

Scotts Valley

Water District

Multi-Year Water Rate Study

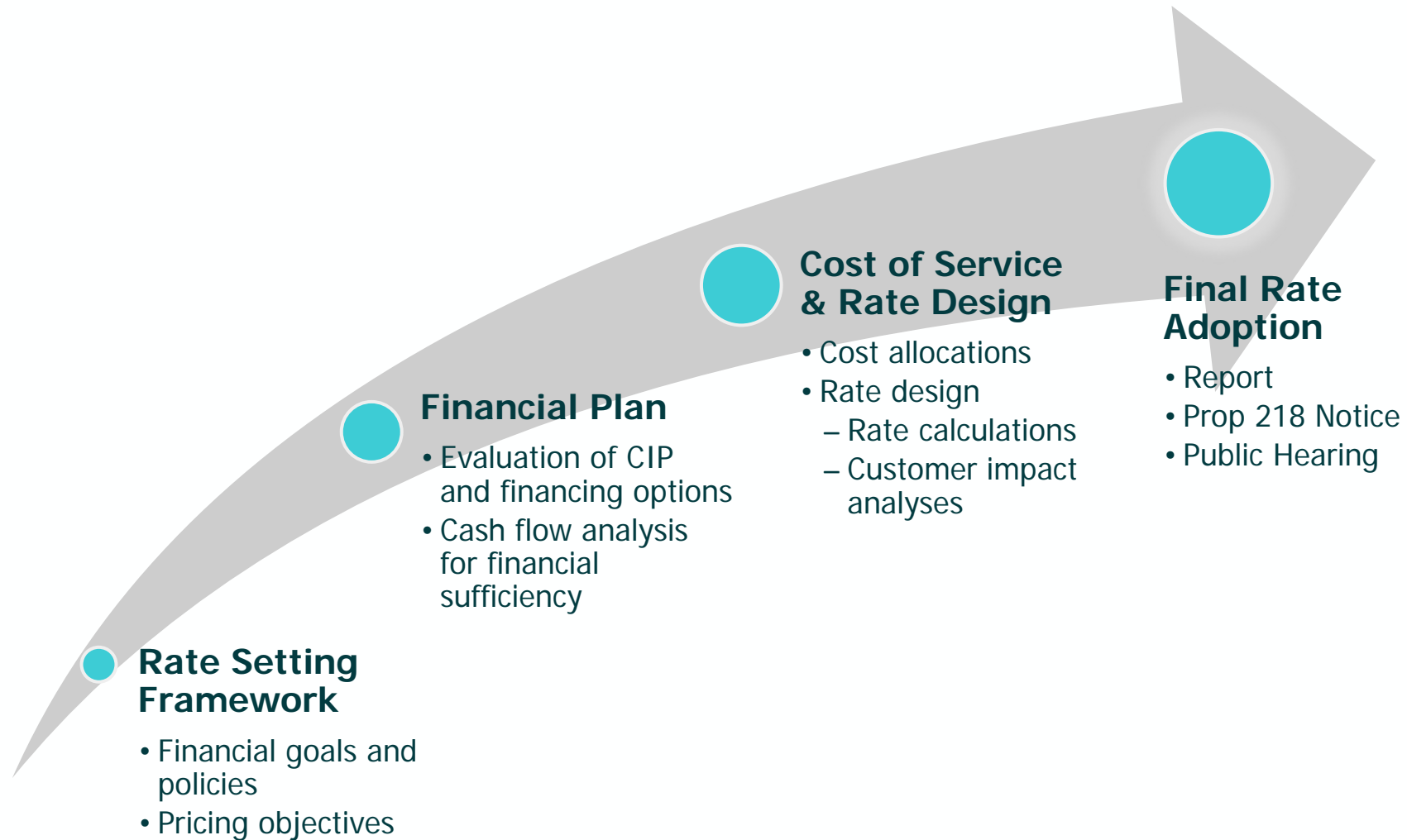
Board Meeting - August 12, 2021



Agenda

- Rate Study Process
- Project Objectives
- Financial Plan Assumptions
- Proposed Financial Plan
- Cost of Service Overview
- Proposed Rate Calculations
- Customer Bill Impacts
- Next Steps

Rate Study Process



Rate Study Objectives

- Develop a 5-year financial plan to identify annual rate revenue needs through FY 2026 for the Potable Water Fund & Recycled Water Fund
- Conduct a Cost-of-Service analysis
- Develop a proposed schedule of potable and recycled water rates for FY 2022 – FY 2026
- Document results in a study report to serve as an administrative record
- Assist District staff with the Prop 218 public hearing process

Financial Plan Assumptions



Financial Plan Assumptions

- Raftelis worked with staff to develop the following assumptions:
 - › Account growth:
 - Financial plan assumes that 50% of projected growth will occur
 - › Water demand:
 - Water demand dropped in FY 2021 due to COVID and other factors
 - Financial Plan assumes rebound in FY 2022 water demand to pre-COVID levels
 - All subsequent increases in water demand assumed to be due to account growth only
 - › New debt:
 - \$6 million in FY 2022 (assumed 3% interest rate over 20 years)

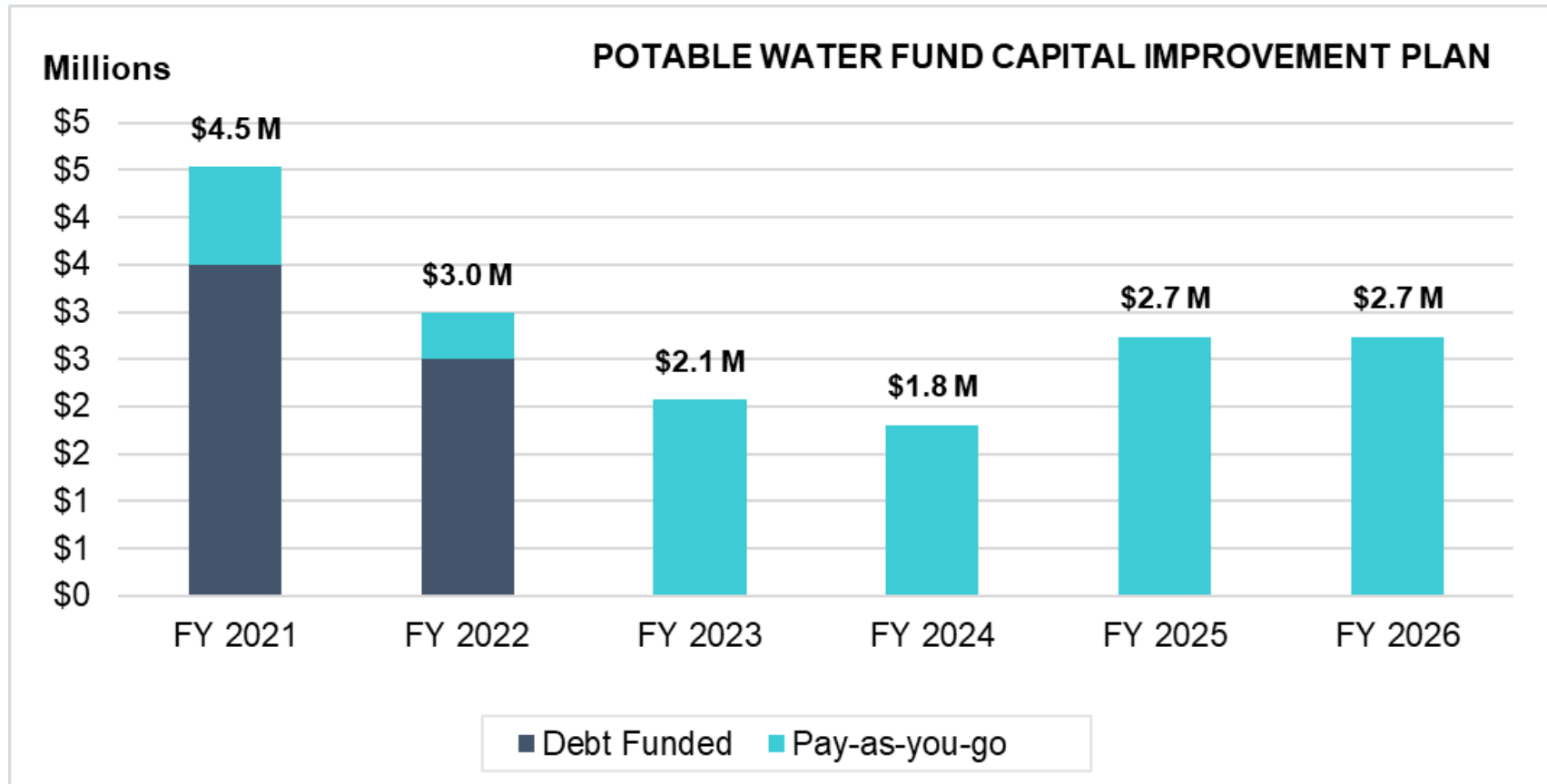
Growth Assumptions

- Financial plan assumes 50% of projected growth will occur

Description	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
New Metered Connections					
Projected growth	43	50	47	30	42
50% of projected growth	22	25	24	15	21
Capacity Fee Revenue					
Projected growth	\$1,035,126	\$1,632,901	\$1,376,572	\$959,409	\$745,666
50% of projected growth	\$517,563	\$816,451	\$688,286	\$479,705	\$372,833
Total Water Demand (AF)					
Projected growth	1,191	1,207	1,224	1,186	1,201
50% of projected growth	1,186	1,194	1,203	1,159	1,166

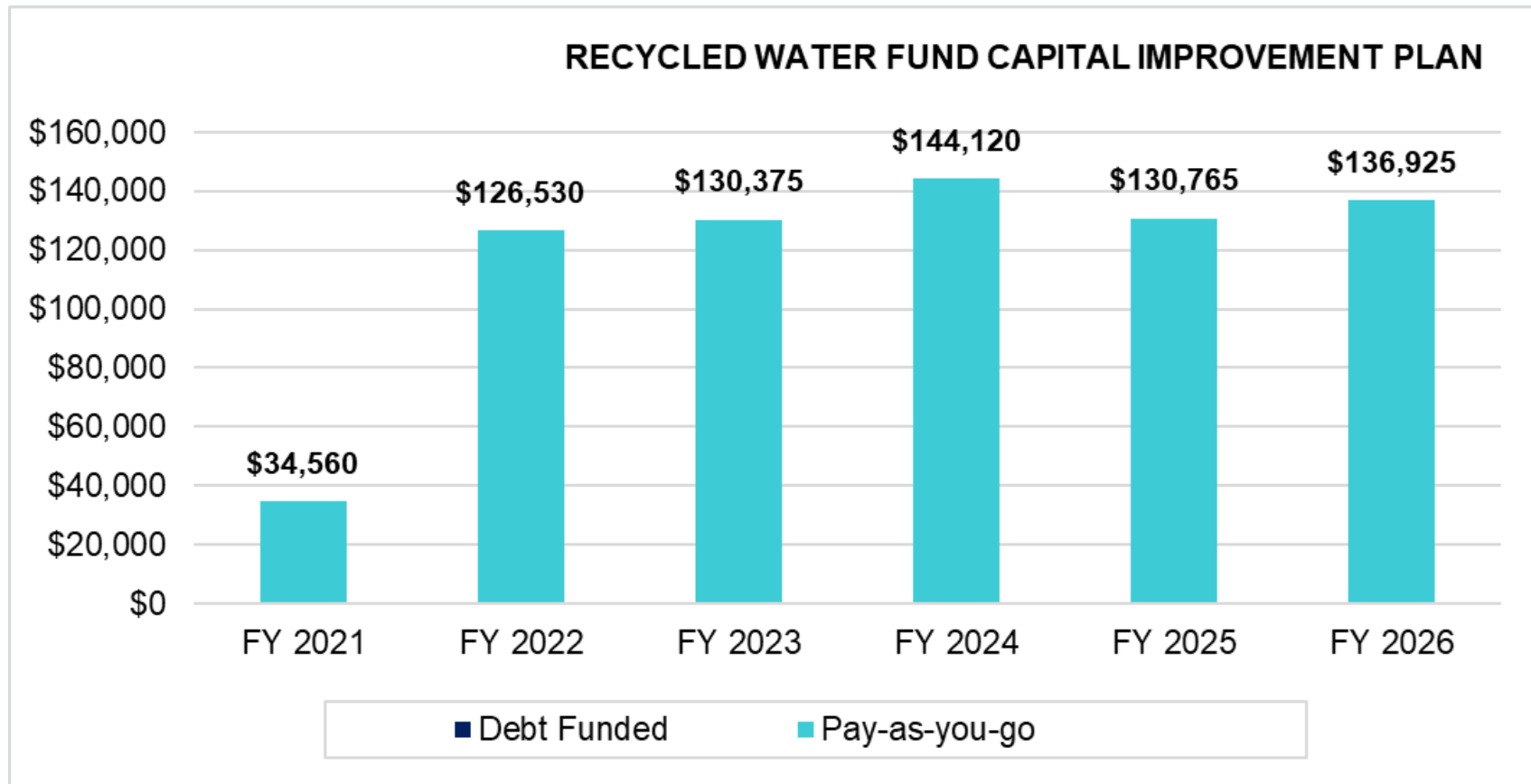
Financial Plan: Potable Water Fund Capital Expenditures

- \$1 million added annually beginning in FY 2025 to account for liability associated with future supplemental supply CIP



Financial Plan: Recycled Water Fund Capital Expenditures

- \$125K added annually beginning in FY 2022 to account for liability associated with District's future share of City wastewater treatment plant CIP



Financial Policies

- Required debt coverage ratio: 1.20
- Existing reserve policy:

Reserve	Target Amount
Operating Reserve	90 days of O&M
Rate Stabilization Reserve	20% of annual variable rate revenue
Capital Emergency Reserve	2.5% of capital asset net book value
Capital R&R Reserve	100% of annual depreciation expense
Debt Service Reserve	100% of annual debt service

Policy Goals / Relationship of Recycled Water Fund to Potable Water Fund

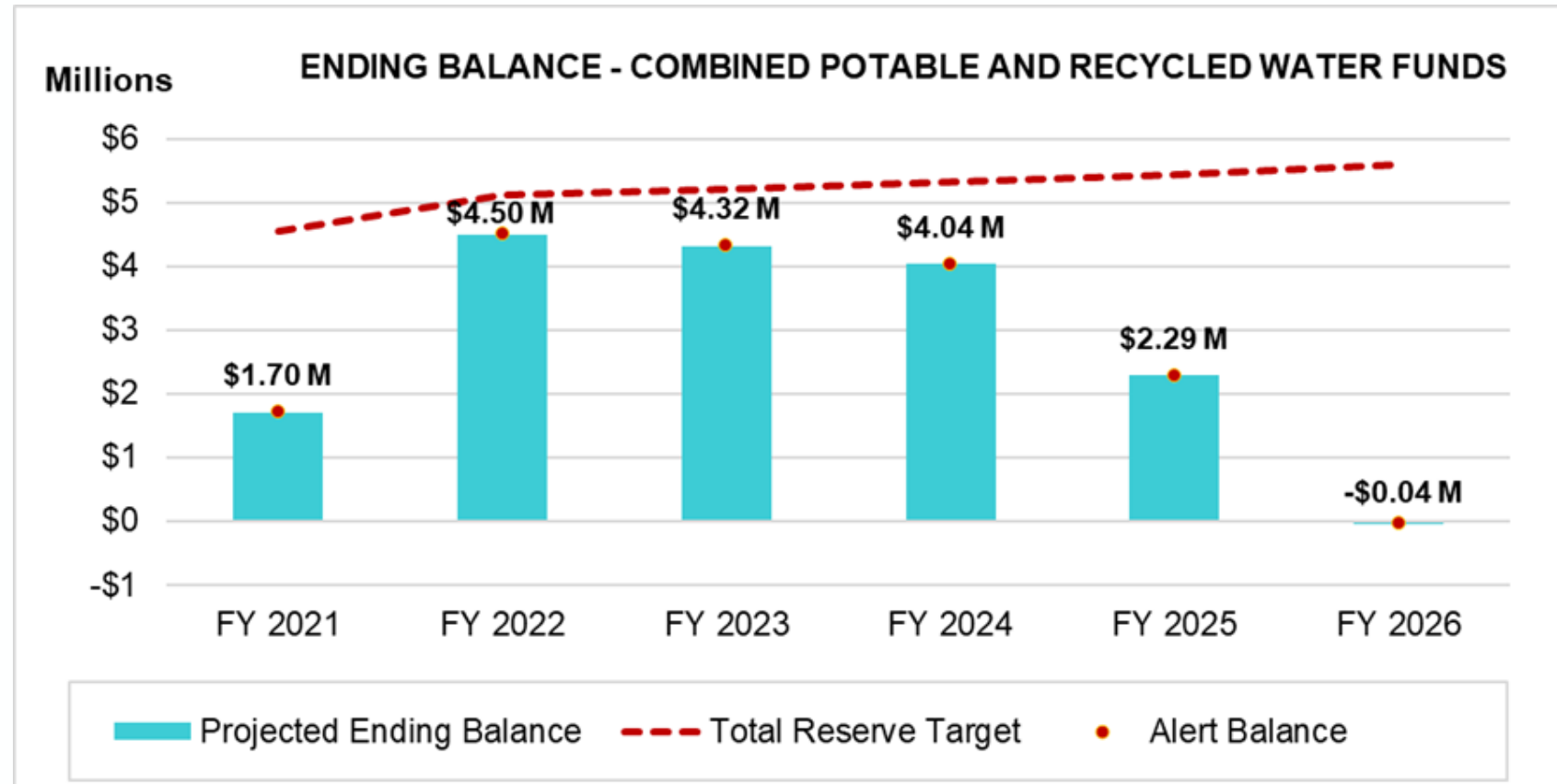
- Policy Goal #1: The recycled water volumetric rate should be no more than 80% of the landscape potable volumetric rate
- Policy Goal #2: Recycled revenue should at least cover the O&M costs in the Recycled Water Fund
- Given these policies and the financial condition of the Recycled Water Fund, Raftelis recommends that the recycled debt service and recycled CIP be paid for by potable water customers
 - › Potable water customers benefit from the expansion and maintenance of the recycled system
 - › Recycled water frees up potable water and provides drought insurance for all customers

Financial Plan



Status Quo Financial Plan: No Rate Increases

- No revenue adjustments (i.e., rate increases)
- Reserves depleted by FY 2026



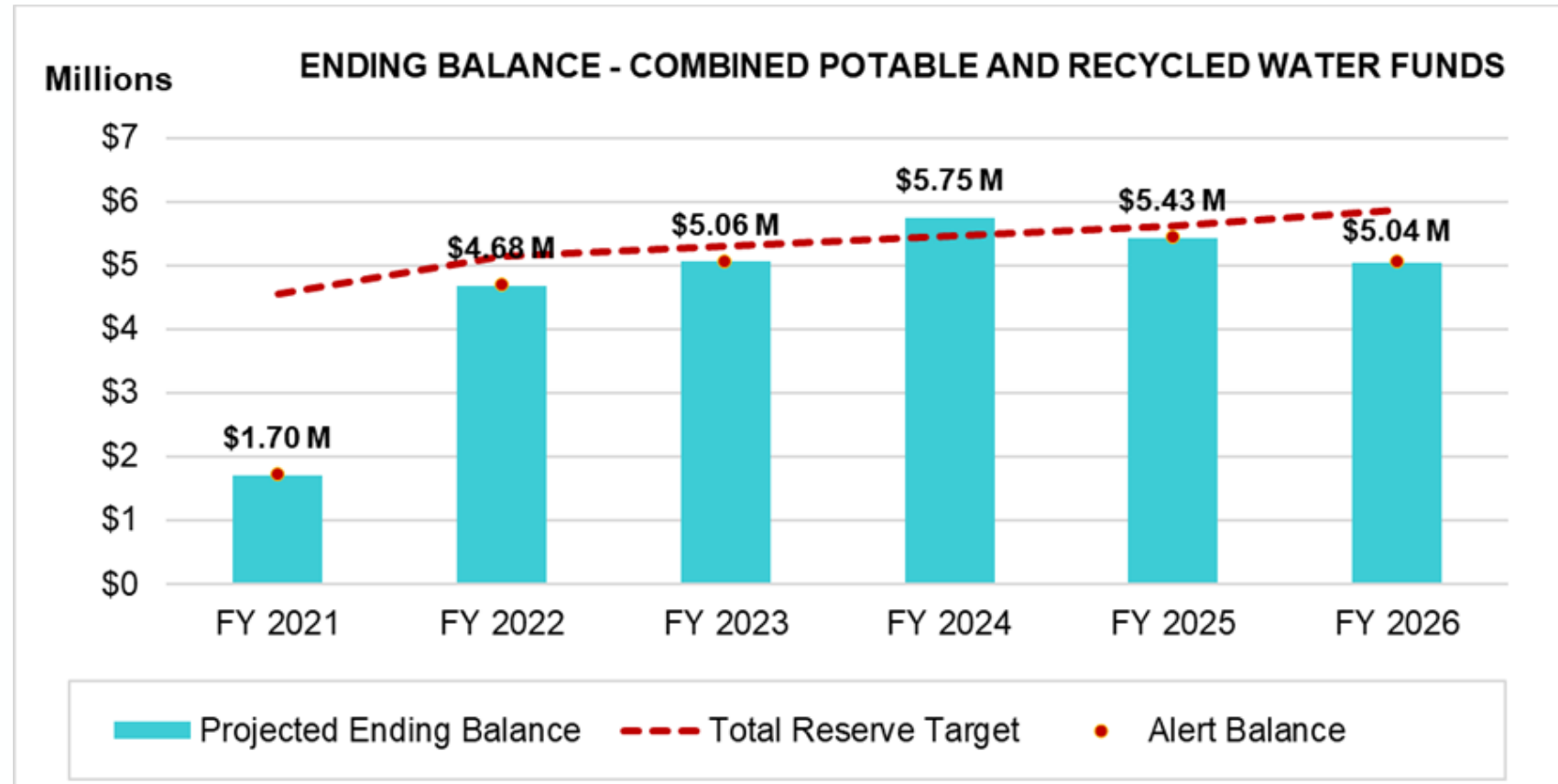
Proposed Financial Plan

- Potable Revenue Adjustments:

- › FY 2022: 5%
- › FY 2023: 5%
- › FY 2024: 5%
- › FY 2025: 5%
- › FY 2026: 5%

- Recycled Revenue Adjustments:

- › FY 2022: 5%
- › FY 2023: 5%
- › FY 2024: 10%
- › FY 2025: 10%
- › FY 2026: 10%



Cost of Service Overview



Key Legislation in California Affecting Water Rates

- **Cost of Service Requirements**

- › Proposition 218 (Article XIII C and XIII D of California Constitution)

- San Juan Capistrano ruling:

- There must be a nexus between cost of providing service and rates charged to customers

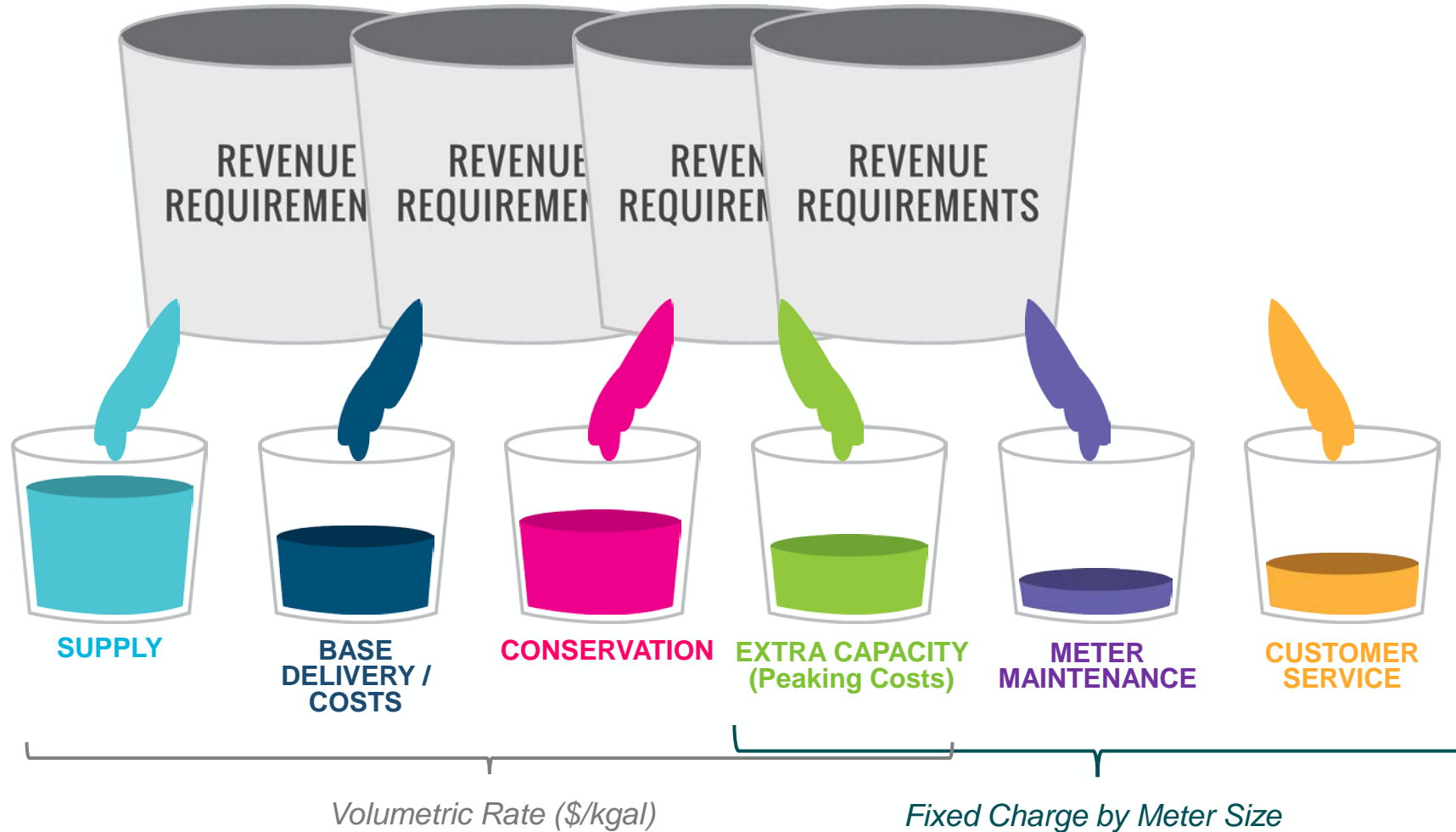
- This nexus needs to be clearly shown in the administrative record (i.e. study report)

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



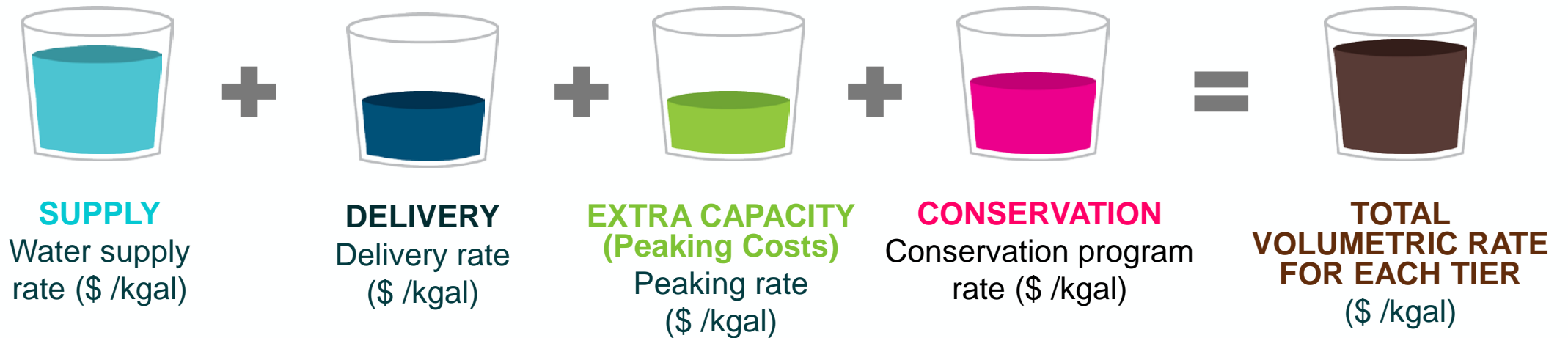
Distribute Costs to Each Class

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 (\$/kgal) costs of water supply, water delivery, peaking/capacity costs and conservation costs



Rate Design



Rate Design Considerations

- Goals:
 - › Maintain existing revenue split of 35% fixed / 65% variable to provide revenue stability
 - › Ensure that recycled landscape rate is at least 20% lower than potable landscape rate
- Proposed rate structure changes:
 - › Adjust potable water rate schedule to reflect monthly billing basis
 - › Implement volumetric rates per 100 gallons rather than 1,000 gallons
 - › Same fixed charges for potable and recycled
 - › Eliminate “Other” potable water volumetric rate class
 - › Revise tier allotments based on updated information

Rate Design: Key Changes Since Last Study

- Updated residential tier allotments
- In prior rate study, property tax was applied to offset residential rates only
 - › Raftelis recommends that property tax be applied equally to all customer classes
- Conservation costs applied to outdoor water use only (landscape potable, residential tiers 3 & 4)

Current Residential Tier Allotments

Tier	Single Family Bi-monthly Tiers (gallons)	Multi-Family Bi-monthly Tiers (gallons)	Rationale
Tier 1	0 to 6,000	0 to 6,000	Efficient indoor use (average household size at 32 gpcd)
Tier 2	6,001 to 12,000	6,001 to 6,400	Efficient outdoor use (based on water budget for landscape area of 1,800 sq. ft. for single family & 100 sq. ft. for multi-family)
Tier 3	12,001 to 16,000	6,401 to 16,000	Based on each dwelling unit's fair share of the District's maximum safe yield for groundwater basin (1,506 AFY)
Tier 4	Over 16,000	Over 16,000	

Proposed Changes to Residential Tier Allotments

- Raftelis recommends no changes to Tier 1 and 2
- Due to account growth in the last five years, Tier 3 needs to be adjusted to reflect the amount of water available per account (as the total safe yield amount has not changed)
 - › Raftelis recommends that Tier 3 maximum be reduced from 16,000 to 14,000 gallons per bi-monthly billing period

Rate Design: Basic Meter Charges

- Basic Meter Charge is composed of:
 - › Customer Service
 - › Meter Maintenance/Replacement
 - › Meter Capacity
 - › Private Fire Protection (if applicable)
- Cost of Service changes from prior study:
 - › More cost is allocated to meter capacity, which reflects the CIP needs of the community

Monthly Basic Meter Charge Calculation (No Revenue Adjustment)

[A]	[B]	[C]	[D]	[E]	[F]	[G=C+D+E+F]
Line	Meter Size	Customer Service	Meter Maintenance/ Replacement	Meter Capacity	Private Fire Protection	Monthly Basic Meter Charge
1	5/8"	\$4.76	\$5.05	\$32.16	\$0.00	\$41.97
2	5/8" Fire Service (Residential/Commercial)	\$0.00	\$0.00	\$0.00	\$11.10	\$11.10
3	3/4" (Multi-Residential, incl Fire Service)	\$4.76	\$5.05	\$32.16	\$11.10	\$53.07
4	3/4"	\$4.76	\$5.67	\$48.24	\$0.00	\$58.67
5	1"	\$4.76	\$7.04	\$80.40	\$0.00	\$92.20
6	1 1/2"	\$4.76	\$18.00	\$160.80	\$0.00	\$183.56
7	2"	\$4.76	\$33.42	\$257.29	\$0.00	\$295.46
8	3"	\$4.76	\$45.67	\$562.81	\$0.00	\$613.24
9	4"	\$4.76	\$66.51	\$1,013.06	\$0.00	\$1,084.33
10	6"	\$4.76	\$66.51	\$2,090.45	\$0.00	\$2,161.71

Monthly Potable Water Basic Meter Charge (No Revenue Adjustment)

[A]	[B]	[C]	[D]	[E]	[F]
Line	Meter Size	COS Monthly Basic Meter Charge	Current Monthly Basic Meter Charge	Difference (\$)	Difference (%)
1	5/8"	\$41.97	\$42.95	(\$0.98)	-2.3%
2	5/8" Fire Service (Residential/Commercial)	\$11.10	\$11.69	(\$0.59)	-5.1%
3	3/4" (Multi-Residential, incl Fire Service)	\$53.07	\$54.64	(\$1.57)	-2.9%
4	3/4"	\$58.67	\$67.58	(\$8.91)	-13.2%
5	1"	\$92.20	\$72.70	\$19.50	26.8%
6	1 1/2"	\$183.56	\$170.84	\$12.72	7.4%
7	2"	\$295.46	\$231.97	\$63.50	27.4%
8	3"	\$613.24	\$413.56	\$199.69	48.3%
9	4"	\$1,084.33	\$723.10	\$361.23	50.0%
10	6"	\$2,161.71	\$1,544.64	\$617.07	39.9%

Rate Design: Volumetric Rates

- Commodity Rate is composed of:
 - › Water Supply
 - › Base Delivery
 - › Peaking
 - › Conservation
 - › Revenue offset (Property Tax)
- Cost of Service changes from prior study:
 - › Property tax allocated to all customers
 - › Conservation program allocated to outdoor water use only

Potable Water Volumetric Rates Calculation (No Revenue Adjustment)

- All volumetric rates shown are per 100 gallons (cGal):

[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
Line	Customer Class	Water Supply	Base Delivery	Peaking Unit Rate	Conservation	Revenue Offset	Volumetric Rate (per cGal)
1	Residential Tier 1	\$0.510	\$0.663	\$0.115	\$0.000	(\$0.506)	\$0.78
2	Residential Tier 2	\$0.510	\$0.663	\$0.254	\$0.000	(\$0.169)	\$1.26
3	Residential Tier 3	\$0.510	\$0.663	\$0.397	\$0.708	\$0.000	\$2.28
4	Residential Tier 4	\$0.510	\$0.663	\$0.861	\$0.708	\$0.000	\$2.74
5	CII	\$0.510	\$0.663	\$0.417	\$0.000	(\$0.307)	\$1.28
6	Landscape Potable	\$0.510	\$0.663	\$0.539	\$0.708	(\$0.307)	\$2.11

Potable Water Volumetric Rates (No Revenue Adjustment)

- All volumetric rates shown are per 100 gallons (cGal):

[A]	[B]	[H]	[J]	[K]	[L]
Line	Customer Class	COS Rate (per cGal)	Current Rate (per cGal)	Difference (\$)	Difference (%)
1	Residential Tier 1	\$0.78	\$0.70	\$0.08	11.2%
2	Residential Tier 2	\$1.26	\$1.22	\$0.04	3.1%
3	Residential Tier 3	\$2.28	\$1.96	\$0.32	16.5%
4	Residential Tier 4	\$2.74	\$2.36	\$0.38	16.0%
5	CII	\$1.28	\$1.64	(\$0.35)	-21.6%
6	Landscape Potable	\$2.11	\$2.05	\$0.07	3.2%

Proposed Rates



Proposed Potable Water Rates: Monthly Basic Meter Charges

Monthly Potable Water Rates	Current FY 2021 (Dec. 2020)	Proposed FY 2022 (Dec. 2021)	Proposed FY 2023 (Dec. 2022)	Proposed FY 2024 (Dec. 2023)	Proposed FY 2025 (Dec. 2024)	Proposed FY 2026 (Dec. 2025)
Monthly Basic Meter Charge						
5/8"	\$42.95	\$44.07	\$46.28	\$48.59	\$51.02	\$53.57
5/8" Fire Service (Residential/Commercial)	\$11.69	\$11.66	\$12.24	\$12.85	\$13.49	\$14.17
3/4" (Multi-Residential, incl Fire Service)	\$54.64	\$55.73	\$58.51	\$61.44	\$64.51	\$67.74
3/4"	\$67.58	\$61.61	\$64.69	\$67.92	\$71.32	\$74.88
1"	\$72.70	\$96.81	\$101.65	\$106.73	\$112.07	\$117.67
1 1/2"	\$170.84	\$192.74	\$202.38	\$212.50	\$223.12	\$234.28
2"	\$231.97	\$310.24	\$325.75	\$342.04	\$359.14	\$377.10
3"	\$413.56	\$643.91	\$676.10	\$709.91	\$745.40	\$782.67
4"	\$723.10	\$1,138.55	\$1,195.48	\$1,255.25	\$1,318.01	\$1,383.91
6"	\$1,544.64	\$2,269.80	\$2,383.29	\$2,502.46	\$2,627.58	\$2,758.96

Proposed Potable Water Rates: Volumetric Rates

Monthly Potable Water Rates	Current FY 2021 (Dec. 2020)	Proposed FY 2022 (Dec. 2021)	Proposed FY 2023 (Dec. 2022)	Proposed FY 2024 (Dec. 2023)	Proposed FY 2025 (Dec. 2024)	Proposed FY 2026 (Dec. 2025)
Volumetric Rates (per 100 gallons)						
<u>Residential Units with Individual Meters</u>						
Tier 1 (0-3,000 gallons per monthly billing period)	\$0.70	\$0.83	\$0.87	\$0.91	\$0.96	\$1.00
Tier 2 (3,001-6,000 gallons per monthly billing period)	\$1.22	\$1.33	\$1.39	\$1.46	\$1.53	\$1.61
Tier 3 (6,001-7,000 gallons per monthly billing period)	\$1.96	\$2.40	\$2.52	\$2.64	\$2.77	\$2.91
Tier 4 (Over 7,000 gallons per monthly billing period)	\$2.36	\$2.88	\$3.03	\$3.18	\$3.34	\$3.50
<u>Multi-Residential Units with Master Meters (Tier allotments are per dwelling unit)</u>						
Tier 1 (0-3,000 gallons per monthly billing period)	\$0.70	\$0.83	\$0.87	\$0.91	\$0.96	\$1.00
Tier 2 (3,001-3,200 gallons per monthly billing period)	\$1.22	\$1.33	\$1.39	\$1.46	\$1.53	\$1.61
Tier 3 (3,201-7,000 gallons per monthly billing period)	\$1.96	\$2.40	\$2.52	\$2.64	\$2.77	\$2.91
Tier 4 (Over 7,000 gallons per monthly billing period)	\$2.36	\$2.88	\$3.03	\$3.18	\$3.34	\$3.50
<u>Uniform Rates</u>						
Commercial, Industrial, Institutional (CII)	\$1.64	\$1.35	\$1.42	\$1.49	\$1.56	\$1.64
Landscape Potable	\$2.05	\$2.22	\$2.33	\$2.45	\$2.57	\$2.70
Qualifying Medical Needs (Residential)	\$1.22	\$1.33	\$1.39	\$1.46	\$1.53	\$1.61
Rate Assistance (Residential)	\$0.70	\$0.83	\$0.87	\$0.91	\$0.96	\$1.00

Proposed Recycled Water Rates

Monthly Recycled Water Rates	Current FY 2021 (Dec. 2020)	Proposed FY 2022 (Dec. 2021)	Proposed FY 2023 (Dec. 2022)	Proposed FY 2024 (Dec. 2023)	Proposed FY 2025 (Dec. 2024)	Proposed FY 2026 (Dec. 2025)
Monthly Basic Meter Charge						
5/8"	\$45.88	\$44.07	\$46.28	\$48.59	\$51.02	\$53.57
3/4"	\$72.18	\$61.61	\$64.69	\$67.92	\$71.32	\$74.88
1"	\$77.64	\$96.81	\$101.65	\$106.73	\$112.07	\$117.67
1 1/2"	\$182.46	\$192.74	\$202.38	\$212.50	\$223.12	\$234.28
2"	\$247.74	\$310.24	\$325.75	\$342.04	\$359.14	\$377.10
3"	\$441.67	\$643.91	\$676.10	\$709.91	\$745.40	\$782.67
4"	\$772.25	\$1,138.55	\$1,195.48	\$1,255.25	\$1,318.01	\$1,383.91
6"	\$1,649.63	\$2,269.80	\$2,383.29	\$2,502.46	\$2,627.58	\$2,758.96
Volumetric Rates (per 100 gallons)						
Landscape Recycled	\$1.36	\$1.41	\$1.48	\$1.64	\$1.82	\$2.01

Recycled Water Rates Discussion

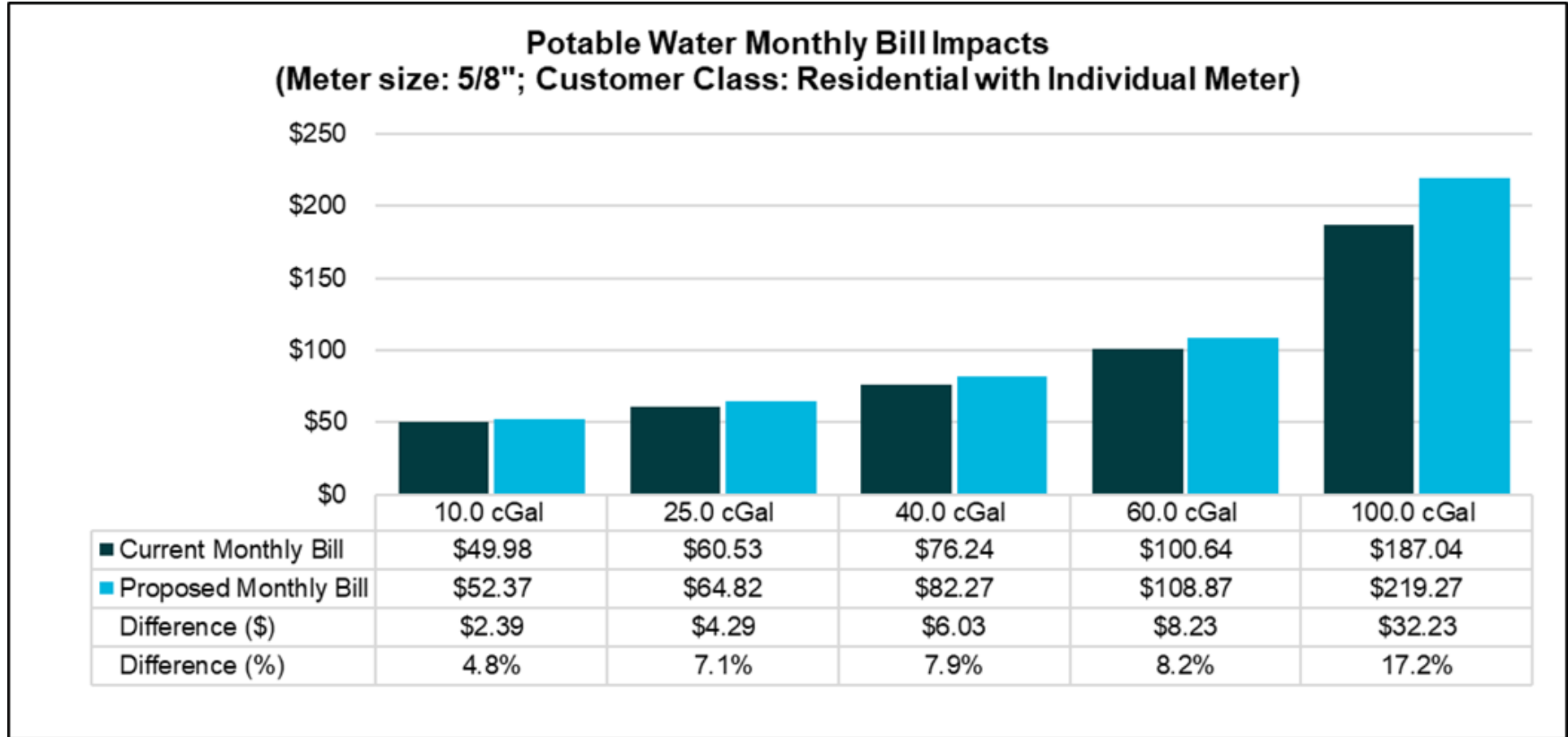
- Recycled customers will have the same Basic Meter Charge as potable
- Comparison of Landscape Recycled and Landscape Potable Rates:

Description	Current	Proposed FY 2022	Proposed FY 2023	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026
Landscape Recycled Volumetric Rate (\$/cGal)	\$1.36	\$1.41	\$1.48	\$1.64	\$1.82	\$2.01
Landscape Potable Volumetric Rate (\$/cGal)	\$2.05	\$2.22	\$2.33	\$2.45	\$2.57	\$2.70
Difference (\$)	(\$0.68)	(\$0.81)	(\$0.85)	(\$0.81)	(\$0.75)	(\$0.69)
Difference (%)	-33%	-36%	-36%	-33%	-29%	-26%

Bill Impacts

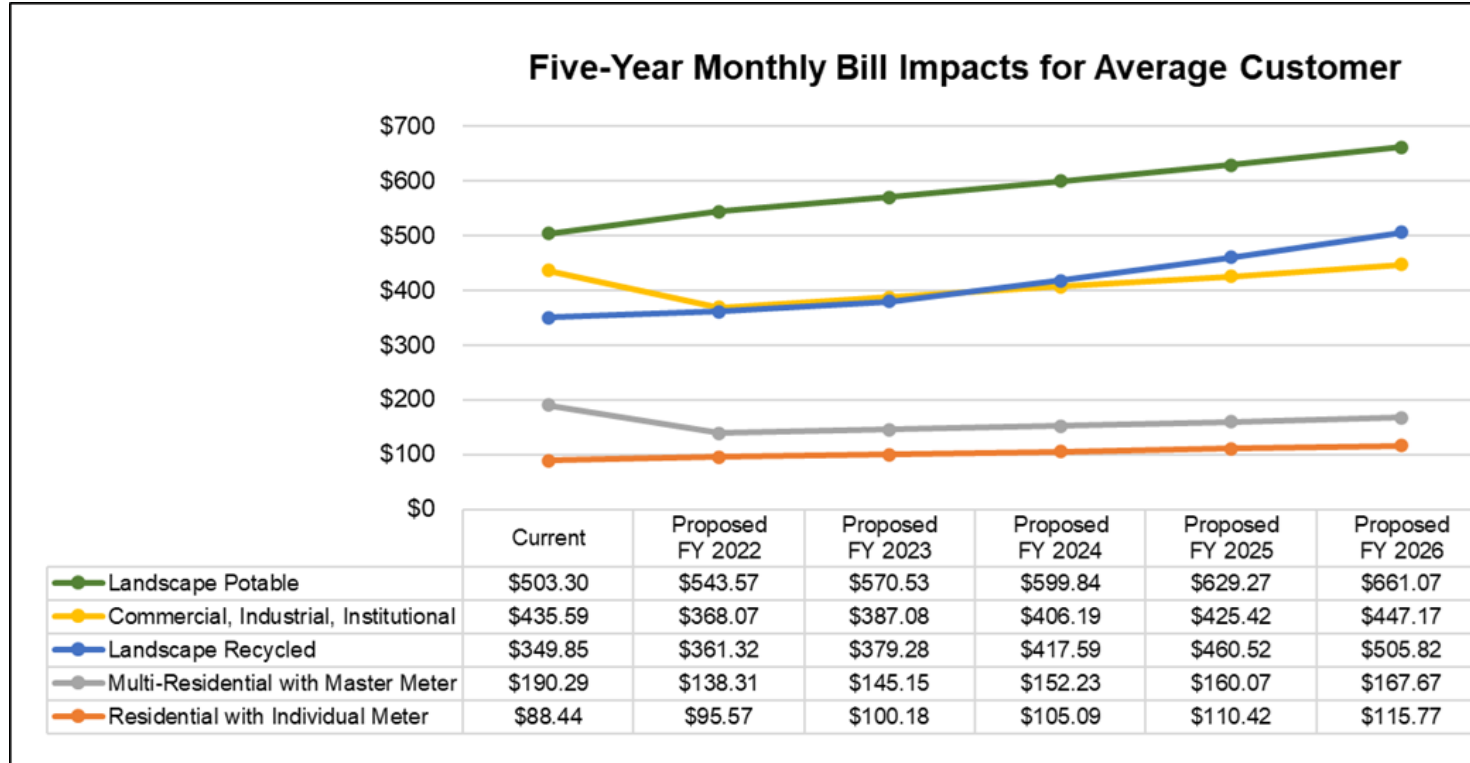


FY 2022 Residential Monthly Bill Impacts



*Various monthly water use represents 10th, 25th, 50th, 75th, and 90th percentiles (based on FY 2020 residential water use)

Five-Year Monthly Bill Impacts for “Average” Customer



Customer Class	Most Common Meter Size	Average Monthly Water Use (FY 2020)	Average Number of Dwelling Units
Residential Units with Individual Meters	5/8"	50 cGal	N/A
Multi-Residential Units with Master Meters	1"	140 cGal	4
Commercial, Industrial, Institutional	5/8"	240 cGal	N/A
Landscape Potable/Recycled	5/8"	225 cGal	N/A

Next Steps

- If authorized by the Board of Directors:
 - › Mail out the Prop 218 Notice by Aug. 30, 2021
 - › Conduct Public Hearing on Oct 14, 2021



Raftelis is a Registered Municipal Advisor within the meaning as defined in Section 15B (e) of the Securities Exchange Act of 1934 and the rules and regulations promulgated thereunder (Municipal Advisor Rule).

However, except in circumstances where Raftelis expressly agrees otherwise in writing, Raftelis is not acting as a Municipal Advisor, and the opinions or views contained herein are not intended to be, and do not constitute “advice” within the meaning of the Municipal Advisor Rule.

Supplemental Slides



Proposed Changes to Residential Tier Allotments (Monthly Billing Basis)

- All proposed changes identified in red below:

Tier	Current Monthly Allotment (gallons)	Updated Monthly Allotment (gallons)	Basis
Residential Units with Individual Meters			
Tier 1	0-3,000	0-3,000	Efficient indoor water use for average household size
Tier 2	3,001-6,000	3,001-6,000	Efficient outdoor water use for typical single family residential landscape area
Tier 3	6,001-8,000	6,001- 7,000	Additional water use within groundwater basin safe yield
Tier 4	Over 8,000	Over 7,000	All use in excess of groundwater basin safe yield
Multi-Residential Units with Master Meters (per Dwelling Unit)			
Tier 1	0-3,000	0-3,000	Efficient indoor water use for average household size
Tier 2	3,001-3,200	3,001-3,200	Efficient outdoor water use for typical multi-family residential landscape area
Tier 3	3,201-8,000	3,201- 7,000	Additional water use within groundwater basin safe yield
Tier 4	Over 8,000	Over 7,000	All use in excess of groundwater basin safe yield

Water Use by Tier: Current vs. Proposed

Tier	Current Tiers (100s of gallons)	Proposed Tiers (100s of gallons)
Residential Units with Individual Meters		
Tier 1	1,013,884	1,013,884
Tier 2	528,390	528,390
Tier 3	167,831	95,197
Tier 4	319,840	392,473
Total	2,029,944	2,029,944
Multi-Residential Units with Master Meters		
Tier 1	169,267	169,267
Tier 2	6,581	6,581
Tier 3	33,785	32,830
Tier 4	1,312	2,267
Total	210,945	210,945