

# Scotts Valley

## Water District

---

Multi-Year Water Rate Study

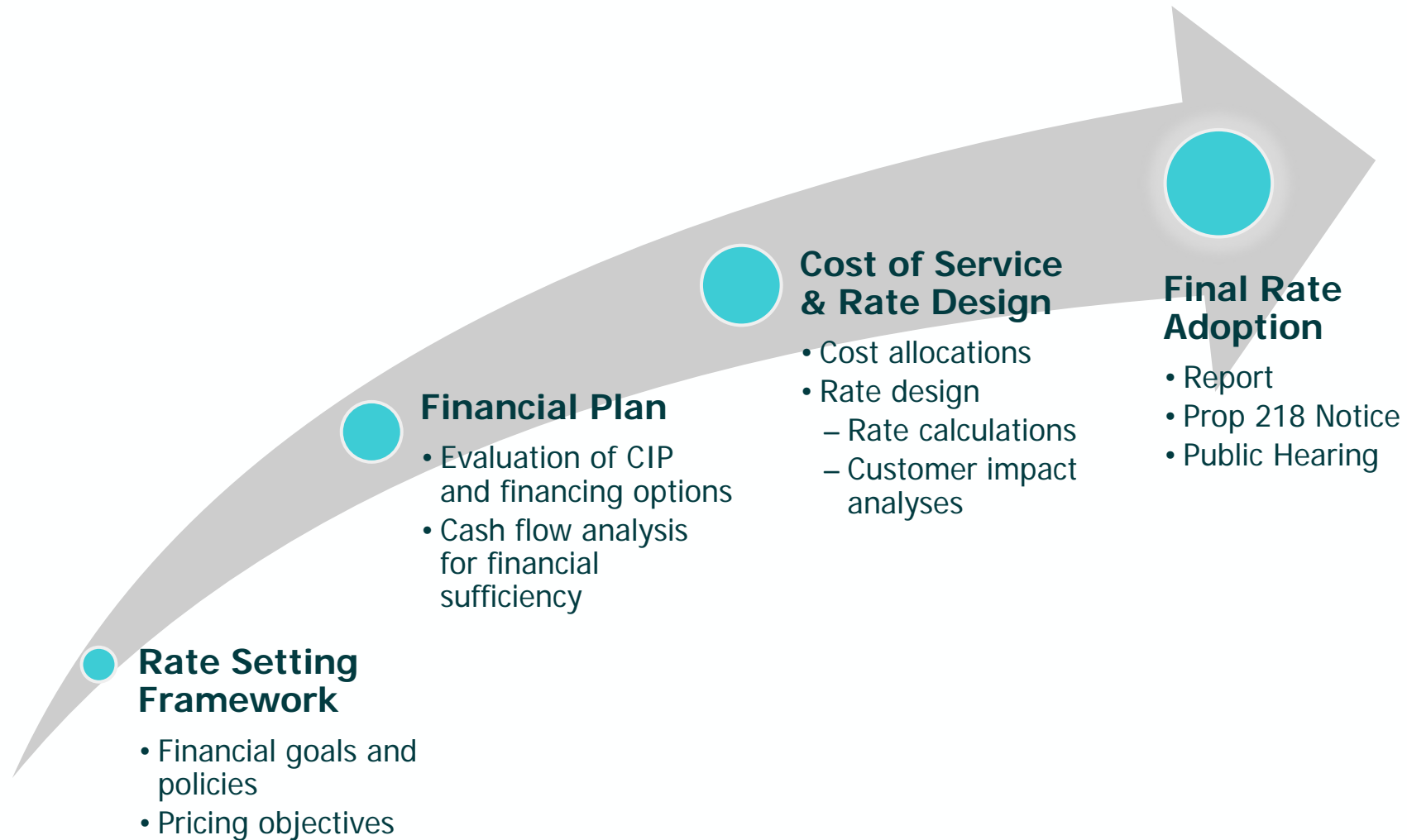
Rate Workshop - June 10, 2021



# Agenda

- Rate Study Process
- Project Objectives
- Financial Plan Assumptions
- Financial Plan Scenarios
- Cost of Service Overview
- Rate Design Discussion
- Discussion and Next Steps

# Rate Study Process



# Project 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 FYE 2021 due to COVID and other factors
    - Financial Plan assumes rebound in FYE 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 FYE 2022 (assumed 3% interest rate over 20 years)

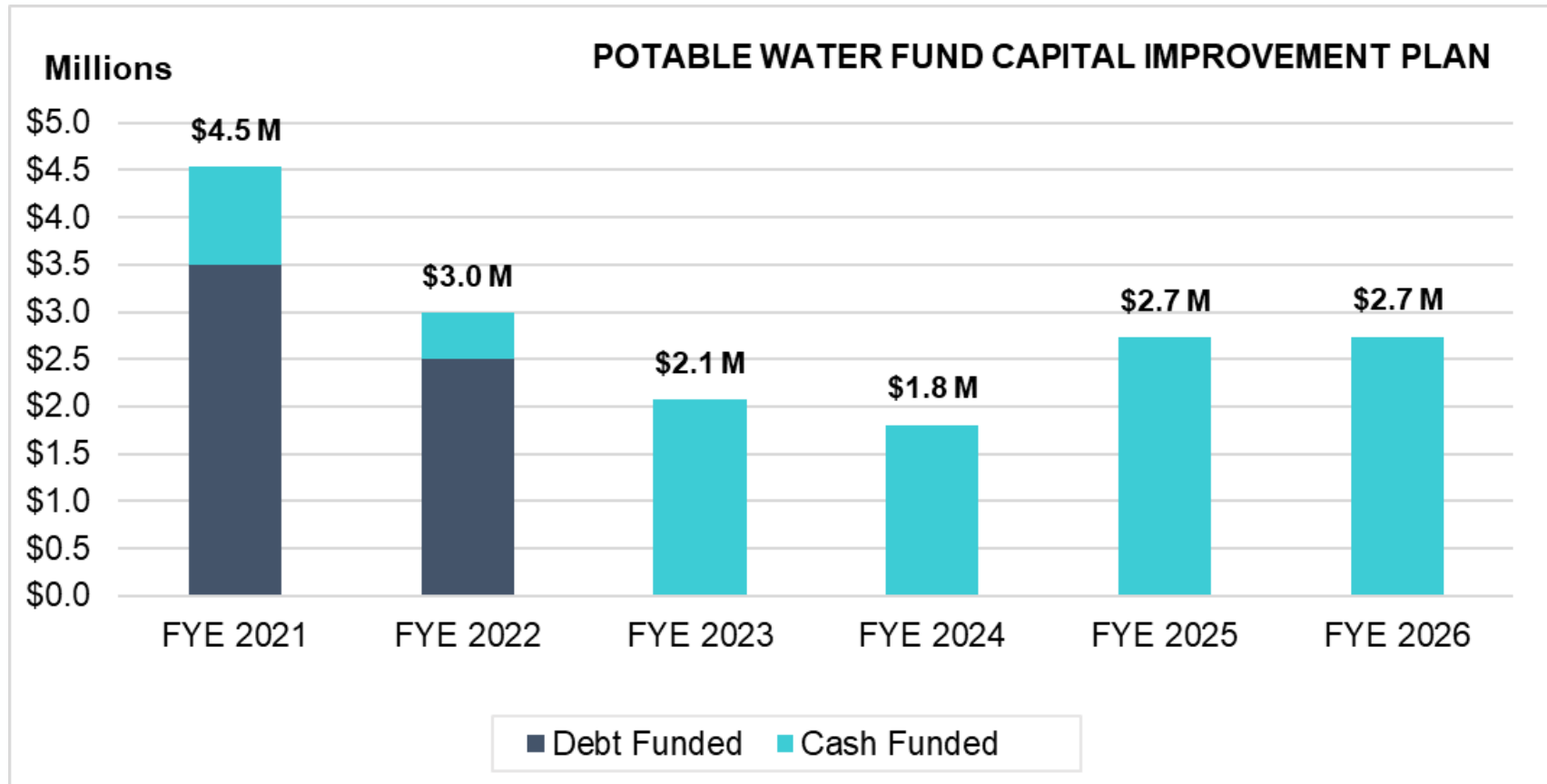
# Growth Assumptions

- Financial plan assumes 50% of projected growth will occur

Description	FYE 2022	FYE 2023	FYE 2024	FYE 2025	FYE 2026
<b>New Metered Connections</b>					
Projected growth	43	50	47	30	42
50% of projected growth	22	25	24	15	21
<b>Capacity Fee Revenue</b>					
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
<b>Total Water Demand (AF)</b>					
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

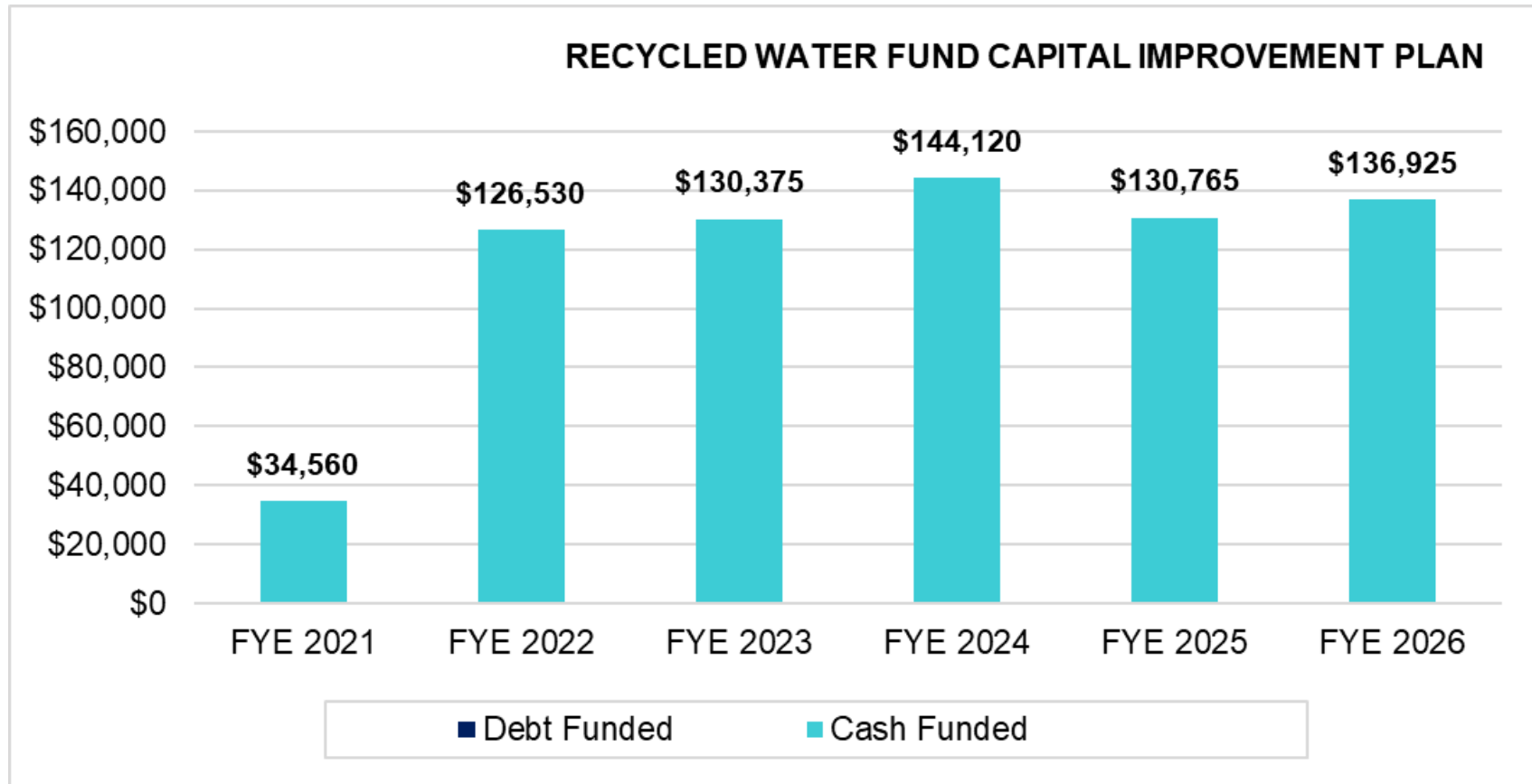
- \$1 million added annually beginning in FYE 2025 to account for liability associated with future supplemental supply CIP





# Financial Plan: Recycled Water Fund Capital Expenditures

- \$125K added annually beginning in FYE 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

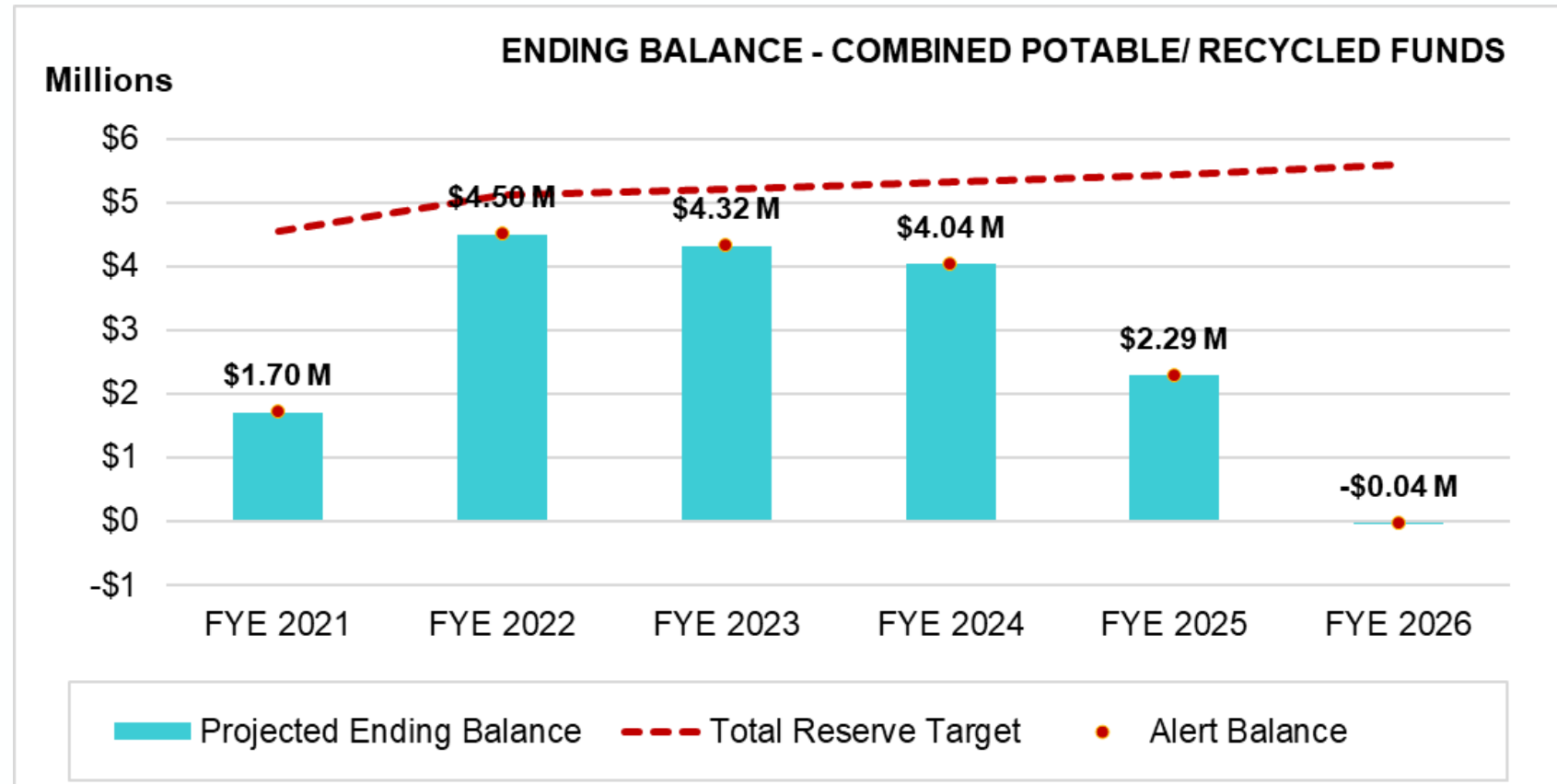
- Policy Goal #1: The recycled water volumetric rate should be no more than 80% of the landscape potable volumetric rate
- Policy Goal #2: Recycled revenue should at least cover the O&M costs in the Recycled Water Fund
- Given these policies and the financial condition of the Recycled Water Fund, Raftelis 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 Scenarios



# Status Quo Financial Plan: No Rate Increases

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



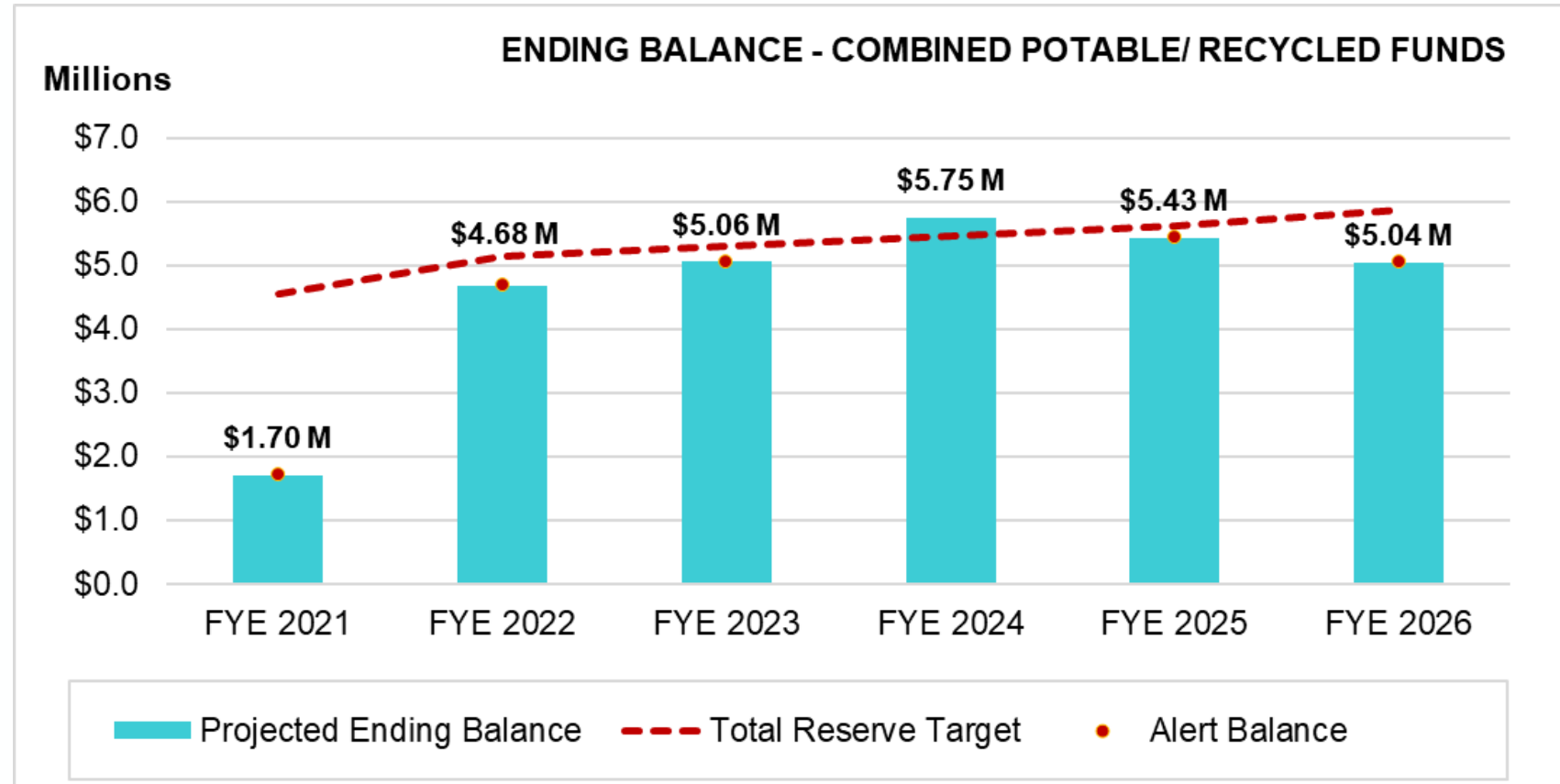
# Proposed Financial Plan

- 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)

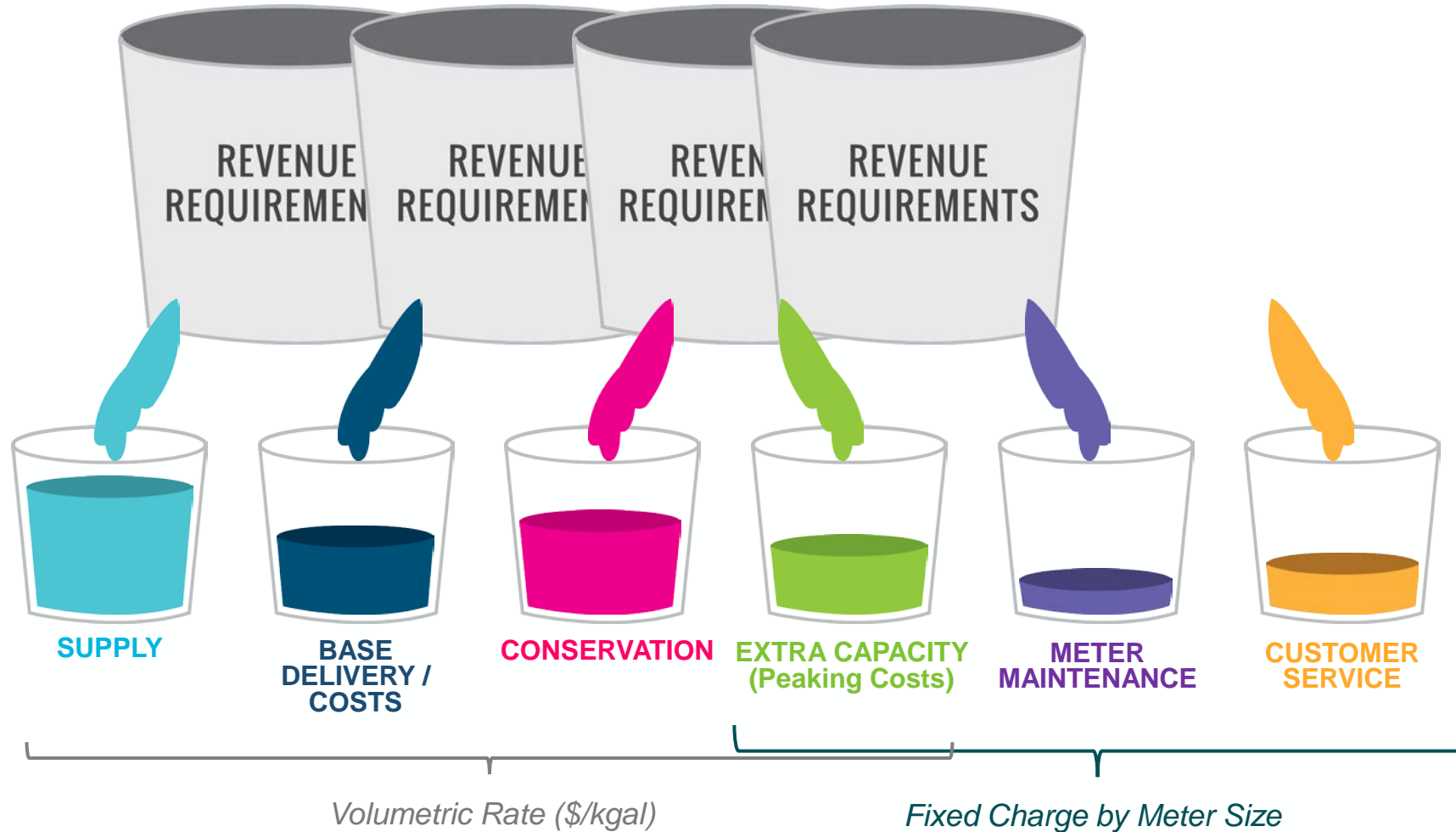


# What is Cost of Service?

- 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



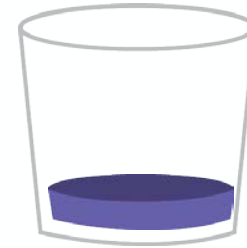
**DELIVERY COSTS**  
Use: Same for All  
Classes



**CONSERVATION**  
Distributed to  
High Vol Users



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



**METER  
MAINTENANCE**  
Meter Size



**CUSTOMER  
SERVICE**  
# of Cust Bills



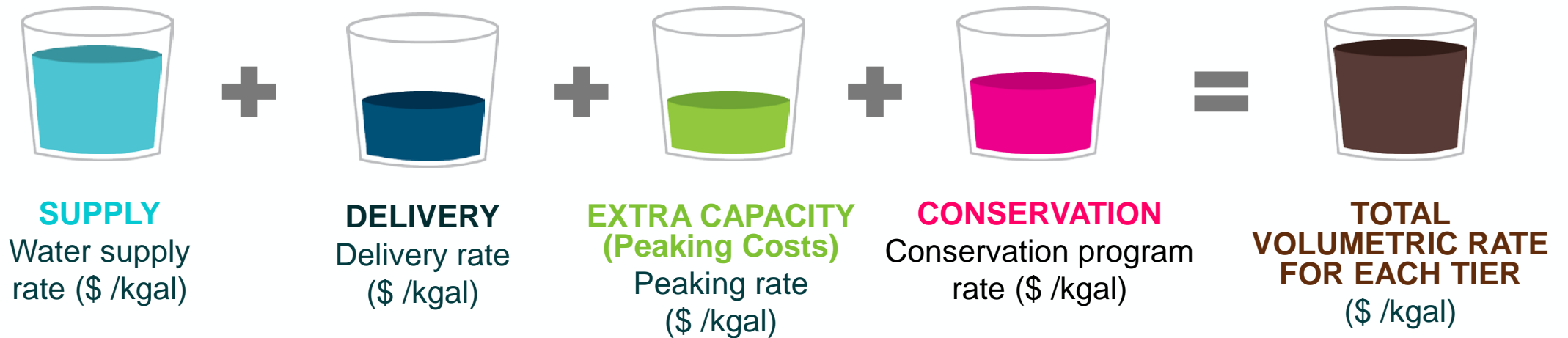
*Distribute Costs to Each Class*

**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 Discussion



# Rate Design 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
- Same fixed charges for potable and recycled
- 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 to account

# Proposed Changes to Residential Tier Allotments

- All proposed changes identified in red below:

Tier	Current Bi-monthly Tiers (gallons)	Proposed Bi-monthly Tiers (gallons)
<b>Single Family</b>		
Tier 1	0 to 6,000	0 to 6,000
Tier 2	6,001 to 12,000	6,001 to 12,000
Tier 3	12,001 to <b>16,000</b>	12,001 to <b>14,000</b>
Tier 4	Over <b>16,000</b>	Over <b>14,000</b>
<b>Multi-Family</b>		
Tier 1	0 to 6,000	0 to 6,000
Tier 2	6,001 to 6,400	6,001 to 6,400
Tier 3	6,401 to <b>16,000</b>	6,401 to <b>14,000</b>
Tier 4	Over <b>16,000</b>	Over <b>14,000</b>

# Water Use by Tier: Current vs. Proposed

Tier	Current Tiers (kgal)	Proposed Tiers (kgal)
<b>SFR</b>		
Tier 1	104,448	104,448
Tier 2	54,433	54,433
Tier 3	17,289	9,807
Tier 4	32,949	40,432
<b>Total</b>	<b>209,120</b>	<b>209,120</b>
<b>MFR</b>		
Tier 1	16,927	16,927
Tier 2	658	658
Tier 3	3,378	3,283
Tier 4	131	227
<b>Total</b>	<b>21,094</b>	<b>21,094</b>

# Rate Design: Basic Meter Charges

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

# Bi-monthly Potable Fixed Charge Calculation (No Revenue Adjustment)

Basic Meter Charge Calculation (FY 2021)	Customer	Meter Maintenance/ Replace	Meter Capacity	Private Fire Protection	COS Bi-Monthly Charge
5/8"	\$9.51	\$10.11	\$64.32	\$0.00	<b>\$83.94</b>
5/8" Fire Service (Residential/Commercial)	\$0.00	\$0.00	\$0.00	\$22.19	<b>\$22.19</b>
3/4" (Multi-Residential, incl Fire Service)	\$9.51	\$10.11	\$64.32	\$22.19	<b>\$106.14</b>
3/4"	\$9.51	\$11.35	\$96.48	\$0.00	<b>\$117.34</b>
1"	\$9.51	\$14.08	\$160.80	\$0.00	<b>\$184.39</b>
1 1/2"	\$9.51	\$36.00	\$321.61	\$0.00	<b>\$367.12</b>
2"	\$9.51	\$66.84	\$514.57	\$0.00	<b>\$590.92</b>
3"	\$9.51	\$91.35	\$1,125.63	\$0.00	<b>\$1,226.48</b>
4"	\$9.51	\$133.02	\$2,026.13	\$0.00	<b>\$2,168.66</b>
6"	\$9.51	\$133.02	\$4,180.90	\$0.00	<b>\$4,323.43</b>

Note: \$1.7 million in Meter Capacity costs could be alternatively collected on the property tax roll as a "Capital Charge"

# Bi-monthly Potable Fixed Charge (No Revenue Adjustment)

Basic Meter Charge Calculation (FY 2021)	Number of Meters (FY 2021)	COS Bi-Monthly Charge	Current Bi-Monthly Charge	Difference (\$)	Difference (%)
5/8"	3,549	<b>\$83.94</b>	\$85.90	(\$1.96)	-2.3%
5/8" Fire Service (Residential/Commercial)	461	<b>\$22.19</b>	\$23.38	(\$1.19)	-5.1%
3/4" (Multi-Residential, incl Fire Service)	27	<b>\$106.14</b>	\$109.27	(\$3.13)	-2.9%
3/4"	60	<b>\$117.34</b>	\$135.16	(\$17.82)	-13.2%
1"	117	<b>\$184.39</b>	\$145.39	\$39.00	26.8%
1 1/2"	44	<b>\$367.12</b>	\$341.68	\$25.44	7.4%
2"	32	<b>\$590.92</b>	\$463.93	\$126.99	27.4%
3"	3	<b>\$1,226.48</b>	\$827.11	\$399.37	48.3%
4"	1	<b>\$2,168.66</b>	\$1,446.19	\$722.47	50.0%
6"	0	<b>\$4,323.43</b>	\$3,089.28	\$1,234.15	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

# Policy Discussion on Revenue Offset Allocations

- Once we have allocated the property tax to each customer class, how should we allocate this between Residential tiers?
  - › Option 1: Property tax offset on all Residential tiers
  - › Option 2: Property tax offset on Residential Tiers 1 & 2 only



# Potable Water Volumetric Rates Calculation (No Revenue Adjustment)

- Option 1: Property tax offset on all Residential tiers

Volumetric Rate Calculations (FY 2021)	Water Supply (\$/kgal)	Base Delivery (\$/kgal)	Peaking (\$/kgal)	Conservation (\$/kgal)	Revenue Offset (\$/kgal)	COS Rate (\$/kgal)
Residential Tier 1	\$5.095	\$6.627	\$1.154	\$0.000	(\$4.482)	\$8.39
Residential Tier 2	\$5.095	\$6.627	\$2.544	\$0.000	(\$1.494)	\$12.77
Residential Tier 3	\$5.095	\$6.627	\$3.971	\$7.085	(\$1.494)	\$21.28
Residential Tier 4	\$5.095	\$6.627	\$8.609	\$7.085	(\$1.494)	\$25.92
Commercial, Industrial, Institutional (CII)	\$5.095	\$6.627	\$4.175	\$0.000	(\$3.071)	\$12.83
Landscape Potable	\$5.095	\$6.627	\$5.385	\$7.085	(\$3.071)	\$21.12

- Option 2: Property tax offset on Residential Tiers 1 & 2 only

Volumetric Rate Calculations (FY 2021)	Water Supply (\$/kgal)	Base Delivery (\$/kgal)	Peaking (\$/kgal)	Conservation (\$/kgal)	Revenue Offset (\$/kgal)	COS Rate (\$/kgal)
Residential Tier 1	\$5.095	\$6.627	\$1.154	\$0.000	(\$5.055)	\$7.82
Residential Tier 2	\$5.095	\$6.627	\$2.544	\$0.000	(\$1.685)	\$12.58
Residential Tier 3	\$5.095	\$6.627	\$3.971	\$7.085	\$0.000	\$22.78
Residential Tier 4	\$5.095	\$6.627	\$8.609	\$7.085	\$0.000	\$27.42
Commercial, Industrial, Institutional (CII)	\$5.095	\$6.627	\$4.175	\$0.000	(\$3.071)	\$12.83
Landscape Potable	\$5.095	\$6.627	\$5.385	\$7.085	(\$3.071)	\$21.12

# Potable Water Volumetric Rates (No Revenue Adjustment)

- Option 1: Property tax offset on all Residential tiers

Volumetric Rate Calculations (FY 2021)	Annual Water Use (kgal)	COS Rate (\$/kgal)	Current Rate (\$/kgal)	Difference (\$)	Difference (%)
Residential Tier 1	118,408	<b>\$8.39</b>	\$7.03	\$1.36	19.4%
Residential Tier 2	53,730	<b>\$12.77</b>	\$12.20	\$0.57	4.7%
Residential Tier 3	12,803	<b>\$21.28</b>	\$19.56	\$1.72	8.8%
Residential Tier 4	39,474	<b>\$25.92</b>	\$23.64	\$2.28	9.7%
Commercial, Industrial, Institutional (CII)	74,773	<b>\$12.83</b>	\$16.36	(\$3.53)	-21.6%
Landscape Potable	18,368	<b>\$21.12</b>	\$20.46	\$0.66	3.2%

- Option 2: Property tax offset on Residential Tiers 1 & 2 only

Volumetric Rate Calculations (FY 2021)	Annual Water Use (kgal)	COS Rate (\$/kgal)	Current Rate (\$/kgal)	Difference (\$)	Difference (%)
Residential Tier 1	118,408	<b>\$7.82</b>	\$7.03	\$0.79	11.2%
Residential Tier 2	53,730	<b>\$12.58</b>	\$12.20	\$0.38	3.1%
Residential Tier 3	12,803	<b>\$22.78</b>	\$19.56	\$3.22	16.5%
Residential Tier 4	39,474	<b>\$27.42</b>	\$23.64	\$3.78	16.0%
Commercial, Industrial, Institutional (CII)	74,773	<b>\$12.83</b>	\$16.36	(\$3.53)	-21.6%
Landscape Potable	18,368	<b>\$21.12</b>	\$20.46	\$0.66	3.2%

# Recycled Rate Discussion

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

Potable Water Volumetric Rates (\$/kgal)	Current	Proposed FY 2022	Proposed FY 2023	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026
Landscape Recycled Rate (%/kgal)	\$13.64	\$14.04	\$14.74	\$16.35	\$18.13	\$20.10
Landscape Potable Rate (\$/kgal)	\$20.46	\$22.18	\$23.29	\$24.46	\$25.69	\$26.98
<i>Difference (\$)</i>	(\$6.82)	(\$8.14)	(\$8.55)	(\$8.11)	(\$7.56)	(\$6.88)
<i>Difference (%)</i>	-33%	-37%	-37%	-33%	-29%	-26%

# Proposed Rates: Option 1

## (Property tax offset on all Residential tiers)

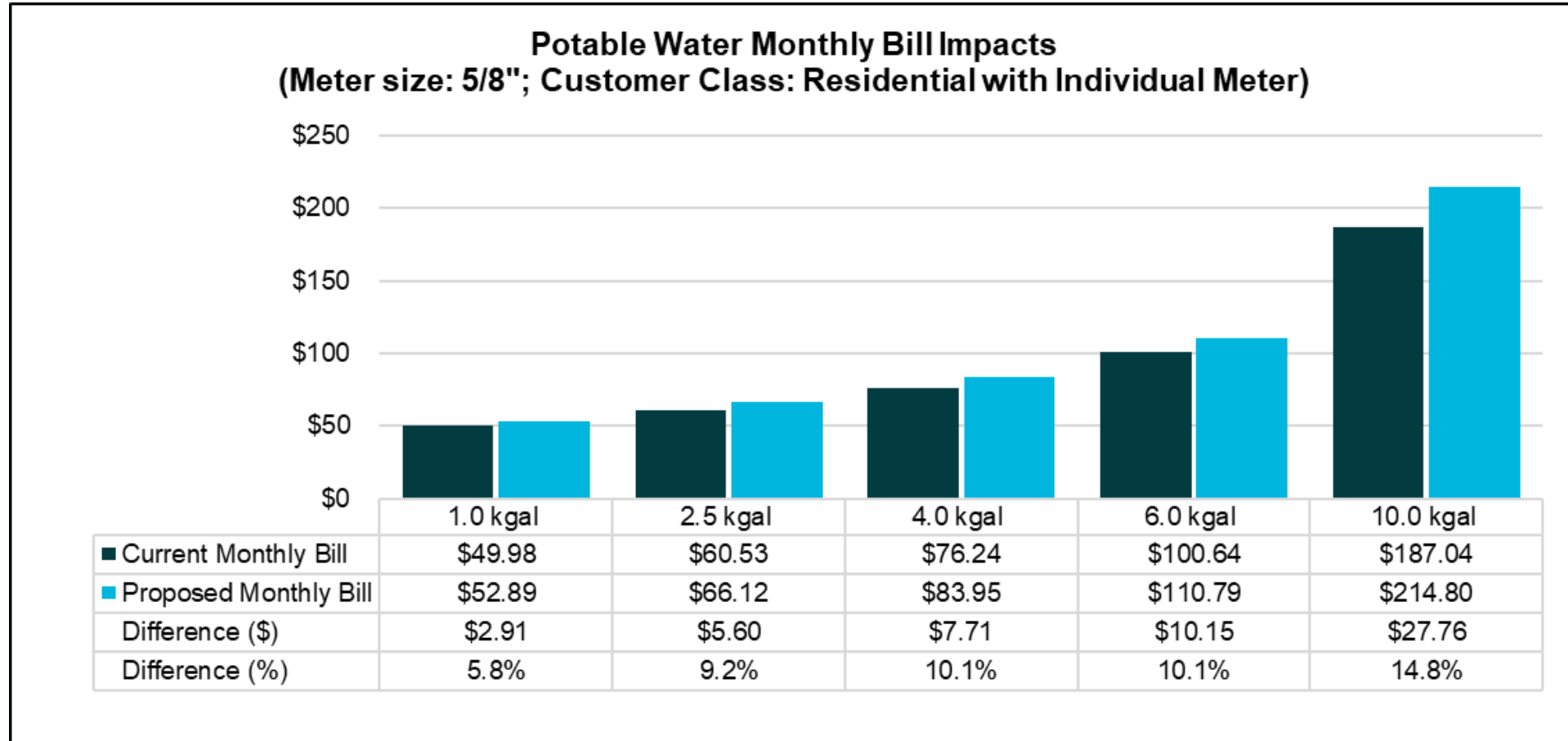
Fixed Basic Meter Charges (Bi-monthly)	Current	Proposed FY 2022	Proposed FY 2023	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026
5/8"	\$85.90	\$88.14	\$92.55	\$97.18	\$102.04	\$107.15
5/8" Fire Service (Residential/Commercial)	\$23.38	\$23.31	\$24.48	\$25.71	\$27.00	\$28.35
3/4" (Multi-Residential, incl Fire Service)	\$109.27	\$111.45	\$117.03	\$122.89	\$129.04	\$135.50
3/4"	\$135.16	\$123.21	\$129.38	\$135.85	\$142.65	\$149.79
1"	\$145.39	\$193.62	\$203.31	\$213.48	\$224.16	\$235.37
1 1/2"	\$341.68	\$385.48	\$404.76	\$425.00	\$446.25	\$468.57
2"	\$463.93	\$620.47	\$651.50	\$684.08	\$718.29	\$754.21
3"	\$827.11	\$1,287.81	\$1,352.21	\$1,419.83	\$1,490.83	\$1,565.38
4"	\$1,446.19	\$2,277.09	\$2,390.95	\$2,510.50	\$2,636.03	\$2,767.84
6"	\$3,089.28	\$4,539.60	\$4,766.58	\$5,004.91	\$5,255.16	\$5,517.92
Water Volumetric Rates (\$/kgal)	Current	Proposed FY 2022	Proposed FY 2023	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026
<b>Residential Units with Individual Meters</b>						
Residential Tier 1	\$7.03	\$8.82	\$9.27	\$9.74	\$10.23	\$10.75
Residential Tier 2	\$12.20	\$13.42	\$14.10	\$14.81	\$15.56	\$16.34
Residential Tier 3	\$19.56	\$22.35	\$23.47	\$24.65	\$25.89	\$27.19
Residential Tier 4	\$23.64	\$27.22	\$28.59	\$30.02	\$31.53	\$33.11
Commercial, Industrial, Institutional (CII)	\$16.36	\$13.47	\$14.15	\$14.86	\$15.61	\$16.40
Landscape Potable	\$20.46	\$22.18	\$23.29	\$24.46	\$25.69	\$26.98
Landscape Recycled	\$13.64	\$14.04	\$14.74	\$16.35	\$18.13	\$20.10

# Proposed Rates: Option 2

## (Property tax offset on Residential Tiers 1 & 2 only)

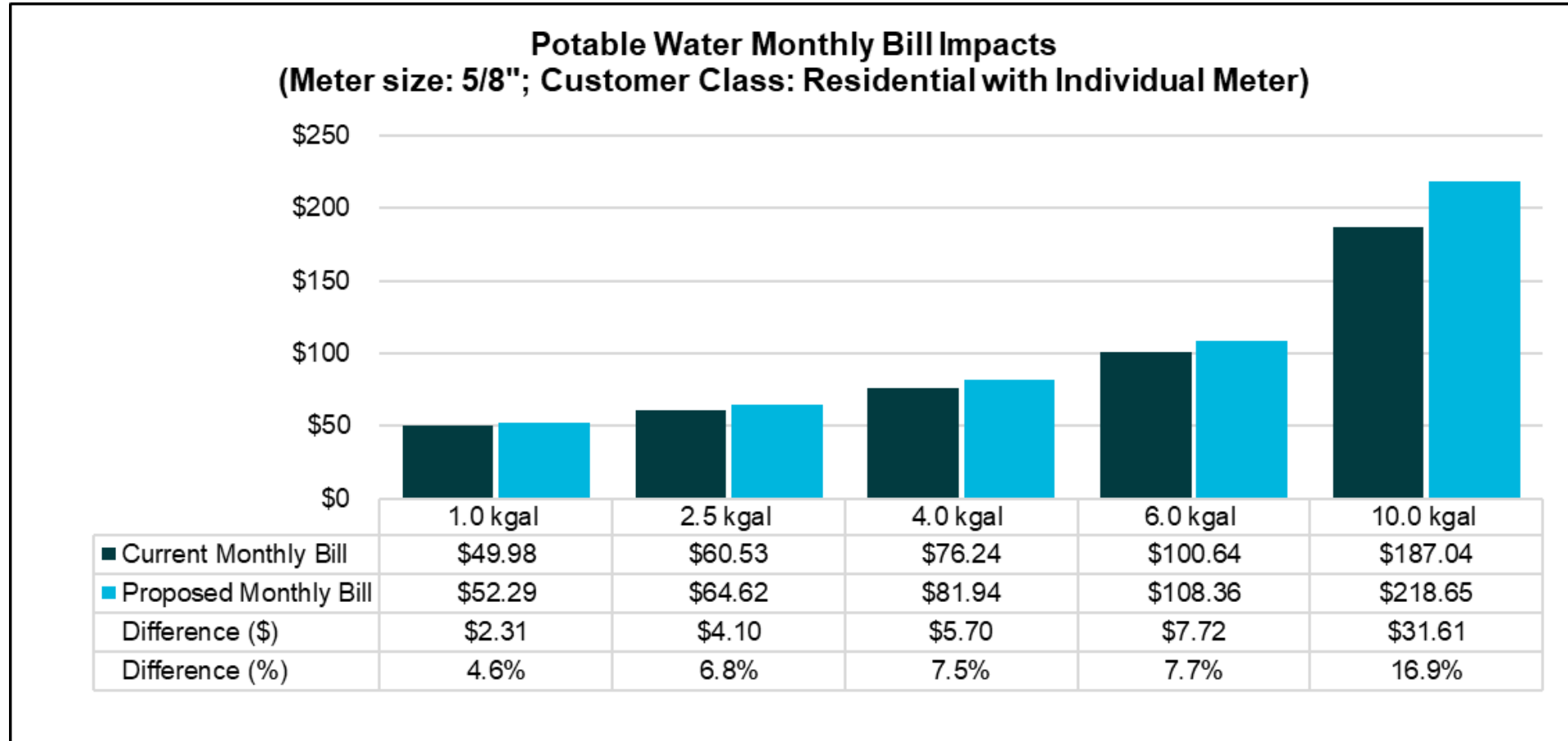
Fixed Basic Meter Charges (Bi-monthly)	Current	Proposed FY 2022	Proposed FY 2023	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026
5/8"	\$85.90	\$88.14	\$92.55	\$97.18	\$102.04	\$107.15
5/8" Fire Service (Residential/Commercial)	\$23.38	\$23.31	\$24.48	\$25.71	\$27.00	\$28.35
3/4" (Multi-Residential, incl Fire Service)	\$109.27	\$111.45	\$117.03	\$122.89	\$129.04	\$135.50
3/4"	\$135.16	\$123.21	\$129.38	\$135.85	\$142.65	\$149.79
1"	\$145.39	\$193.62	\$203.31	\$213.48	\$224.16	\$235.37
1 1/2"	\$341.68	\$385.48	\$404.76	\$425.00	\$446.25	\$468.57
2"	\$463.93	\$620.47	\$651.50	\$684.08	\$718.29	\$754.21
3"	\$827.11	\$1,287.81	\$1,352.21	\$1,419.83	\$1,490.83	\$1,565.38
4"	\$1,446.19	\$2,277.09	\$2,390.95	\$2,510.50	\$2,636.03	\$2,767.84
6"	\$3,089.28	\$4,539.60	\$4,766.58	\$5,004.91	\$5,255.16	\$5,517.92
Water Volumetric Rates (\$/kgal)	Current	Proposed FY 2022	Proposed FY 2023	Proposed FY 2024	Proposed FY 2025	Proposed FY 2026
<b>Residential Units with Individual Meters</b>						
Residential Tier 1	\$7.03	\$8.22	\$8.64	\$9.08	\$9.54	\$10.02
Residential Tier 2	\$12.20	\$13.21	\$13.88	\$14.58	\$15.31	\$16.08
Residential Tier 3	\$19.56	\$23.92	\$25.12	\$26.38	\$27.70	\$29.09
Residential Tier 4	\$23.64	\$28.79	\$30.23	\$31.75	\$33.34	\$35.01
Commercial, Industrial, Institutional (CII)	\$16.36	\$13.47	\$14.15	\$14.86	\$15.61	\$16.40
Landscape Potable	\$20.46	\$22.18	\$23.29	\$24.46	\$25.69	\$26.98
Landscape Recycled	\$13.64	\$14.04	\$14.74	\$16.35	\$18.13	\$20.10

# FYE 2022 Residential Monthly Bill Impacts: Option 1 (Property tax offset on all Residential tiers)



\*Various monthly water use represents 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentiles (based on FYE 2020 residential water use)

# FYE 2022 Residential Monthly Bill Impacts: Option 2 (Property tax offset on Residential Tiers 1 & 2 only)



\*Various monthly water use represents 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentiles (based on FYE 2020 residential water use)

# Discussion & Next Steps





# Next Steps

- Receive direction from the Board on the proposed rates
- Develop the Administrative Record
- Board receive the Administrative Record on Aug. 12, 2021
- Issue 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.