

Alameda County Water District

Financial Workshop

Workshop Overview

Presentation Purpose

- Review 2020 rates process
- Receive Board feedback on key rate-setting policies and financial planning scenarios
- Provide an overview of utilizing the property tax roll to bill the service charge and collect delinquencies, options to resume collections, and receive Board feedback

Workshop Overview

Presentation Agenda

- Review 2020 rates process
 - Key policy decisions
 - Cost-of-service results
- Updated financial planning metrics
 - N3 Ranch scenarios
 - Water conservation scenario
- Overview of collecting charges on the property tax roll
- Options for resuming collections, including use of the property tax roll

Alameda County Water District

Review 2020 Rates Process

Review of 2020 Rates Process

The Board conducted the following meetings:

- August 27, 2020 workshop to discuss policy objectives and review financial scenarios
- October 22, 2020 workshop to provide an update on the cost-of-service study and review financial planning scenarios and potential water rate adjustments
- December 10, 2020 regular Board meeting to receive the cost-of-service study and provide direction for a proposed rate increase. The Board elected not to pursue a rate increase

Staff recommends approaching this process as a continuation of the process from 2020

Review of 2020 Rates Process

Key policy decisions from 2020 included:

- Performing a comprehensive cost-of-service study.
Primary changes included:
 - Slight reductions to service charges for the smallest meters and increases for larger meters
 - Revisions to charges for dedicated fire services
- Maintaining water shortage emergency stage rates
- Maintaining a uniform rate structure
- Maintaining the same ratio between service charge and commodity charge revenue recovery
 - 34% service charges per cost of service; budgeted at 33% for service charge for the next two fiscal years based on a slight increase in estimated consumption

Alameda County Water District

Transition to Consultant Presentation

Alameda County Water District

Financial Plan Updates & Scenarios

Financial Plan Update & Scenarios

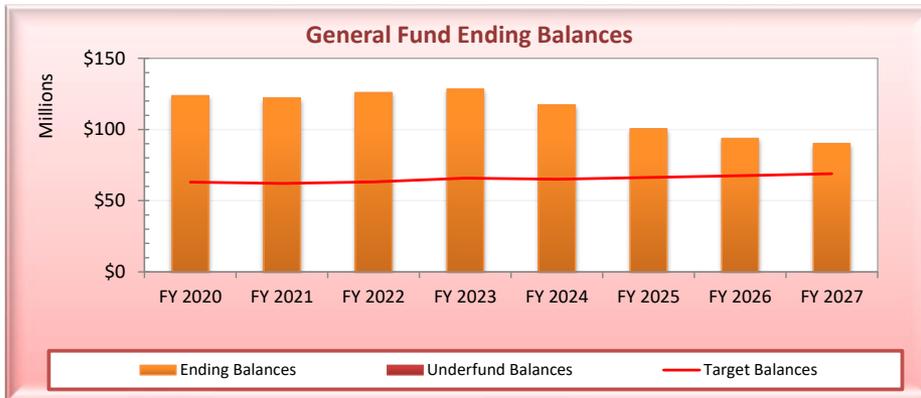
- Review of updates to the Financial Planning Model since budget adoption
- Presentation of financial scenarios:
 - N3 Ranch options
 - Water conservation

Key Changes to Financial Planning Model Since Budget Adoption

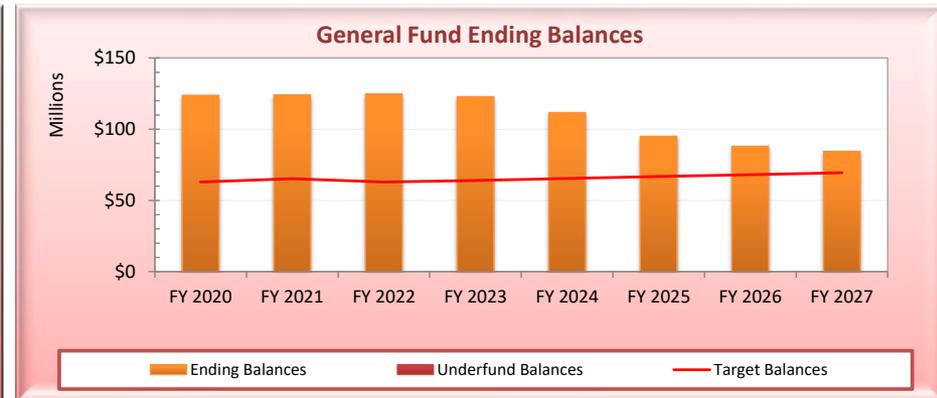
- Revenues, expenses, and cash balances all updated to actual for FY 2020/21
- Preliminary actual General Fund ending cash balance for FY 2020/21 is \$1.9 million higher than estimate presented at budget adoption
- Updated billed demand from 35.5 MGD to 35.0 MGD for FY 2021/22, from 36.3 MGD to 35.0 MGD for FY 2022/23 based on expected conservation
- Water purchase costs reflect updated billed demand and water source availability
 - Water purchase costs increased slightly due to anticipated higher reliance on SFPUC

General Fund Ending Balances

Adopted Budget



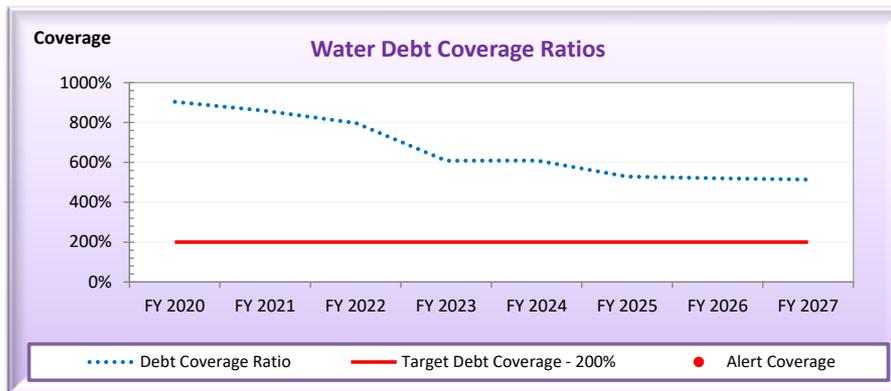
Updated Ending Balances



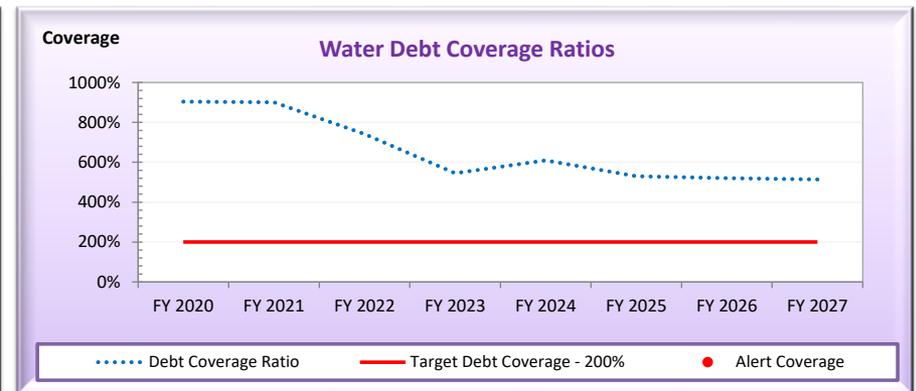
- District continues to maintain General Fund ending balances above target level
 - Low balance of \$90.1 million in FY 2026/27 at budget adoption
 - Low balance of \$84.4 million in FY 2026/27 after updates

Debt Coverage Ratios

Adopted Budget



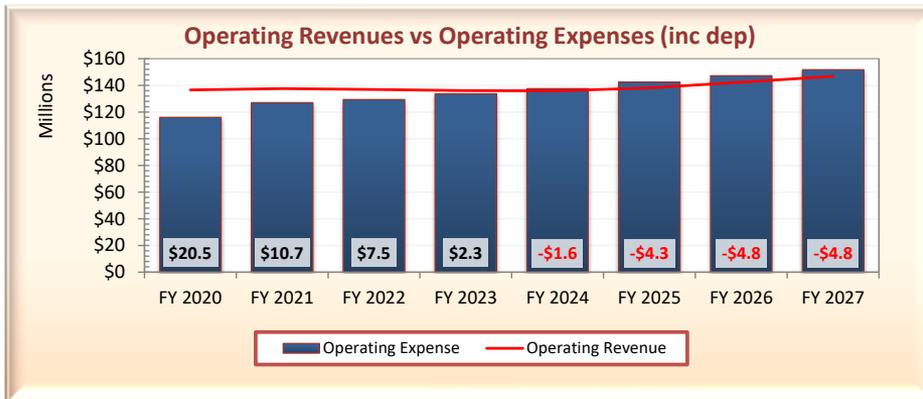
Updated Debt Coverage



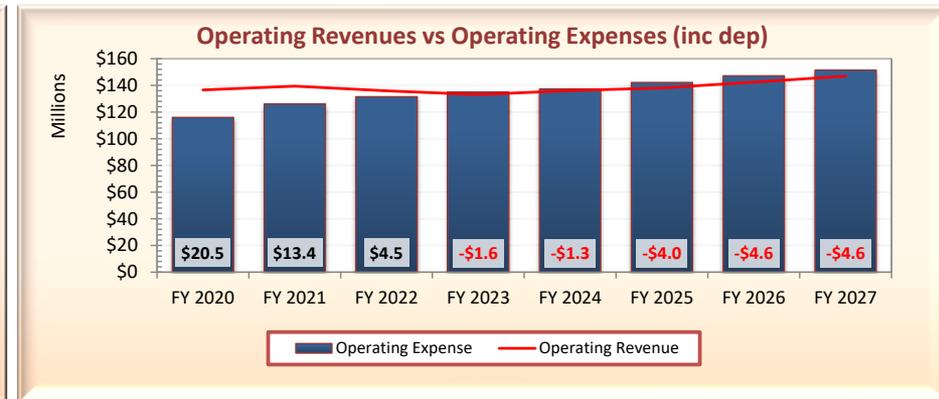
- Includes \$19.5 million in State Revolving Fund (SRF) loan for Advanced Metering Infrastructure (AMI) Program
- Continues to maintain strong annual debt coverage ratios
- Maintains extremely strong ratings: 'AAA' by S&P and 'Aa1' by Moody's

Revenues vs Expenses

Adopted Budget



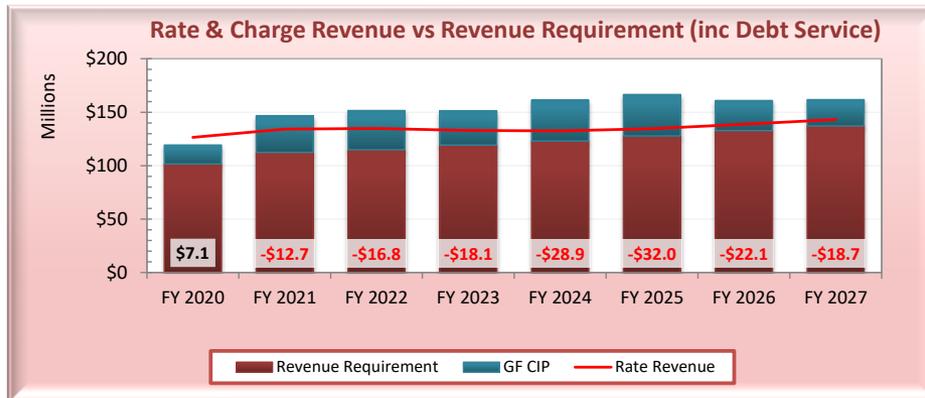
Updated Operating Revenues and Expenses



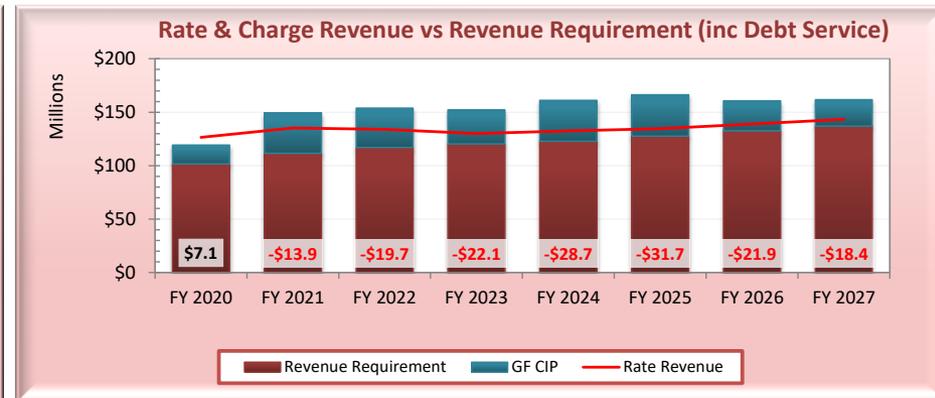
- Annual operating revenues are sufficient to cover annual operating expenses including depreciation in the two-year adopted budget
- Non-operating revenues (i.e., property taxes, interest income) now needed to cover operating expenses starting in FY 2022/23

Rate Revenue vs Revenue Requirement

Adopted Budget



Updated Revenue Requirement

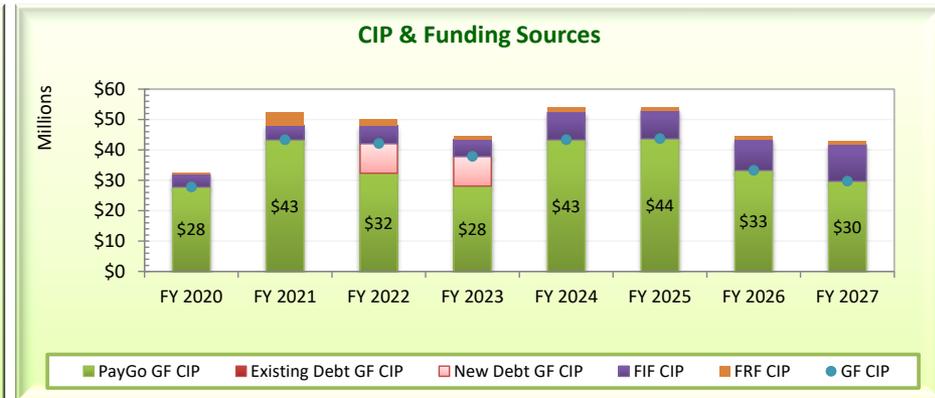
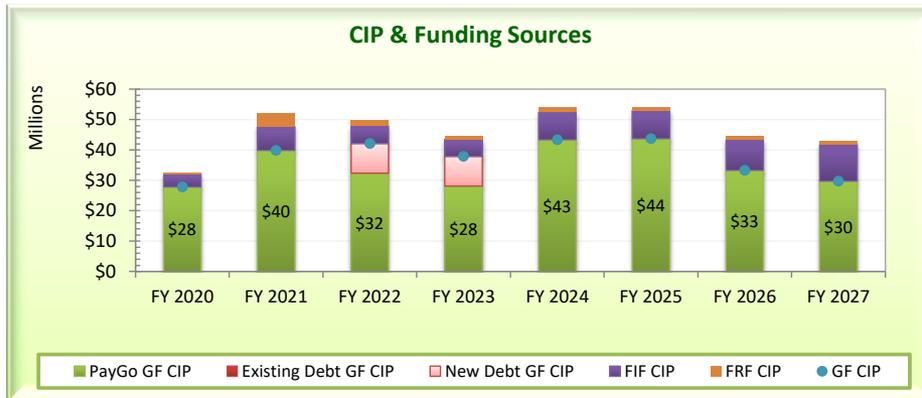


- The District relies on other revenue sources (i.e., property taxes, grants, interest income) in addition to water rate and charge revenue to fully fund its annual operations, debt service payments, and capital program

Capital Improvement Program

Adopted Budget

Updated CIP for FY 2020/21 Actual activity



- FY 2020/21 actual capital expenditures were \$0.5 million higher than estimate at budget adoption
- CIP does not yet include full funding for PFAS treatment – a study to determine treatment requirements and costs is starting this year

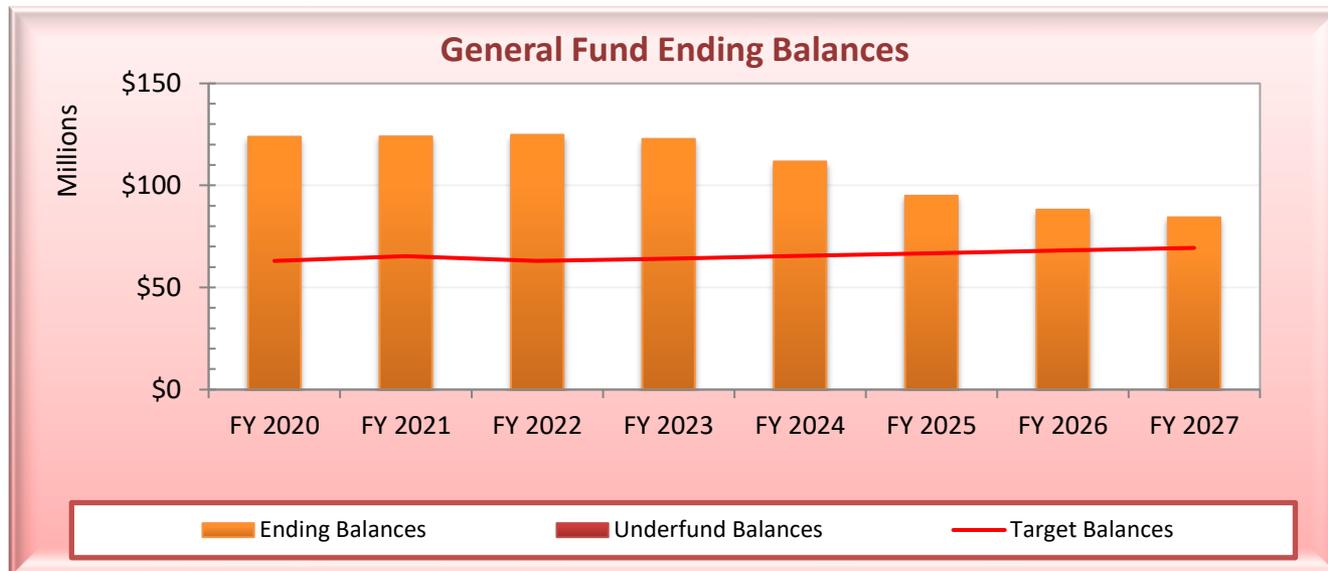
Financial Planning Model Scenarios

Status Quo – Maintain Reserves Above Target

- Key Assumptions for the Status Quo:
 - Based on the adopted budget with the financial model adjustments previously identified
 - 3% rate increase effective March 1, 2022 and each year thereafter
 - Maintain current Capital Improvement Program
 - Pension/OPEB funding at 6.5% discount rate (level \$) and full funding by 2032
 - \$19.5 million in State Revolving Fund (SRF) loan for Advanced Metering Infrastructure (AMI) Program
 - Billed demand at 35.0 MGD for FY 2021/22 and FY 2022/23
 - Watershed Preservation and Protection (N3 Ranch) budget of \$5 million plus \$1 million in annual operations & maintenance (O&M) expense

Financial Planning Model Scenarios

Status Quo – Maintain Reserves Above Target



- Status Quo low balance of \$84.4 million in FY 2026/27 after updated for FY 2020/21 actual activity and revised billed demand and water purchase assumptions

Financial Planning Model Scenarios

Real Estate Purchase

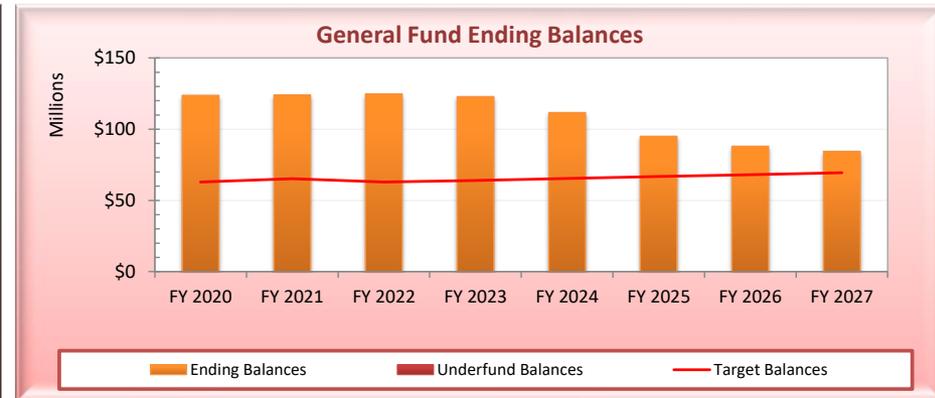
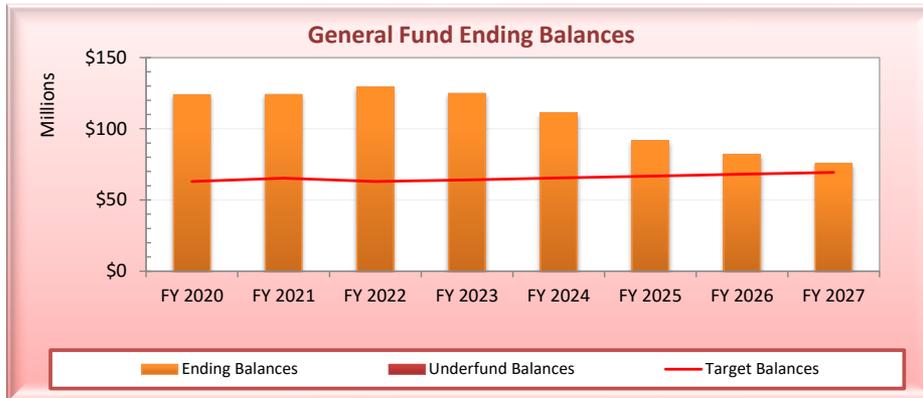
- N3 Ranch Scenarios
 - \$5 million cash contribution toward purchase and \$1 million in annual O&M (consistent with adopted budget and included in current 'status quo' scenario)
 - \$34 million debt issuance contribution toward purchase and \$2 million in annual O&M
 - \$68 million debt issuance toward purchase and \$3 million in annual O&M
 - No cash contribution to purchase or O&M costs

Financial Planning Model Scenarios

N3 Ranch Debt Issuance \$34M and \$2M annual O&M

N3 Ranch Debt Issuance \$34M and \$2M annual O&M

Status Quo



- Low balance of \$75.5 million in FY 2026/27 (\$6.1 million above reserve target)
- Assumes financing at 2.3% for 30-year, fixed-rate bonds

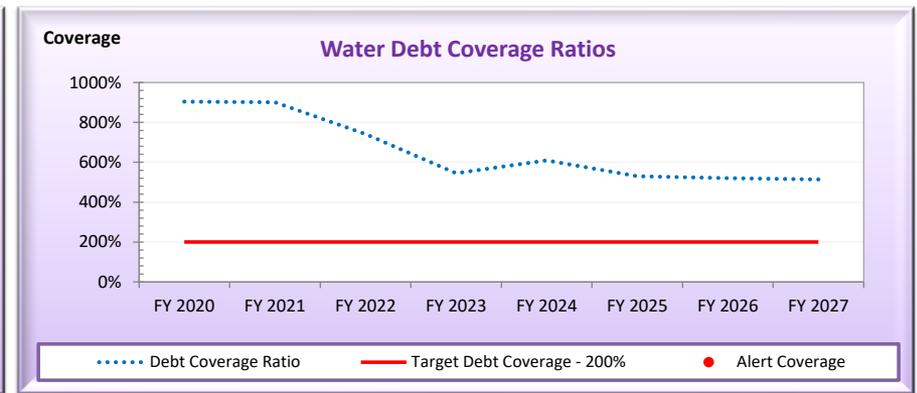
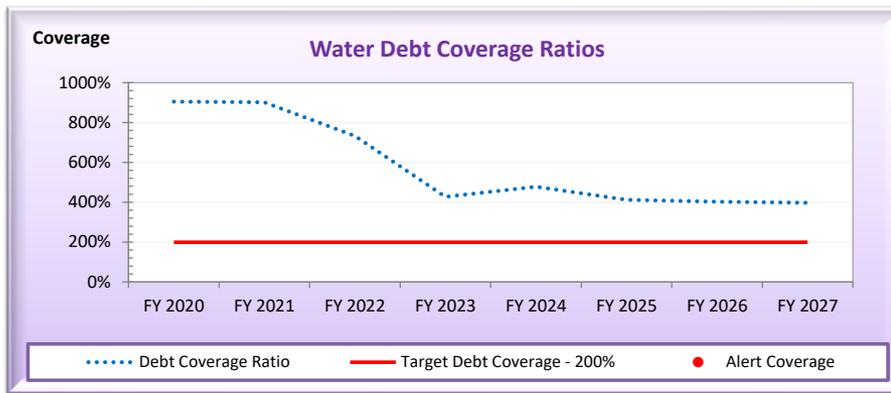
- Low balance of \$84.4 million in FY 2026/27 after updated for FY 2020/21 actual activity

Financial Planning Model Scenarios

N3 Ranch Debt Issuance \$34M and \$2M annual O&M

N3 Ranch Debt Issuance \$34M and \$2M annual O&M

Status Quo



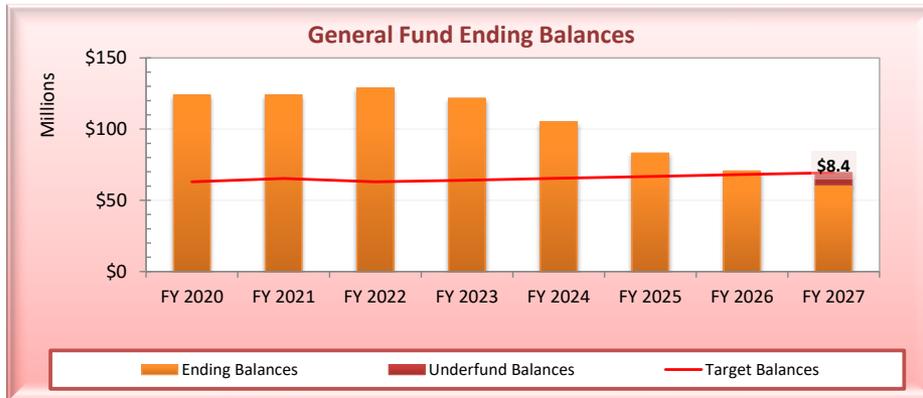
- Low year debt coverage ratio in FY 2026/27 of 397%

- Low year debt coverage ratio in FY 2026/27 of 514%

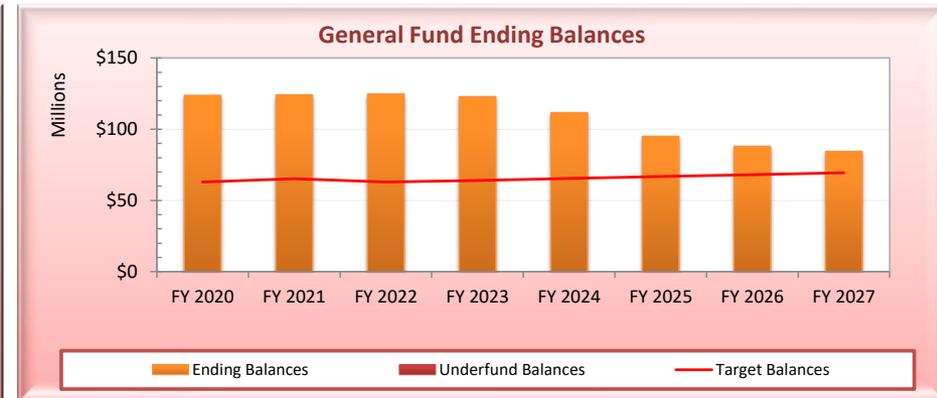
Financial Planning Model Scenarios

N3 Ranch Debt Issuance \$68M and \$3M annual O&M

N3 Ranch Debt Issuance \$68M and \$3M annual O&M



Status Quo



- Low balance of \$61.0 million in FY 2026/27 (\$8.4 million below target level)
- Assumes financing at 2.3% for 30-year, fixed-rate bonds

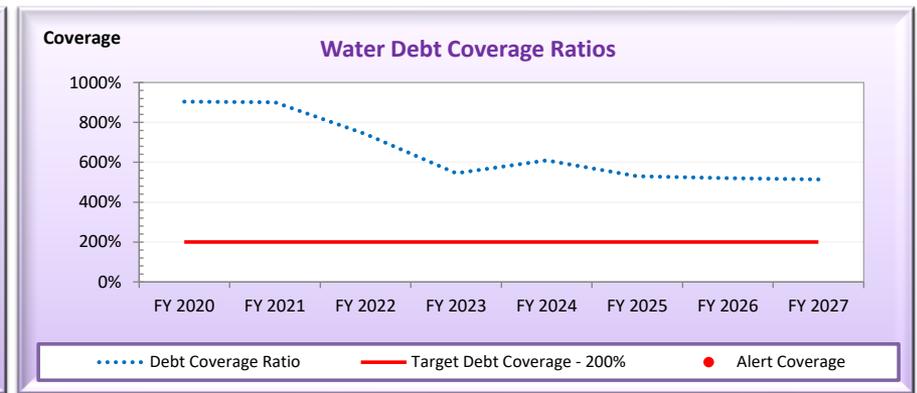
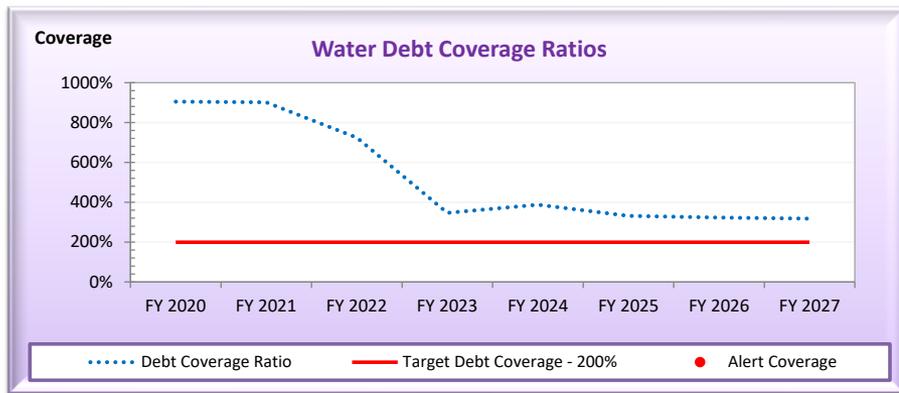
- Low balance of \$84.4 million in FY 2026/27 after updated for FY 2020/21 actual activity

Financial Planning Model Scenarios

N3 Ranch Debt Issuance \$68M and \$3M annual O&M

N3 Ranch Debt Issuance \$68M and \$3M annual O&M

Status Quo



- Low year debt coverage ratio in FY 2026/27 of 317%

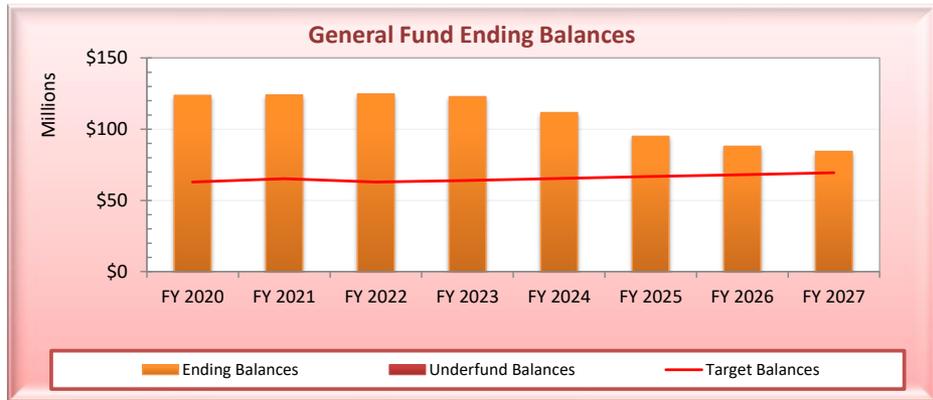
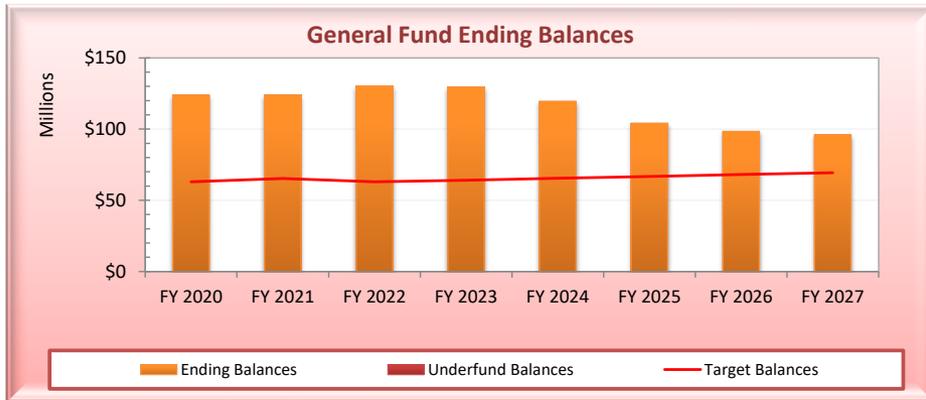
- Low year debt coverage ratio in FY 2026/27 of 514%

Financial Planning Model Scenarios

N3 Ranch No Cash Contribution or Purchase

N3 Ranch No Cash Contribution or Purchase

Status Quo



- Low balance of \$96.1 million in FY 2026/27 (\$26.7 million above target level)

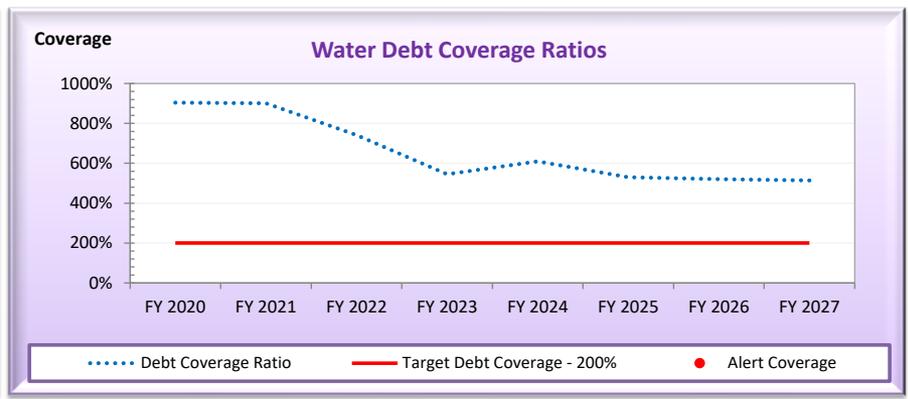
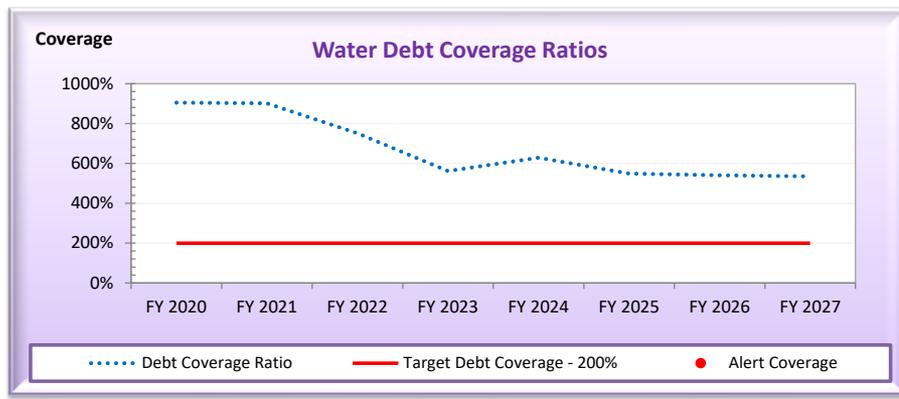
- Low balance of \$84.4 million in FY 2026/27 after updated for FY 2020/21 actual activity

Financial Planning Model Scenarios

N3 Ranch No Cash Contribution or Purchase

N3 Ranch No Cash Contribution or Purchase

Status Quo



- Low year debt coverage ratio in FY 2026/27 of 534%

- Low year debt coverage ratio in FY 2026/27 of 514%

Financial Planning Model Scenarios

Water Conservation Impacts

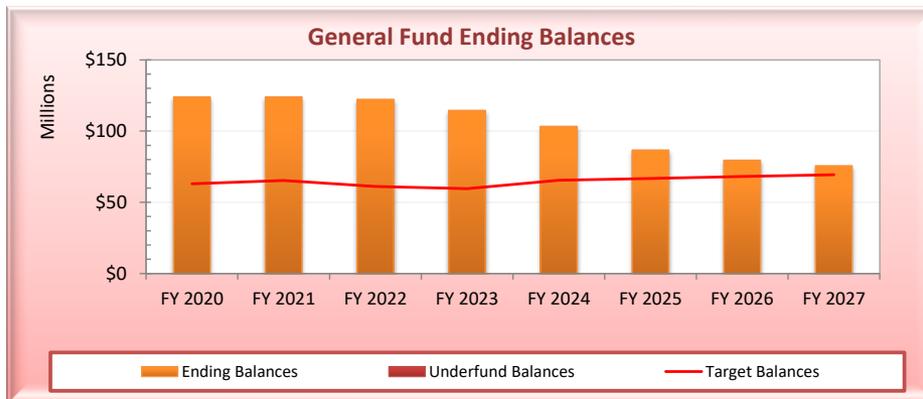
- Potential revenue and expense adjustments due to water conservation
 - 15% reduction in CY2022 without stage rates
 - Revenue loss
 - Water purchase costs increased due to even greater reliance on SFPUC

Financial Planning Model Scenarios

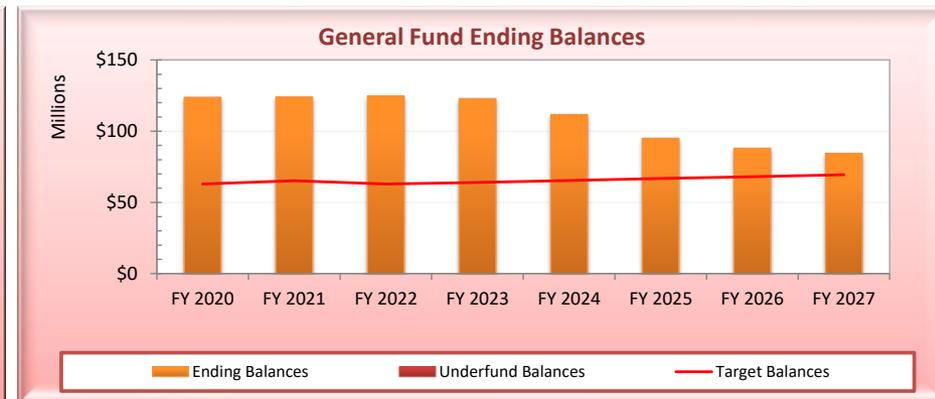
Water Conservation Impacts

15% Reduction (without Water Shortage Emergency Stage Rates)

15% Reduction



Status Quo



- Low balance of \$75.7 million in FY 2026/27 (\$6.3 million above target level)
- No water shortage emergency declaration or implementation of stage rates

- Low balance of \$84.4 million in FY 2026/27 after updated for FY 2020/21 actual activity

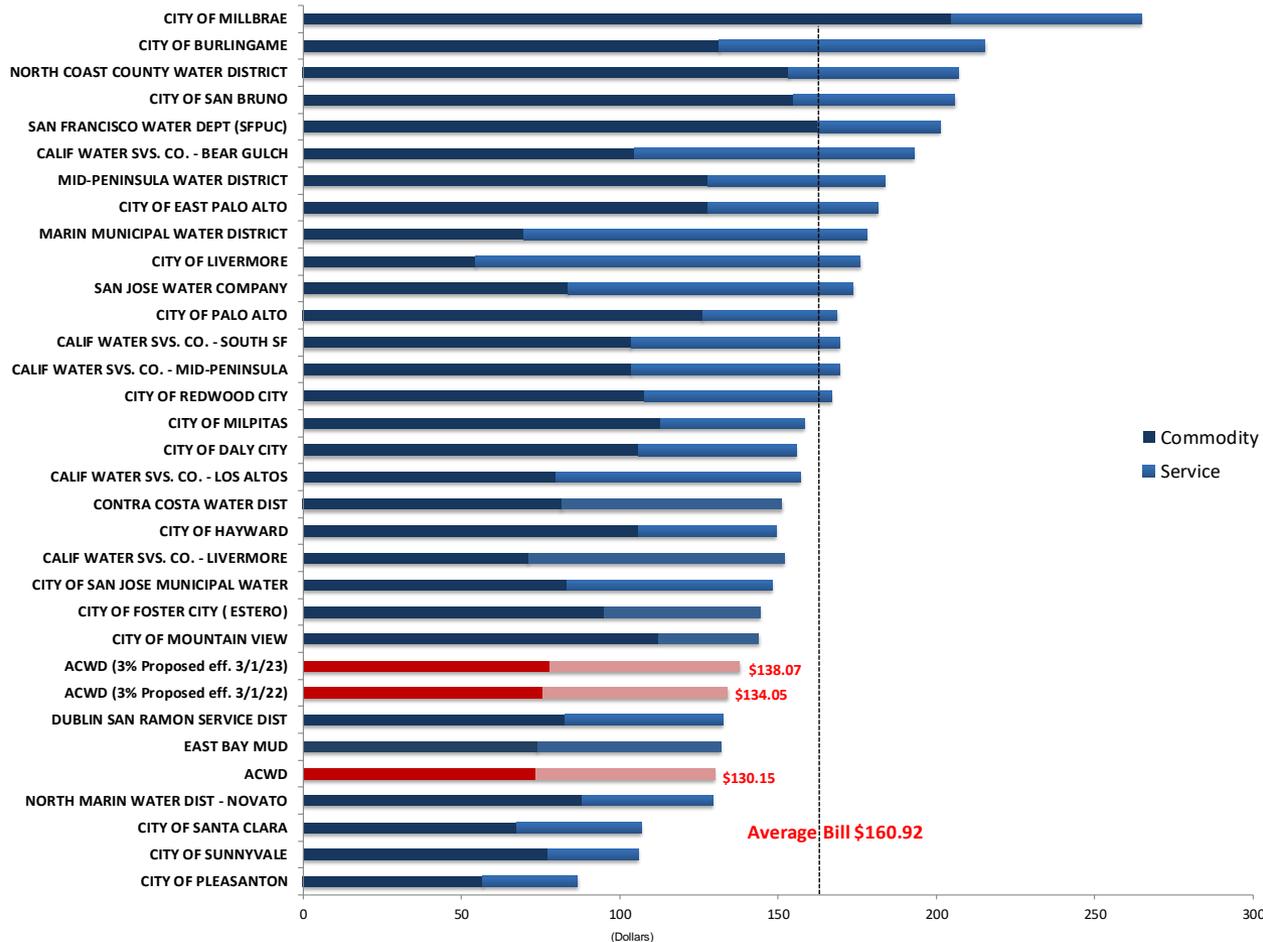
Alameda County Water District

Fixed/Variable Revenue Considerations

Alameda County Water District

2021 AVERAGE WATER BILL COMPARISON*

Based on 16 HCF (200 gallons per day) Consumption Bimonthly and a 5/8 or 3/4 inch meter

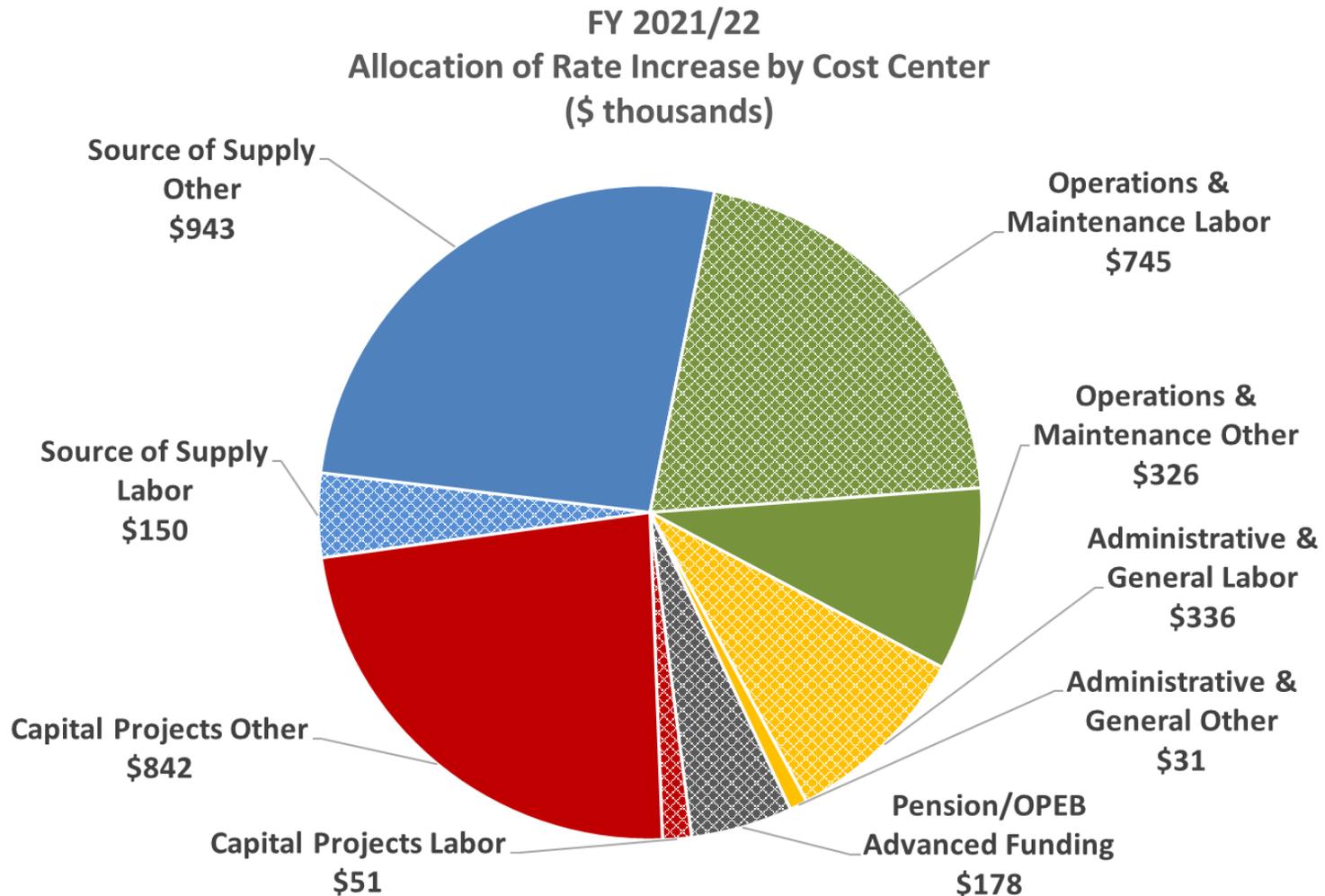


* Comparison based on July 7, 2021 data. Comparison of Commodity and Service Charges Only. Rankings based on Total Cost to Customer. Financial Workshop

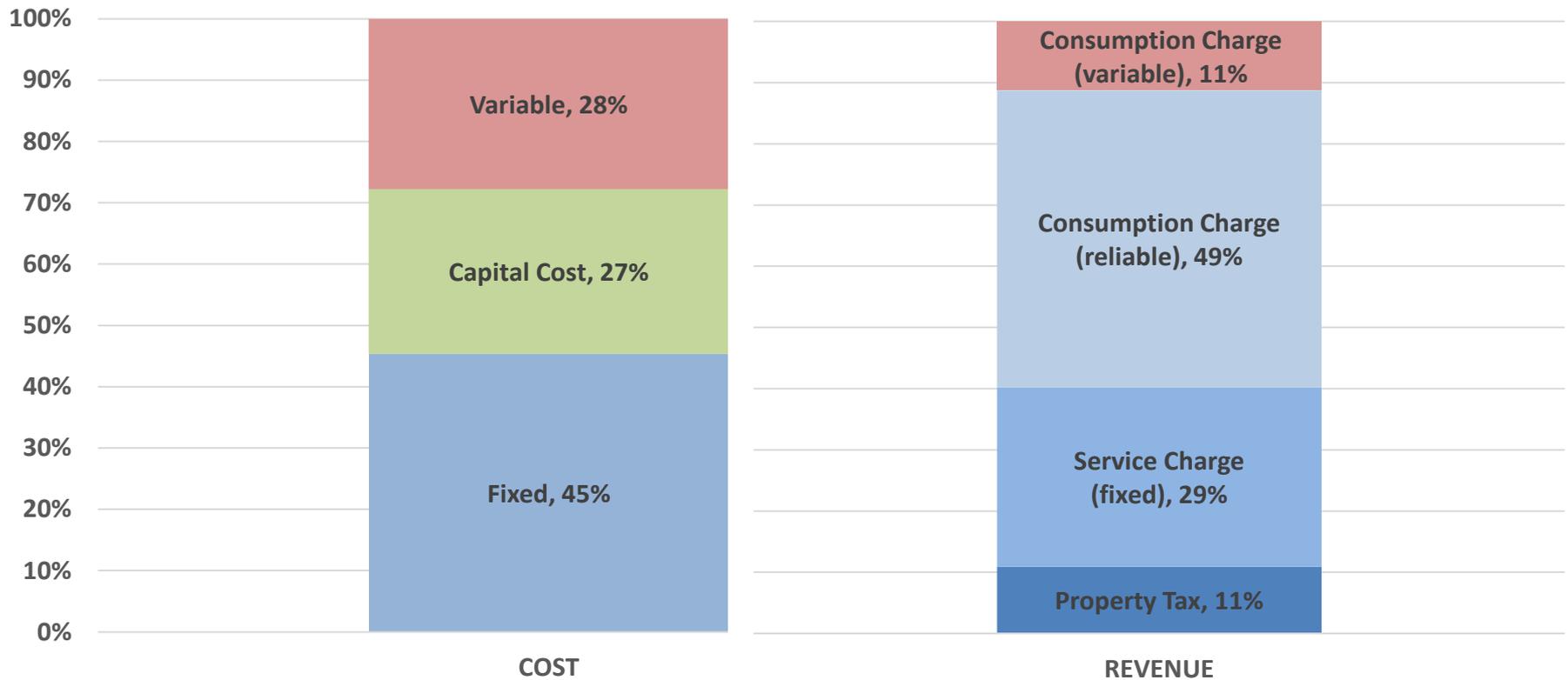
Where is the Money Going?

- Rate increase dollars are needed to meet overall cost of service.
- The District reviews its budget by cost center and by cost element. Allocating the \$3.6 million rate increase by cost element is as follows:
 - Employee Compensation: \$1.4 million
 - Capital Projects: \$0.9 million
 - Water Purchases: \$0.8 million
 - Operations & maintenance: \$0.5 million
 - Total: \$3.6 million
- Debt service and developer-reimbursed projects are excluded.

Where is the Money Going?



Cost and Revenue Structure FY2021/22



Potential Rate Increase Approaches

- Status Quo financial scenario projects 3% annual rate increases
- Increases could be applied uniformly or focused on either the service or commodity charges
- An approach that is not uniform would require revisions to the cost-of-service analysis completed by Raftelis
- Baseline Cost-of-Service makes some adjustments for the typical customer (3/4” meter and 16 HCF):

Bill Amount	Service	Commodity	Total
Current	\$56.61	\$ 73.54	\$130.15
Cost of Service	\$55.57	\$ 73.54	\$129.11

Potential Rate Increase Approaches

Potential options to implement a 3% revenue increase:

	Bill Amount			Bill Impact Percentage		
	Service	Commodity	Total	Service	Commodity	Total
Baseline ¹	\$55.57	\$ 73.54	\$129.11	N/A	N/A	N/A
Potential Approaches to a 3% Revenue Adjustment²						
Uniform	\$57.24	\$ 75.74	\$132.98	3.0%	3.0%	3.0%
Service	\$60.47	\$ 73.54	\$134.00	8.8%	0.0%	3.8%
Commodity	\$55.57	\$ 76.83	\$132.40	0.0%	4.5%	2.6%
1. Based on Cost-of-Service Analysis performed by Raftelis						
2. Typical residential customer with 3/4" meter and 16 HCF per billing period						

Alameda County Water District

Use of Property Tax Roll

Property Tax Roll

Agenda

- Overview of typical property tax bill
- Financial analysis
- Procedural requirements and operational considerations for service charge and delinquency collections on the property tax roll
- Options for resuming collections activities; including use of the property tax roll
- Board discussion and guidance

Property Tax Roll

Sample property tax bill provided on next slide

- Existing state project override tax is highlighted and circled
- Base 1% tax is also circled – we receive about 1% of this tax
- Potential new line items to collect service charges and delinquencies are also highlighted and circled (on the right side of the bill; must be separate line items)

Consideration of merging state project override tax revenue recovery into water rates if the District starts billing on the property tax roll?

Alameda County Water District

2020-2021 INTERNET COPY
 For Fiscal Year Beginning July 1, 2020 and Ending June 30, 2021
ALAMEDA COUNTY
SECURED PROPERTY TAX STATEMENT
 Henry C. Levy, Treasurer and Tax Collector
 1221 Oak Street, Room 131
 Oakland, California 94612

Parcel Number	Tracer Number	Tax-Rate Area	Special Handling
		12-047	

Location of Property
 Assessed to on January 1, 2020

ASSESSEE NAME AND ADDRESS ARE NOT AVAILABLE ONLINE
 PER CA GOV CODE §6254.21

THIS IS NOT AN OFFICIAL BILL

We receive about 1% of this.

Tax-Rate Breakdown		
Taxing Agency	Tax Rate	Ad Valorem Tax
COUNTYWIDE TAX	1.0000 %	6,431.04
VOTER APPROVED DEBT SERVICE:		
COUNTY GO BOND	0.0036 %	23.13
CITY OF FREMONT	0.0050 %	32.16
SCHOOL UNIFIED	0.0756 %	486.19
SCHOOL COMM COLL	0.0334 %	214.80
WASHINGTON TWP HOSP	0.0213 %	136.98
BAY AREA RAPID TRANSIT	0.0139 %	89.39
EAST BAY REGIONAL PARK	0.0014 %	9.00
ALAMEDA CO WATER	0.0067 %	43.09
		August 26, 2021
TOTAL AD VALOREM TAX (AV TAX)	1.1609 %	7,465.78

Fixed Charges and/or Special Assessments		
Description	Phone	Amount
UNION SEWER SVC	510-477-7626	421.36
MOSQ MSR K 1982 CSA	800-273-5167	1.74
PARAMEDIC PARAMEDIC	925-867-3400	35.00
SUPLMNT	510-494-4295	15.00
MEASURE I SCH TAX	866-807-6864	73.00
SFBRA MEASURE AA	888-508-8157	12.00
FLOOD BENEFIT 6 HAZ	510-670-5212	32.00
WASTE PROGRAM	800-273-5167	6.64
ALAMEDA VECTOR FR	800-273-5167	11.00
MOSQUITO ASMT 2008	800-273-5167	2.50
EAST BAY TRAIL LLD	888-512-0316	5.44
CLEAN WATER FEE	510-494-4570	13.50
Alameda CO Water SVC	510-668-4200	339.66
Alameda CO Water Balance	510-668-4200	XXXX
Potential new line items		
* Possible Sr Exemption - Call Agency		
Total Fixed Charges and/or Special Assessments		629.18

Tax Computation Worksheet			
Description	Full Valuation	x Tax Rate	= Tax Amount
LAND IMPROVEMENTS	195,031		
FIXTURES	455,073		
TOTAL REAL PROPERTY	650,104		
PERSONAL PROPERTY			
GROSS ASSESSMENT & TAX	650,104	1.1609 %	7,547.04
HOMEOWNERS EXEMPTION	-7,000	1.1609 %	-81.26
OTHER EXEMPTION			
NET ASSESSMENT & AV TAX	643,104	1.1609 %	7,465.78
Total Ad Valorem Tax			7,465.78
Financial First Installment		Second Installment	Total Amount Due
PAID	\$ 4,047.48	PAID	\$ 4,047.48
			\$ 8,094.96

Financial Analysis

Key financial considerations:

- District may not participate in the Teeter Plan. Participation required a one-time irrevocable decision from decades prior
 - District will receive a share of late penalties as applicable
- Property is repossessed by county once five years past-due on tax bills. Sale proceeds are used for tax/fee obligations first
 - Property owners cannot make partial property tax payments
- Administrative fees charged by the county are 1.7% unless other amount specified by statute
 - Fees to collect service charges are capped at the greater of 1% or \$5/account
- County has never declined to collect a fee if duly authorized by the relevant authority

Financial Analysis

Financial effect of delinquency collections on property tax roll:

- Costs
 - Administrative fee to county: \$3K (assume \$168K referred for collections)
 - Consultant costs: \$10K
- Financial Improvements
 - *Collections: \$126K
 - Based on five-year average of 0.14% of billings referred to third-party collections
 - Accounts for 25% of amounts referred being collected under current approach
- Net Result: Financial benefit of \$113K

*double counts with collecting service charges on the tax roll

Financial Analysis

Financial effect of billing the service charge on the property tax roll:

- Costs
 - Administrative fee to county: \$430K (\$5/account)
 - Consultant costs: \$20K
- Financial Improvements
 - *Collections: \$41K
 - Payment processing fees: \$138K (based on current experience – 35% of payments with a credit card)
 - Revenue from vacant accounts: \$10K
- Net Result: Cost of \$261K

*double counts with collecting delinquencies on the tax roll

Procedural Requirements – Delinquent Charges

Under Water Code Sections 31701 et seq.

- Notify property owners with delinquent charges to be collected on the property tax roll each year
 - No public hearing or newspaper notice required
 - No protest process for delinquent charges
- By a simple majority, adopt a resolution containing a statement of delinquent charges and approving a Service Agreement with the County
 - Charges must be 60+ days delinquent as of July 1
 - This statement must be furnished to the County Board of Supervisors and Auditor by August 1st annually
- Since accounts placed on the property tax roll would no longer be subject to water shutoffs, there would be no additional SB 998 requirements

Procedural Requirements – Service Charge

Under Health and Safety Code Sections 5470 et seq.

- Prepare a written report, describing each parcel of real property to be charged, to be adopted by resolution
- The first time the service charge is collected on the property roll, the Board must hold a public hearing and mail notice to all property owners on the last equalized tax roll whose properties are described in the report
 - In subsequent years, notice by newspaper publication is sufficient
- At the hearing, the Board must hear and consider all objections or protests
 - A majority protest of those listed in the report is necessary to prevent placing the service charge on the property tax bill
- $\frac{2}{3}$ Board Majority required for adoption of the resolution and report
- This information would also be due to the County in August

Additional Considerations

- Properties that do not receive a tax bill would need to be billed under our current system nor could we use the tax roll to collect delinquencies for these properties (about 300 government-owned properties)
- Process would need to be developed for new connections during a year
- Under Water Code Section 31007.5, the District may require property owners to assume responsibility for the water account if previous residential tenants have become delinquent.
- Revenues would be disbursed by the County to ACWD primarily in January and May in accordance with property tax collections

Collections

Options to Resume Collections

Reinstating Collections

Current Collection Policy:

- Board approved the District's Collection and Residential Water Service Termination Policy (SB 998) in November 2019.
- The policy establishes a process and timeline for collecting on past due accounts.
- Process includes written and verbal notifications.
- Provides process for appeals and disputes, including payment arrangements.
- Process ultimately results in disconnection for delinquent accounts if the customer does not abide by a payment plan

Reinstating Collections

Timeline if Current Policy is Reinstated:

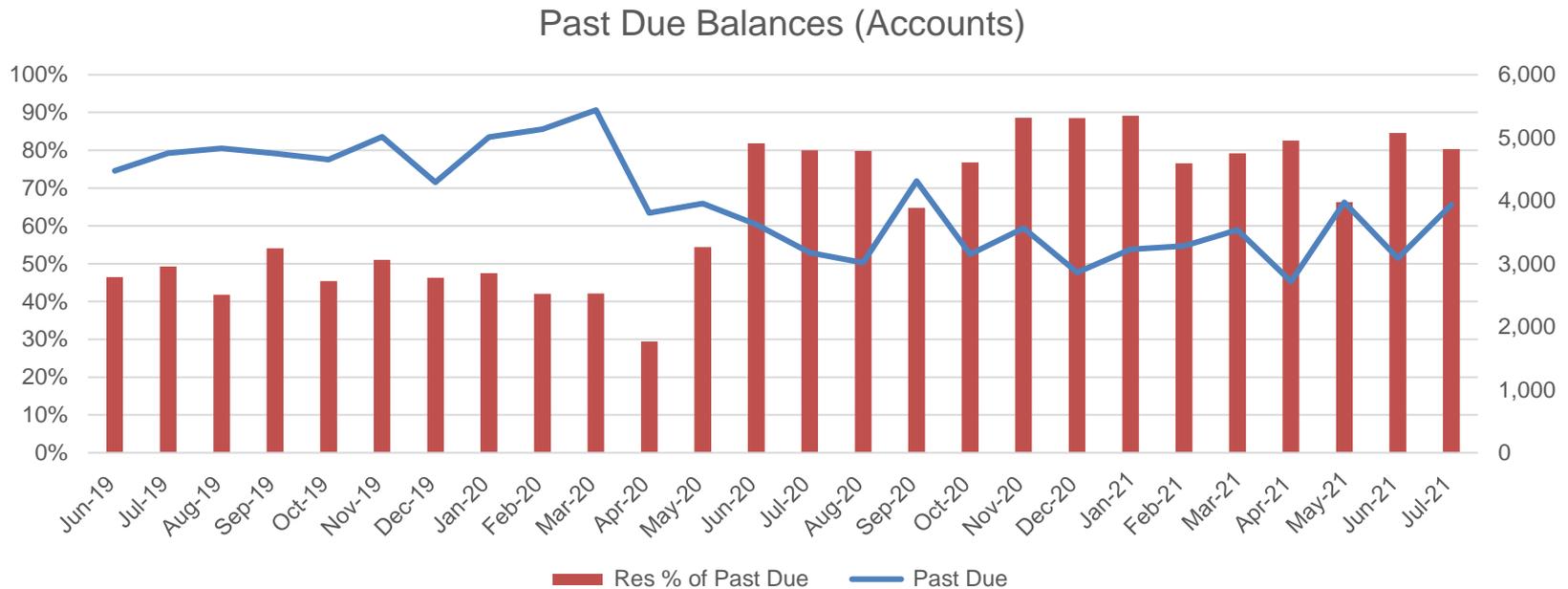
- Courtesy notices and phone calls are ongoing. Courtesy door tags suggested to start in September regardless of approach
- Provide customers flexibility to select their own payment plan
- The Governor's Executive Order N-42-20, which prohibits the District from terminating water service to residential customers and certain businesses for non-payment, expires on September 30, 2021, pursuant to Executive Order N-8-21
- Reinstate established process with bills issued in December:
 - First Late Fee issued on January 3, 2022
 - First Final Notice issued on February 7, 2022
 - First 48 Hour Notice (door tag) issued on February 14, 2022
 - First Disconnect on February 21, 2022
- Dates could be delayed pending timing of state-funded relief

Collections Activity

Collections Activity (prior to SB 998) in 2019:

- Overdue Notices/Late Fee – 92,491
- Final Notices – 10,415
- 48 Hour Door Tags – 2,957
 - Residential – 2,721
 - Non-Residential – 236
- Disconnections – 593
 - Residential – 559
 - Non-Residential – 34

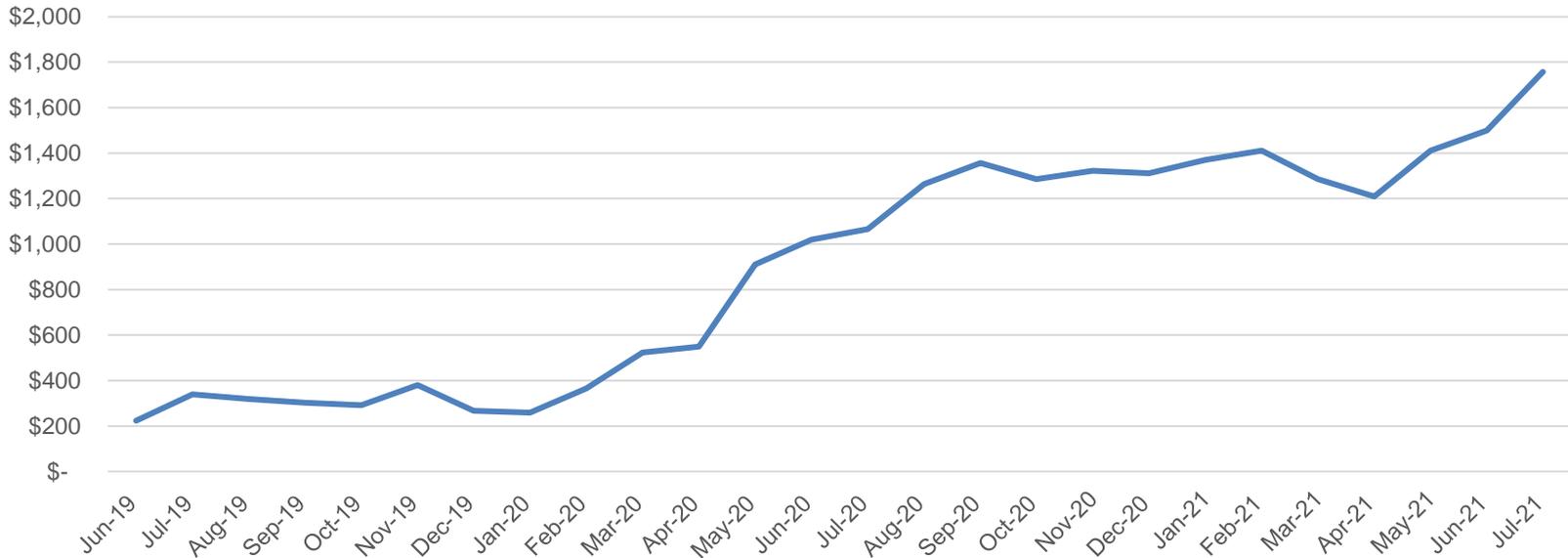
Past Due Accounts



- Number of total accounts past due has decreased
- Total residential accounts past due have stayed consistent since the pandemic
- In June, 85% of accounts more than 30 days past due were residential

Past Due Balances

Past Due Balances (thousands)



- Steady increase in past due balances
- Past due balances over 30 days total over \$1.1M
- Balances over 30 days for owner-occupied residences: \$727,100
- Balances over 30 days for multi-family and tenant occupied: \$160,000
- Balances over 30 days for commercial/institutional: \$213,000

Delinquent Accounts on Property Tax

Potential Approach if Collecting on Property Tax Bill:

- Only active accounts at time the list is generated will be assigned to property tax roll. Accounts closed during the year would still be referred to the District's third-party collection agency.
- Past due balances for owner-occupied residential accounts would be assigned to the property tax bill annually.
 - Timing of initial implementation will depend on State funding for water bill arrearages and if a substantial increase occurs.
 - Provide time for outreach informing property owners of new policy.
- Past due balances for tenant-occupied residential and non-residential accounts would follow established policy with bills issued in December (or later pending timing of State relief).
- Would need to consider approaches to providing notices to owner-occupied residences – to-be-developed pending Board feedback.

Conclusions

- Recap Board guidance
 - Cost of Service study
 - Re-establish stage rates
 - Fixed/Variable revenue recovery
 - Rate Structure
 - Financial planning scenarios
 - Use of property tax roll
 - Approach to resuming collections
- Next Steps
 - Workshops scheduled for September 23 and October 28

Alameda County Water District

Questions?

Alameda County Water District

Cost of Service & Stage Rates

August 26, 2021



A close-up photograph of clear water being poured from a glass pitcher into a glass. The water is captured in mid-pour, creating a dynamic, flowing shape. The background is a solid, light blue color. The glass is partially filled with water, and the surface of the water is rippling from the incoming stream.

Agenda

- 1. Cost of Service**
- 2. Service Charge**
- 3. Commodity Charge**
- 4. Private Fire Line**
- 5. Stage Rates**
- 6. Next Steps**

Cost of Service

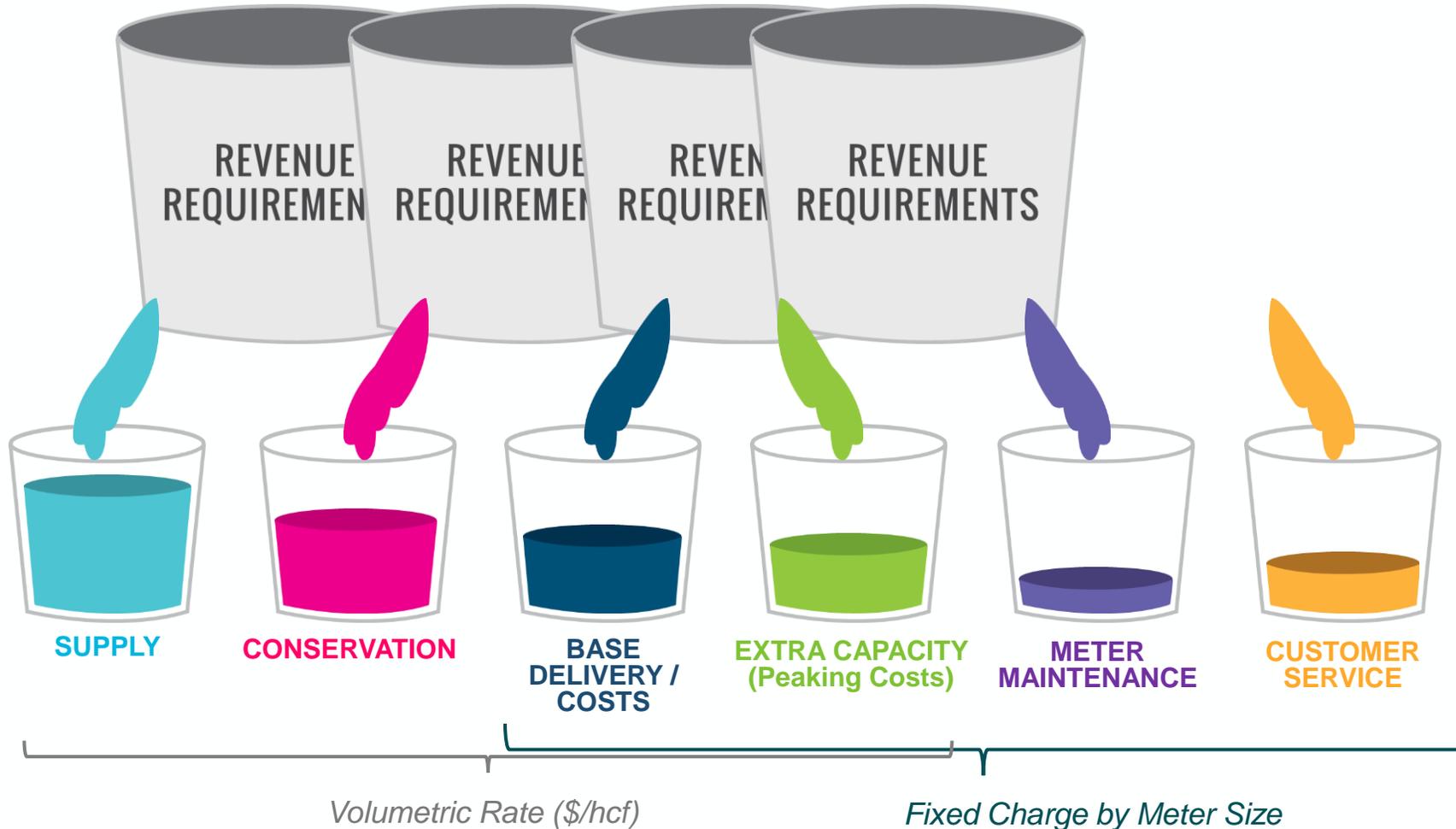


What is Cost of Service?

- Different types of customers generate different costs because their patterns of use or characteristics are different
- Cost of service allows the matching of rates charged with the costs of serving each group
- Each group will “pay its own way” – no subsidies

Cost of Service

Allocation to Cost Components



Distribute Costs to Customer Classes



SUPPLY
Use



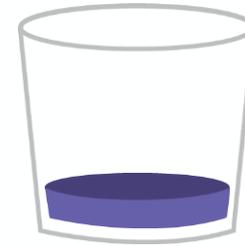
DELIVERY COSTS
Use: Same for All
Classes



CONSERVATION
Distributed to
High Vol Users



**EXTRA CAPACITY
(PEAKING)**
Peaking Factors or
Meter Cap Ratios



**METER
MAINTENANCE**
Meter Size



**CUSTOMER
SERVICE**
of Cust Bills



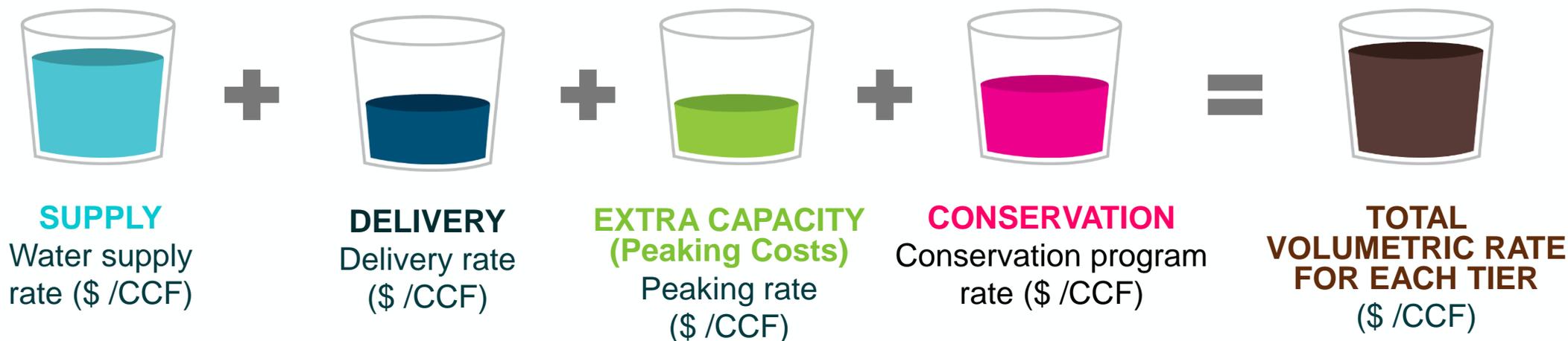
Distribute Costs to Each Class

CUSTOMER CLASSES
Cost to Serve Each Class
(Single Family, Multi-family, Commercial etc.)

Rate Design

Commodity Rate Derivation

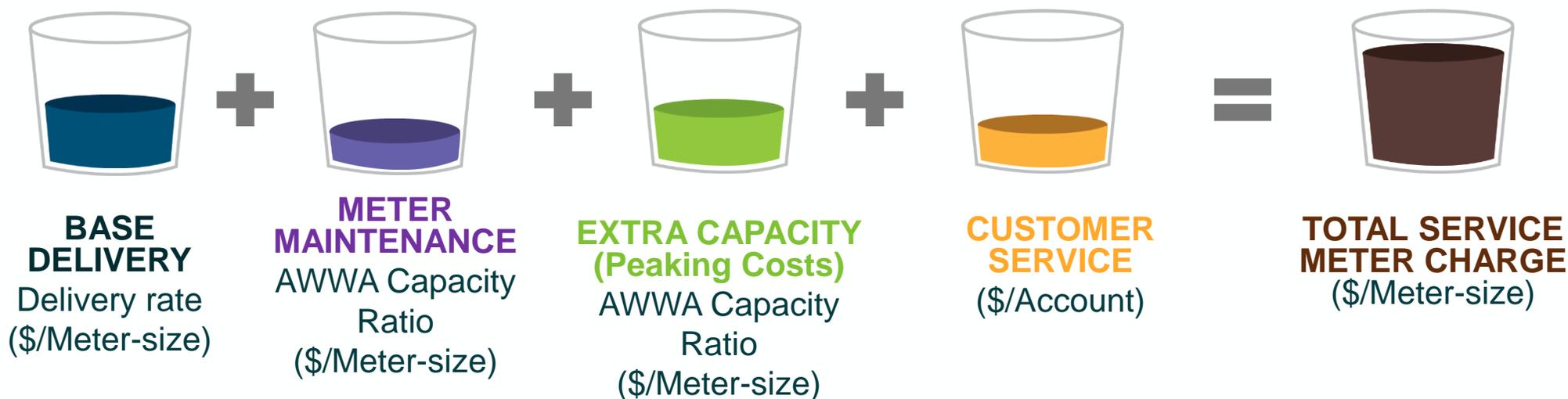
To calculate commodity rates, we combine the unit (\$/CCF) costs of water supply, water delivery, peaking/capacity costs and conservation costs



Rate Design

Service Meter Charge Derivation

To calculate service meter charges, we combine the costs of base delivery, meter maintenance, extra capacity and customer service



Major Assumptions

- Cost of Service is based on 2020 Budget
- Maintains the same amount of revenue collected during FY 2020
 - › Revenue collected: \$116,776,764
- Maintains the same level of fixed and variable revenue
 - › 34% Fixed
 - › 66% Variable
- The resulting Cost of Service Rates shown in the following slides are not final
 - › Board direction will be used to calculate the final Rates

Service Charge



Service Charge Calculation

No Revenue Adjustment

Meter Size	Hydraulic Capacity (gpm)	Hydraulic Capacity Meter Ratio	Number of Meters	Customer Billing	Meter Service	Potable Meter Capacity	Proposed Bi-Monthly Fixed Charge
5/8"	20	1.00	23,136	\$5.86	\$1.61	\$48.10	\$55.57
3/4"	30	1.00	51,471	\$5.86	\$1.61	\$48.10	\$55.57
1"	50	1.67	5,768	\$5.86	\$2.68	\$80.17	\$88.71
1-1/2"	100	3.33	2,252	\$5.86	\$5.36	\$160.34	\$171.56
2"	160	5.33	2,908	\$5.86	\$8.57	\$256.55	\$270.98
3"	350	11.67	224	\$5.86	\$18.75	\$561.20	\$585.80
4"	630	21.00	111	\$5.86	\$33.75	\$1,010.15	\$1,049.76
6"	1,600	53.33	60	\$5.86	\$85.71	\$2,565.47	\$2,657.03
8"	2,800	93.33	26	\$5.86	\$149.99	\$4,489.57	\$4,645.42
10"	4,200	140.00	3	\$5.86	\$224.98	\$6,734.36	\$6,965.19

Service Charge Revenue

No Revenue Adjustment

Meter Size	Proposed Bi-Monthly Fixed Charge	Current Charges	Difference (\$)	Difference (%)
5/8"	\$55.57	\$56.61	-\$1.04	-1.8%
3/4"	\$55.57	\$56.61	-\$1.04	-1.8%
1"	\$88.71	\$87.29	\$1.42	1.6%
1-1/2"	\$171.56	\$163.97	\$7.59	4.6%
2"	\$270.98	\$255.99	\$14.99	5.9%
3"	\$585.80	\$547.39	\$38.41	7.0%
4"	\$1,049.76	\$976.81	\$72.95	7.5%
6"	\$2,657.03	\$2,464.48	\$192.55	7.8%
8"	\$4,645.42	\$4,304.88	\$340.54	7.9%
10"	\$6,965.19	\$6,451.99	\$513.20	8.0%

Commodity Charge



Volumetric Charge Calculation

No Revenue Adjustment

Customer Class	Water Supply	Base Delivery	Max Day	Max Hour	Revenue Offset	Calculated Water Rate
Inside Customers	\$2.989	\$2.122	\$0.087	\$0.038	-\$0.64	\$4.596
Outside Customers	\$2.989	\$2.122	\$0.087	\$0.038	\$0.00	\$5.240

- Revenue offsets include the 1% Tax Allocation and State Water Contract Tax
- Volumetric charge is based on a \$/CCF (hundred cubic feet)
- 1 CCF is equal to 748 gallons

Comparison

No Revenue Adjustment

Customer Class	Proposed Water Rate	Current Water Rate	Difference (\$)	Difference (%)
Inside Customers	\$4.596	\$4.596	\$0.00	0.00%
Outside Customers	\$5.240	\$5.285	-\$0.05	-0.86%

Private Fire Line



Private Fire Methodology

- Determine the appropriate cost of Fire Service, which includes public and private fire
 - › Private fire estimate is based on a 4-hour fire at 4,250 gallons/minute
- Fire Service cost is allocated between public and private fire
 - › Based on number of public fire hydrants and private fire lines
- Private fire service charges include the additional capacity to provide that service, customer service, and the cost to maintain the fire line meter

Private Fire Service Charges

No Revenue Adjustment

Private Fire Connection Size	Number of Connections	Potential Demand	Private Fire	Customer Billing	Fire Line Meter	Calculated Total Bi-Monthly Rate
3/4"	4	0.47	\$0.17	\$5.86	\$1.61	\$7.63
1"	1	1.00	\$0.35	\$5.86	\$1.61	\$7.82
2"	163	6.19	\$2.18	\$5.86	\$1.61	\$9.65
4"	420	38.32	\$13.50	\$5.86	\$1.61	\$20.97
6"	747	111.31	\$39.22	\$5.86	\$1.61	\$46.68
8"	910	237.21	\$83.57	\$5.86	\$1.61	\$91.04
10"	156	426.58	\$150.29	\$5.86	\$1.61	\$157.75
12"	10	689.04	\$242.76	\$5.86	\$1.61	\$250.22

Private Fire Service Charge Comparison

No Revenue Adjustment

Private Fire Connection Size	Calculated Bi-Monthly Rate	Current Bi-Monthly Rate	Difference (\$)	Difference (%)
3/4"	\$7.63	\$71.01	(\$63.38)	-89%
1"	\$7.82	\$71.01	(\$63.19)	-89%
2"	\$9.65	\$71.01	(\$61.36)	-86%
4"	\$20.97	\$71.01	(\$50.04)	-70%
6"	\$46.68	\$75.81	(\$29.13)	-38%
8"	\$91.04	\$80.61	\$10.43	13%
10"	\$157.75	\$85.41	\$72.34	85%
12"	\$250.22	\$90.21	\$160.01	177%

Differences in Study Proposed and Current Cost of Service

	Proposed	Current	Difference
Fixed Charge	\$38,283,426	\$38,105,180	\$178,246
Private Fire	\$931,444	\$1,115,791	(\$184,347)
Volumetric Revenue	\$77,561,895	\$77,555,794	\$6,101
Total	\$116,776,764	\$116,776,764	\$0

Stage Rates



Stage Rates

- Water Shortage Emergency Stage Rates (Stage Rates) are implemented during water shortage emergencies
 - › Consistent with the 2020 Urban Water Management Plan
 - District's Water Shortage Contingency Plan identifies six stages
 - › Include service disruptions from drought, water shortage emergencies, or water supply interruptions from natural disasters
- Require Board adoption & 30-day customer notice prior to implementation
- Function as a mechanism to maintain revenue stability during the water emergencies
 - › Recover the revenue decrease from less water use

Stage Rate Stages

Water Shortage Emergency Stage	Stage 0 No Drought	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Reduction in Water Demand	0%	10%	20%	30%	40%	50%	Up to 60%*
Projected Water Sales (AF)	38,730	34,857	30,984	27,111	23,238	19,365	16,654

*57% based on Urban Water Management Plan Table 10-1

- Six Stages are developed in District’s Water Shortage Contingency Plan
- Stages Rates are in addition to the Consumption Charge
- Projected water sales is based on the Cost of Service year (FY 2020)
 - › Final rates will incorporate Board determined revenue adjustment

$$\text{Stage 2 Rate} = \frac{\text{Water Sales Revenue Reduction} - \text{Variable Cost Savings}}{\text{Estimated Water Sales at Stage 2 (20\% Reduction)}}$$

Proposed Cost of Service Stage Rates

Inside Rate

Water Shortage Emergency Stage	Stage 0 No Drought	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Reduction in Water Demand	0%	10%	20%	30%	40%	50%	Up to 60%*
Cost of Service Rates (\$/HCF)							
Unit Stage Rate	\$0.000	\$0.496	\$1.115	\$1.920	\$3.000	\$4.443	\$5.852
Commodity Rate (Inside)	\$4.596	\$4.596	\$4.596	\$4.596	\$4.596	\$4.596	\$4.596
Total Commodity Rate (Inside)	\$4.596	\$5.092	\$5.711	\$6.516	\$7.596	\$9.039	\$10.448

*57% based on Urban Water Management Plan Table 10-1

Proposed Cost of Service Stage Rates

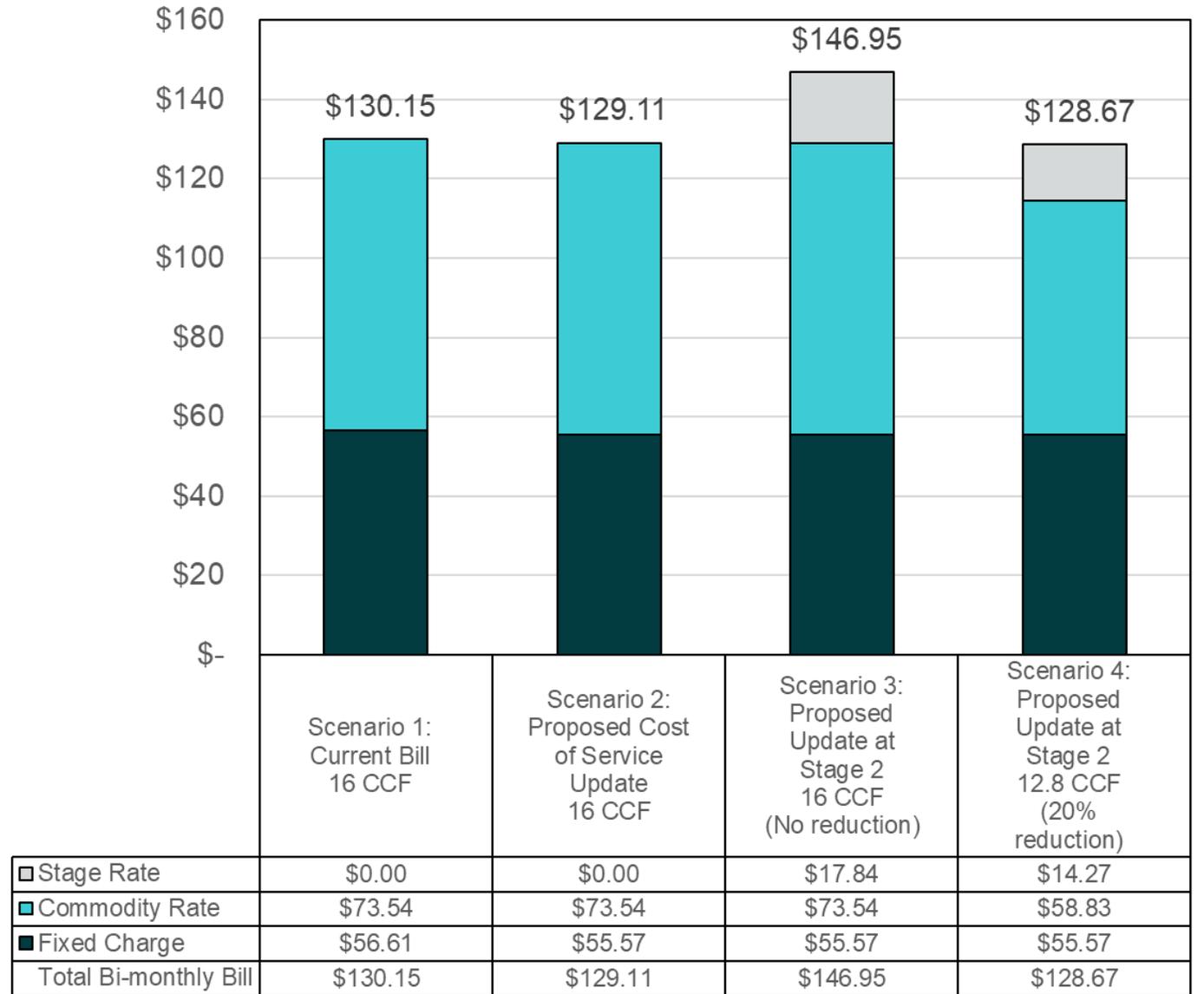
Outside Rate

Water Shortage Emergency Stage	Stage 0 No Drought	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Reduction in Water Demand	0%	10%	20%	30%	40%	50%	Up to 60%*
Cost of Service Rates (\$/HCF)							
Unit Stage Rate	\$0.000	\$0.496	\$1.115	\$1.920	\$3.000	\$4.443	\$5.852
Commodity Rate (Outside)	\$5.240	\$5.240	\$5.240	\$5.240	\$5.240	\$5.240	\$5.240
Total Commodity Rate (Outside)	\$5.240	\$5.736	\$6.355	\$7.160	\$8.240	\$9.683	\$11.092

*57% based on Urban Water Management Plan Table 10-1

Cost of Service and Stage Rate Impact

- Scenario 1 and 2 demonstrate the impact for a typical indoor user with a ¾ inch meter and 16 CCF bimonthly use
- Scenario 3 and 4 demonstrate the updated Cost of Service (Scenario 2) during a declared Stage 2 Water Shortage Emergency



Next Steps



Next Steps

1

Receive the Board determined financial plan

2

Updated Rates based on determined financial plan and present to Board during Workshop Sessions

3

Conduct the Board Meetings in preparation for rate adoption at Public Hearing

Q&A



Thank you!

Contact:

Sanjay Gaur

213-327-4405 / sgaur@water-economics.com

Kevin Kostiuik

213-262-9309 / kkostiuk@Raftelis.com

Jonathan Jordan

213-262-9305 / jjordan@Raftelis.com