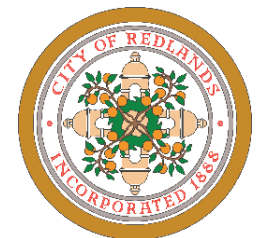


CITY OF REDLANDS

Potable Water, Wastewater, and Non-Potable Water

UAC Meeting / June 13, 2019



Agenda

- Financial Plan Recap
- Potable Water
 - › Financial Plan
 - › Proposed Rates
- Wastewater
 - › Financial Plan
 - › Proposed Rates
- Non-Potable Water
 - › Financial Plan
 - › Proposed Rates
- Next Steps



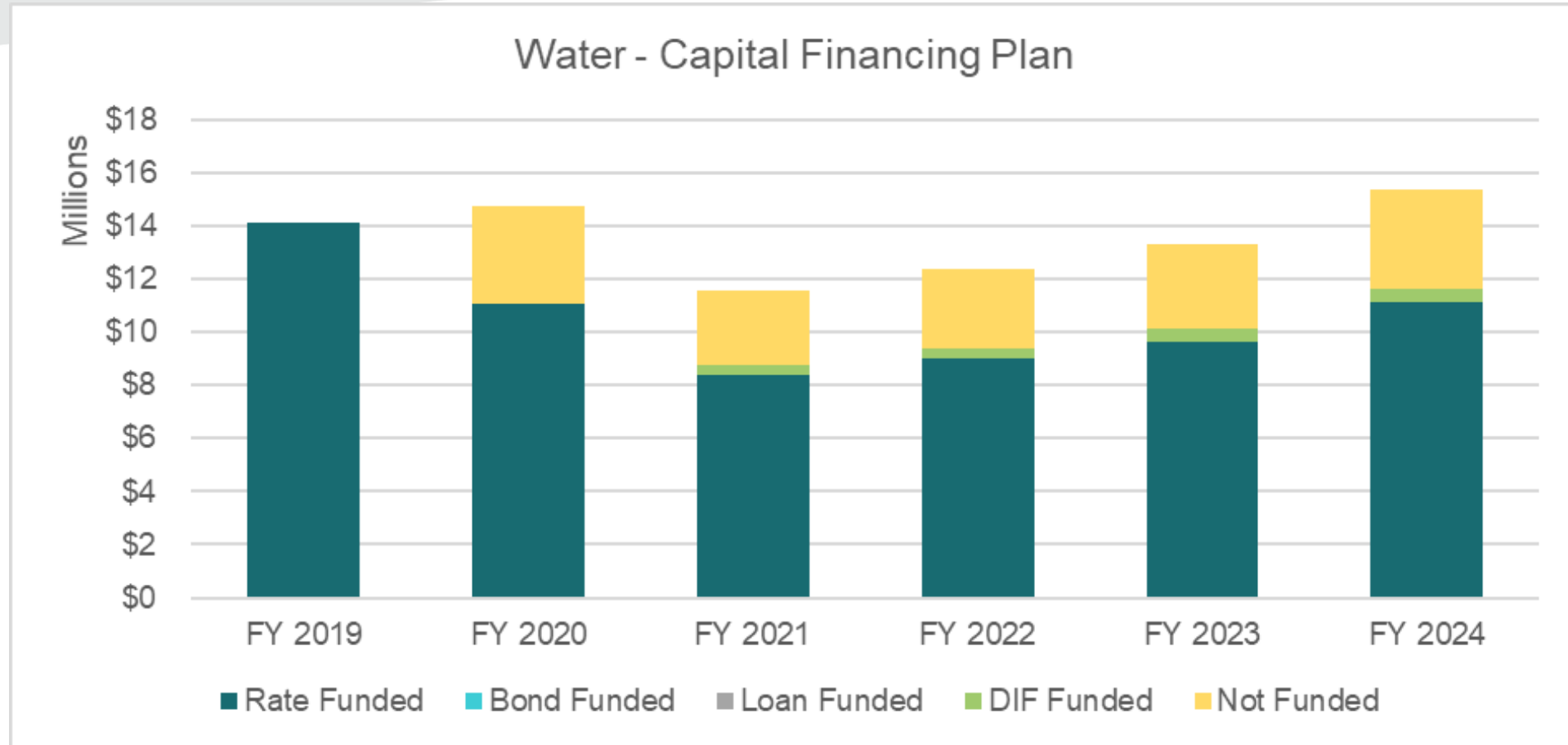
Financial Plan

Recap and Changes Since Last Meeting

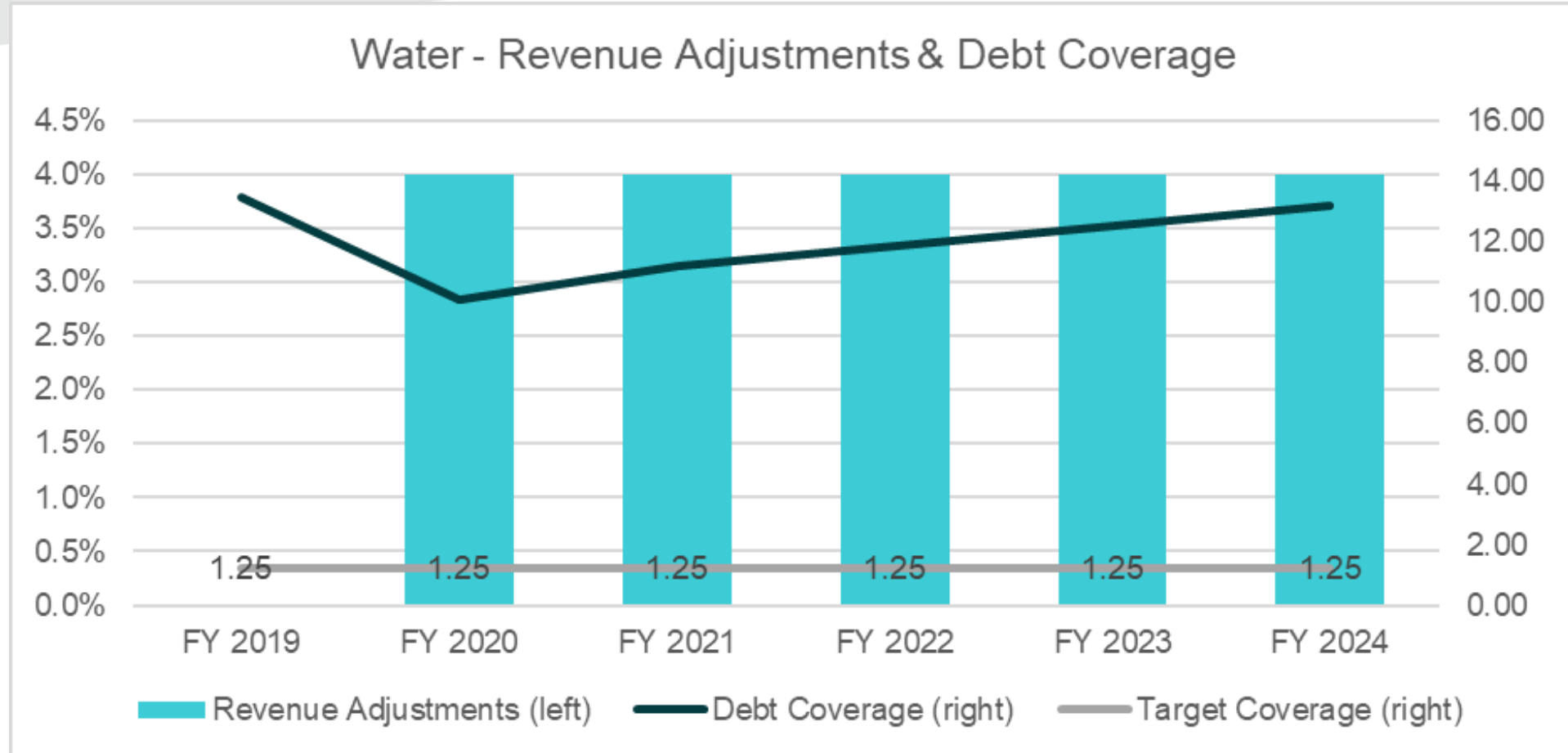
- Water
 - › 4% adjustment every year
 - › 75% of CIP spending for five years
 - › Across-the-board rate increase
- Wastewater
 - › 9% adjustment every year
 - › Large portion of CIP is SRF Loan funded (option to bond fund)
 - › Cost of service analysis and rates
- Non-Potable
 - › 3% adjustment every year
 - › \$500k non-inflated annual CIP
 - › Across-the-board rate increase



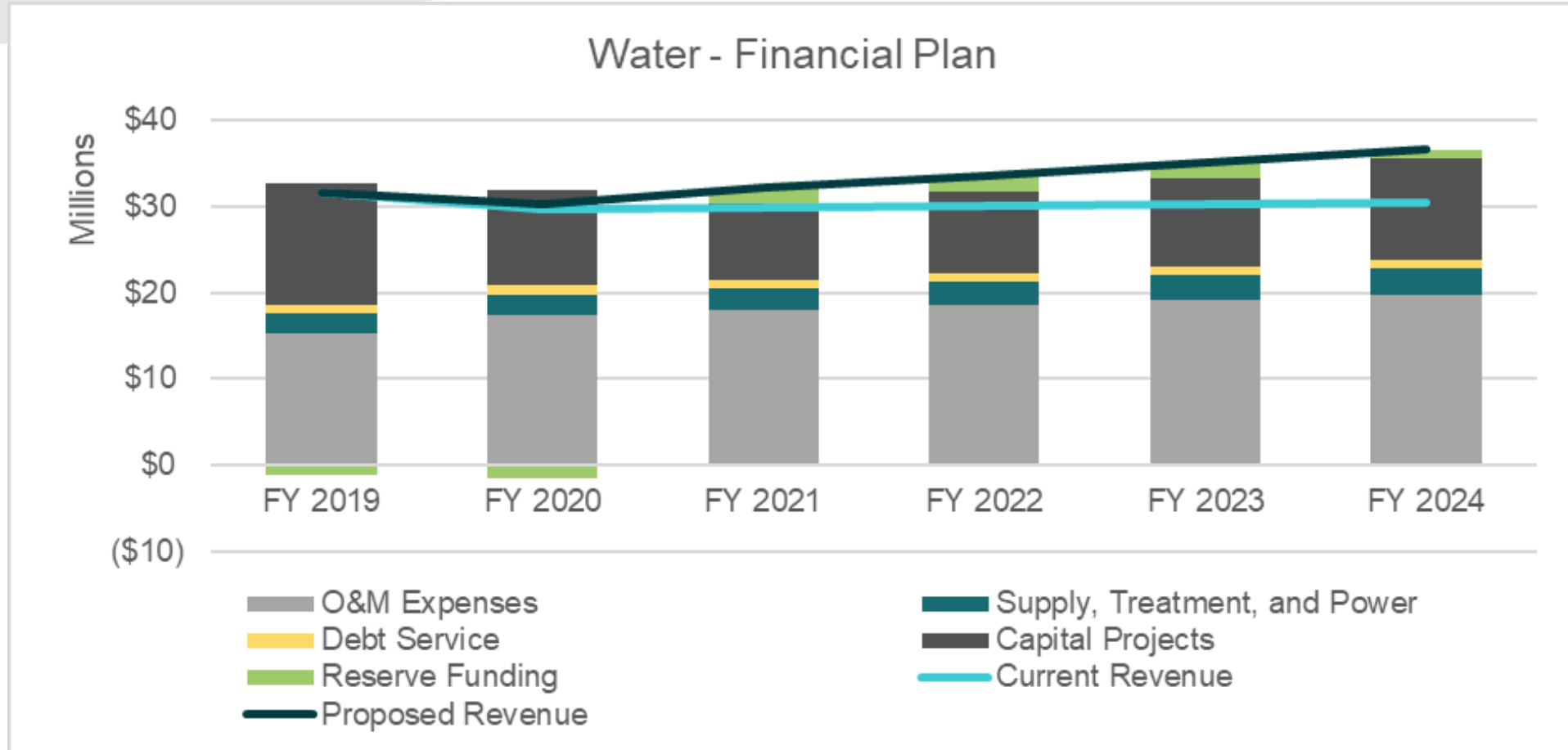
Potable Water Capital Financing Plan



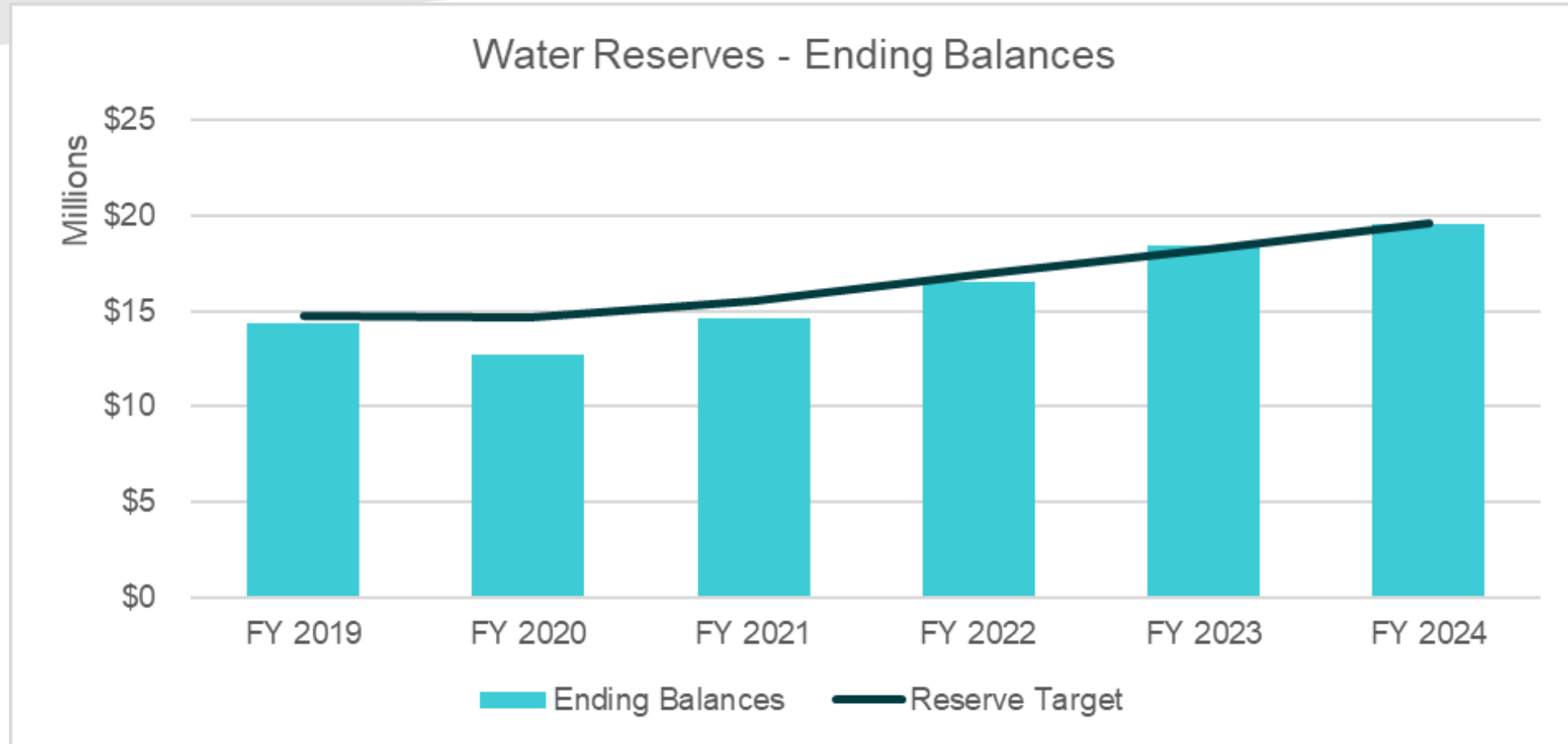
Potable Water Revenue Adjustments and Debt Coverage



Potable Water Proposed Financial Plan



Potable Water Projected Reserve Balances



Reserve target = 25% of O&M expenses and 5-year average rate-funded CIP costs

Potable Water

Proposed Rates – Monthly Service Charge (\$/meter)

Meter Size	Current	January 2020	July 2020	July 2021	July 2022	July 2023
5/8"	\$16.05	\$16.70	\$17.37	\$18.07	\$18.80	\$19.56
3/4"	\$21.59	\$22.45	\$23.35	\$24.29	\$25.27	\$26.29
1"	\$32.34	\$33.63	\$34.98	\$36.38	\$37.84	\$39.36
1 1/2"	\$58.40	\$60.74	\$63.17	\$65.70	\$68.33	\$71.07
2"	\$86.42	\$89.88	\$93.48	\$97.22	\$101.11	\$105.16
3"	\$149.62	\$155.60	\$161.83	\$168.31	\$175.05	\$182.06
4"	\$231.05	\$240.30	\$249.92	\$259.92	\$270.32	\$281.14
6"	\$426.51	\$443.58	\$461.33	\$479.79	\$498.99	\$518.95
8"	\$628.49	\$653.63	\$679.78	\$706.98	\$735.26	\$764.68
10"	\$1,488.50	\$1,548.04	\$1,609.97	\$1,674.37	\$1,741.35	\$1,811.01
12"	\$1,957.60	\$2,035.91	\$2,117.35	\$2,202.05	\$2,290.14	\$2,381.75



Potable Water

Proposed Rates – Monthly Fire Service Charge (\$/meter)

Fire Line Size	Current	January 2020	July 2020	July 2021	July 2022	July 2023
Fire Protection Lines						
2"	\$5.10	\$5.30	\$5.52	\$5.75	\$5.98	\$6.22
3"	\$9.05	\$9.42	\$9.80	\$10.20	\$10.61	\$11.04
4"	\$15.88	\$16.51	\$17.18	\$17.87	\$18.59	\$19.34
6"	\$40.37	\$41.98	\$43.66	\$45.41	\$47.23	\$49.12
8"	\$82.61	\$85.92	\$89.36	\$92.94	\$96.66	\$100.53
10"	\$146.16	\$152.01	\$158.10	\$164.43	\$171.01	\$177.86
12"	\$234.23	\$243.60	\$253.35	\$263.49	\$274.03	\$285.00
Fire Hydrants						
All Meters	\$36.80	\$38.28	\$39.82	\$41.42	\$43.08	\$44.81



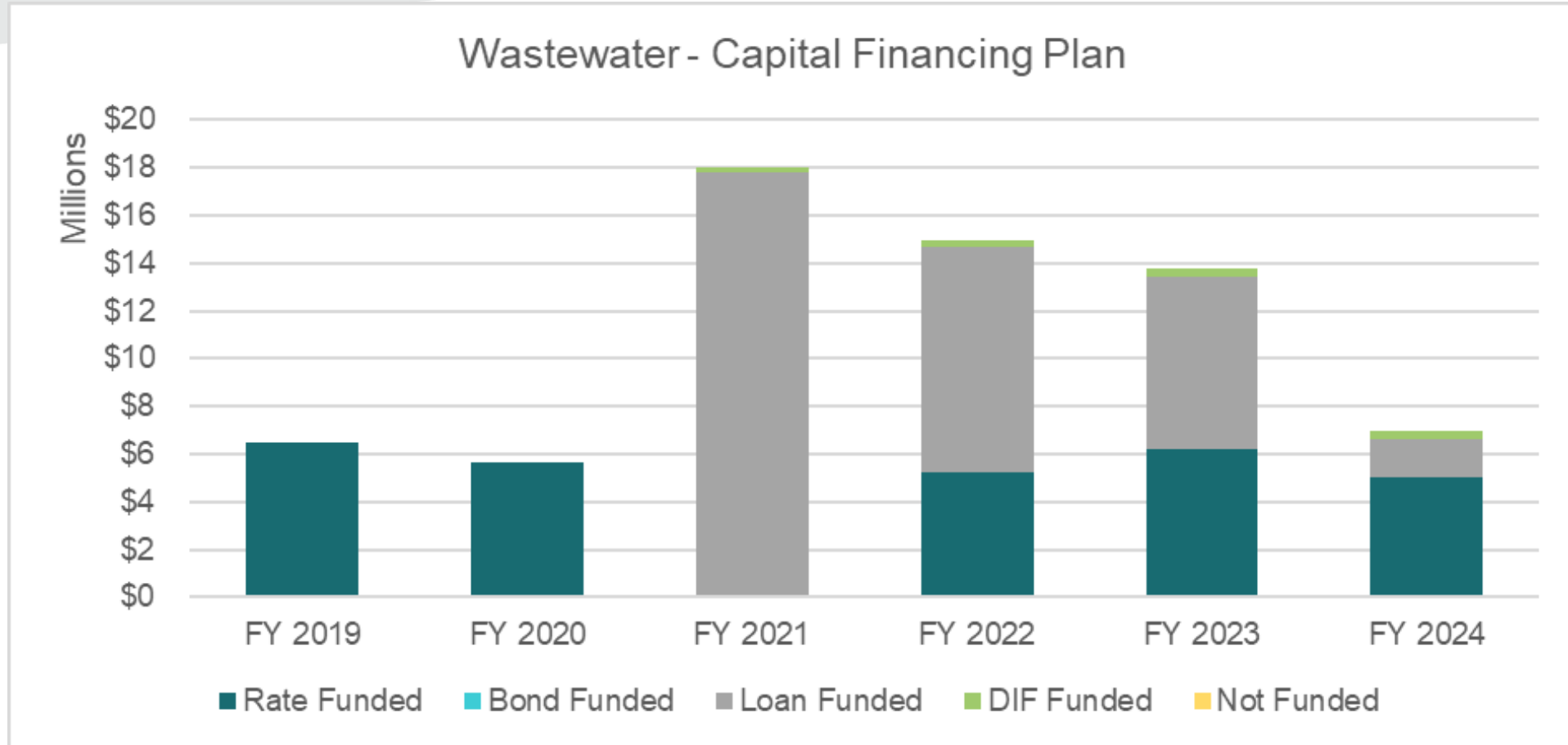
Potable Water

Proposed Rates – Commodity or Usage Rates (\$/ccf)

Customer Class	Tiers	Current	January 2020	July 2020	July 2021	July 2022	July 2023
Building							
Tier 1	16	\$1.46	\$1.52	\$1.59	\$1.66	\$1.73	\$1.80
Tier 2	27	\$1.78	\$1.86	\$1.94	\$2.02	\$2.11	\$2.20
Tier 3	Over 27	\$2.69	\$2.80	\$2.92	\$3.04	\$3.17	\$3.30
Non-Building							
Tier 1	27	\$1.78	\$1.86	\$1.94	\$2.02	\$2.11	\$2.20
Tier 2	Over 27	\$2.69	\$2.80	\$2.92	\$3.04	\$3.17	\$3.30
Other							
B Contract		\$7.05	\$7.34	\$7.64	\$7.95	\$8.27	\$8.61
Recycled		\$0.29	\$0.31	\$0.33	\$0.35	\$0.37	\$0.39
Fire Protection							
All Units		\$2.69	\$2.80	\$2.92	\$3.04	\$3.17	\$3.30



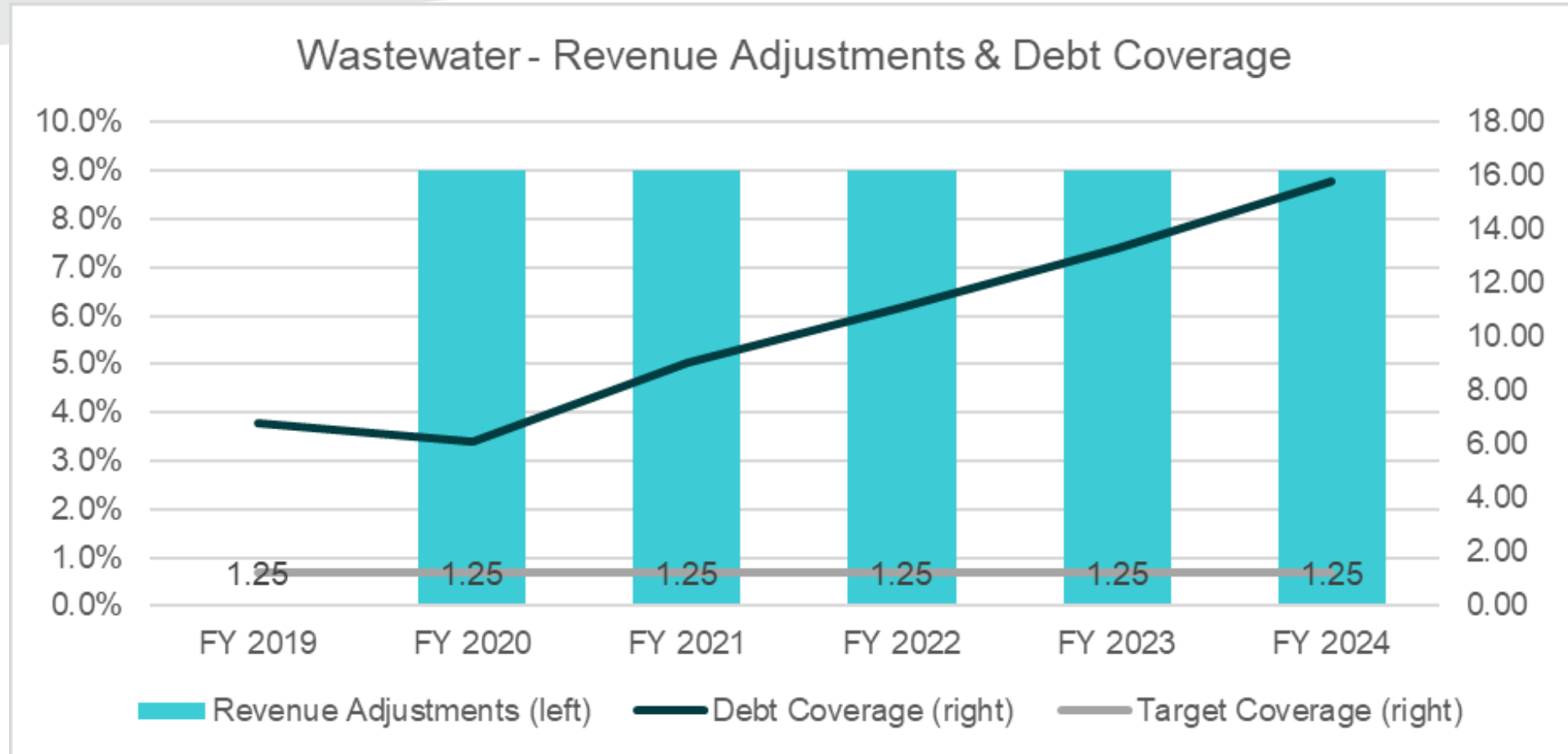
Wastewater Capital Financing Plan



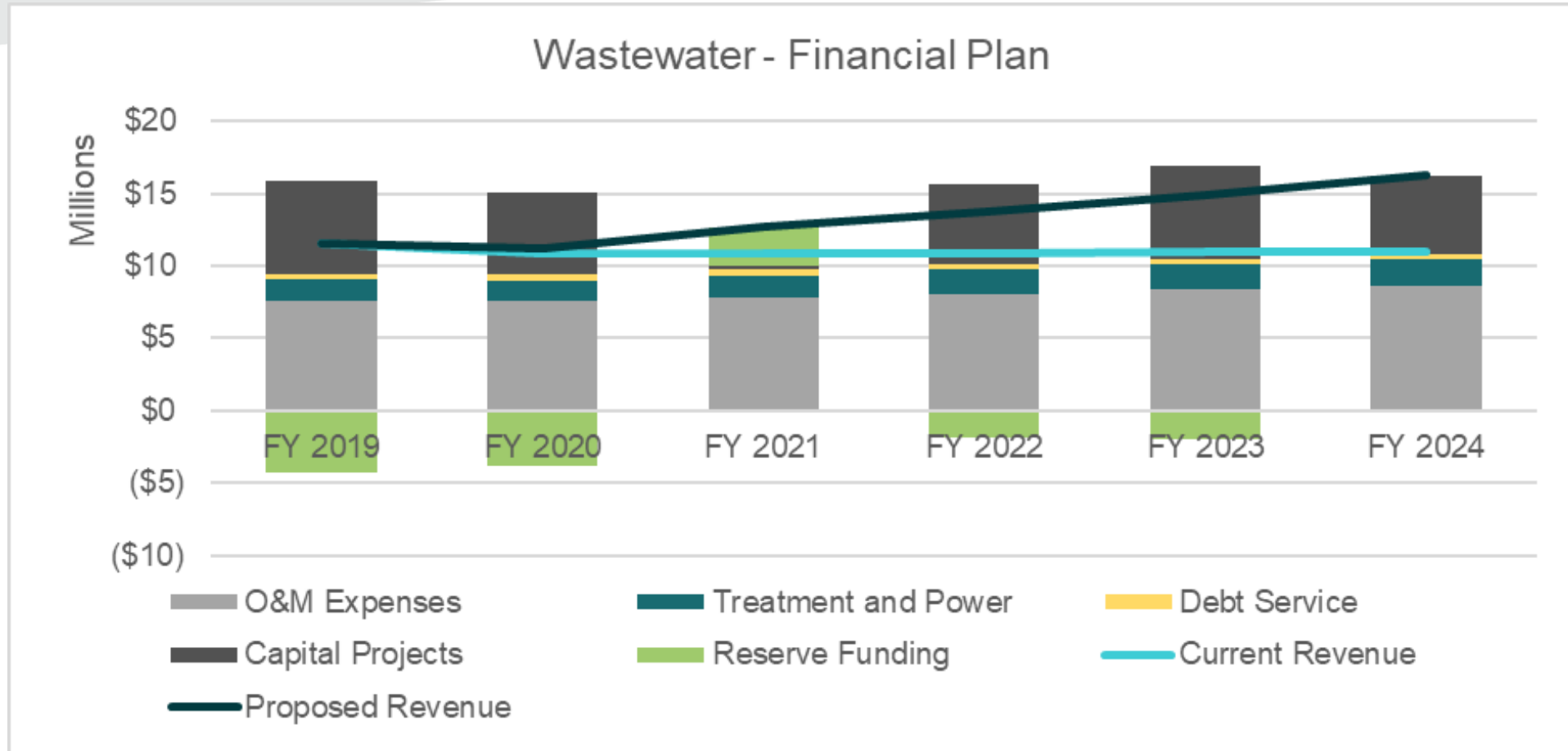
Based on SRF Loans



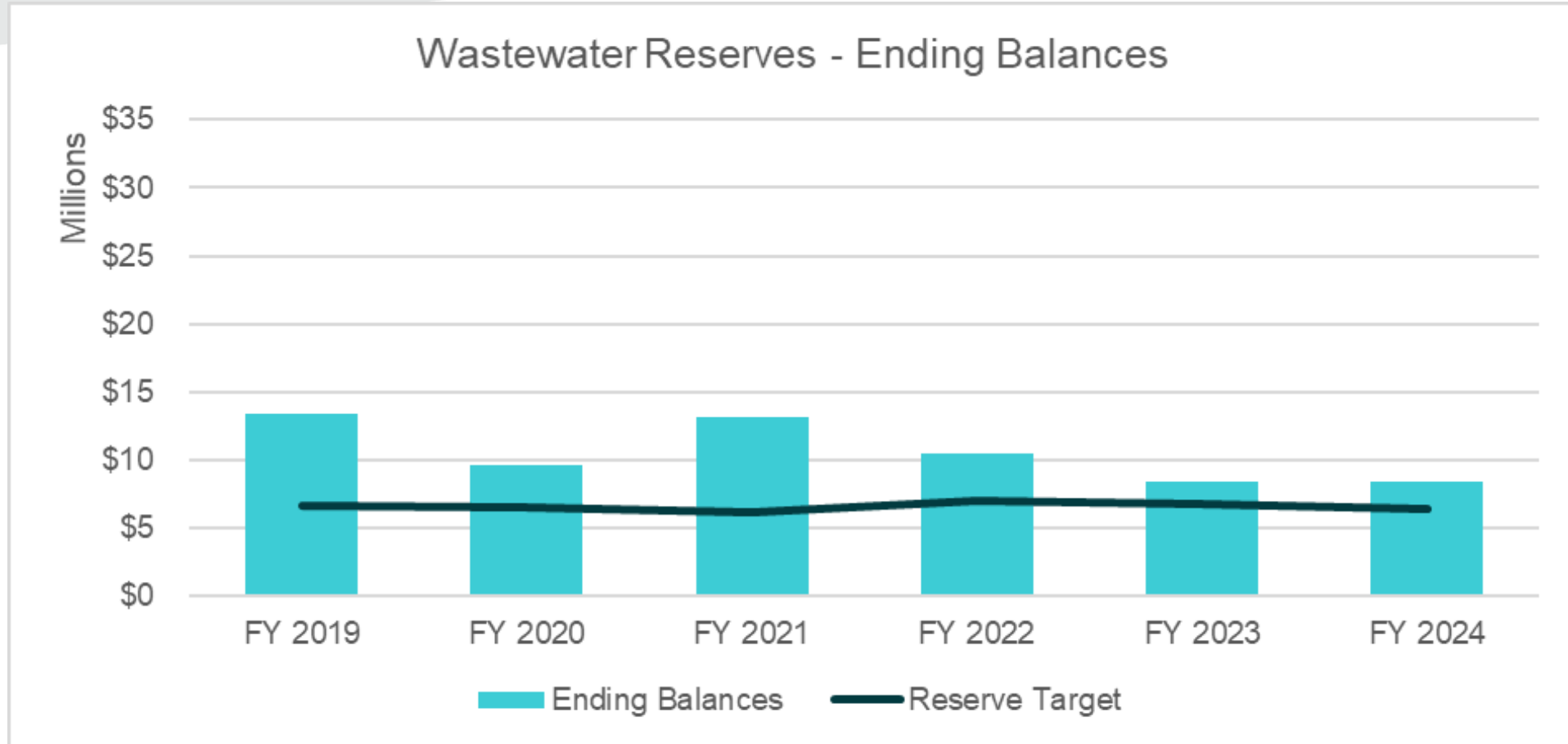
Wastewater Revenue Adjustments and Debt Coverage



Wastewater Proposed Financial Plan



Wastewater Projected Reserve Balances



Reserve target = 25% of O&M expenses and 5-year average rate-funded CIP costs

Wastewater

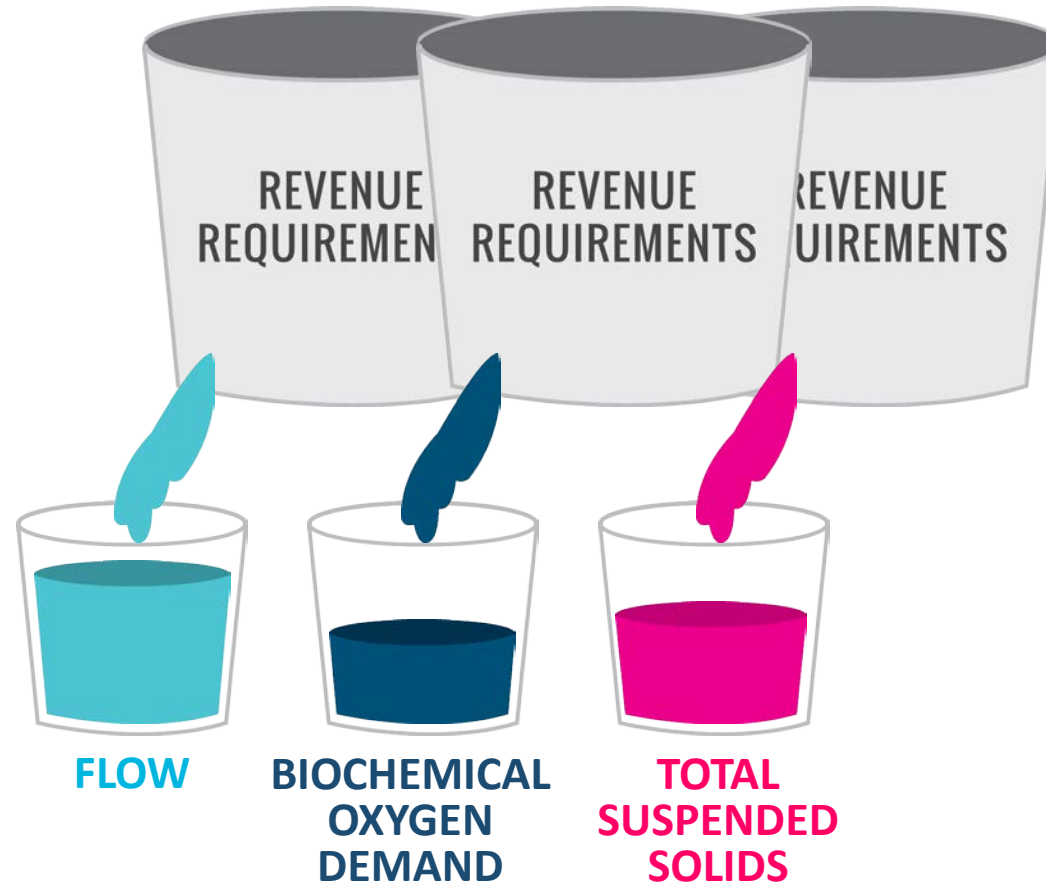
Steps of Cost of Service Analysis

- What is the total amount of revenue to be collected from rates?
 - › Revenue requirement = total costs less miscellaneous revenues
- What is creating these costs?
 - › Flow – costs related to wastewater flow (i.e., collection costs)
 - › Strength – costs related to BOD and TSS (i.e., treatment and lab costs)
- How much does each customer class contribute to these costs?
 - › Based on wastewater flow and strength associated with each class
 - › Result → cost to serve each customer class



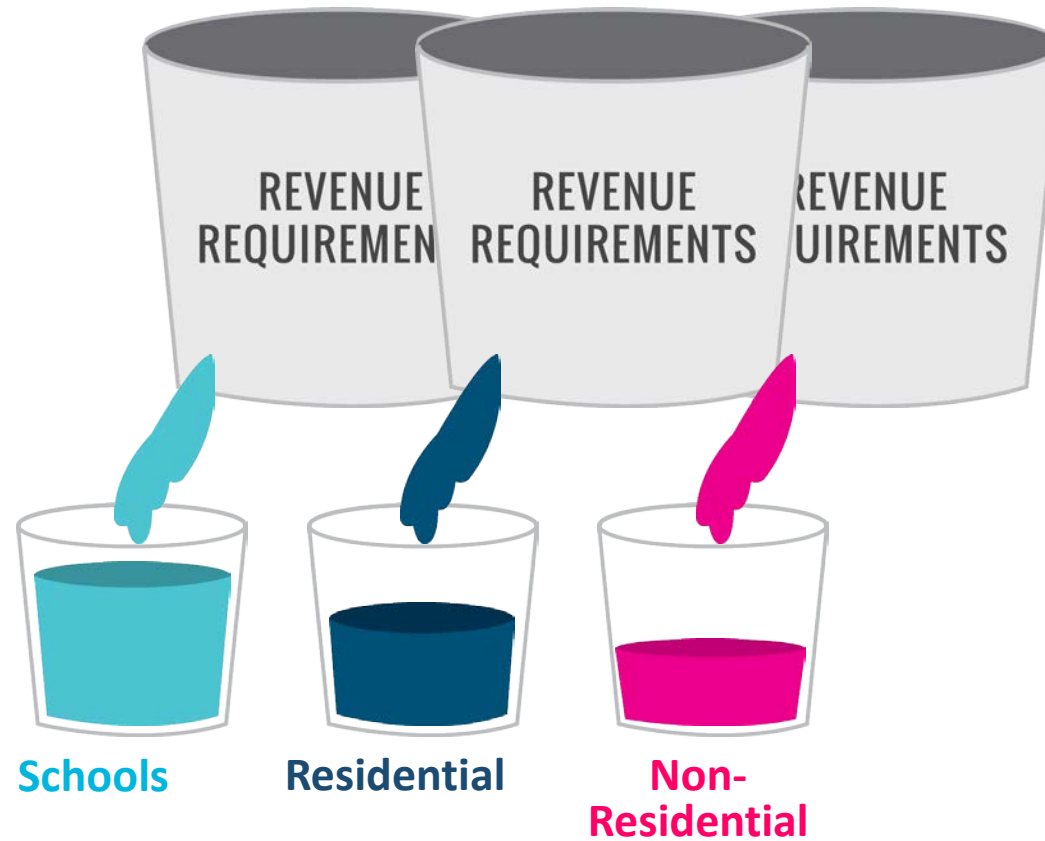
Wastewater

Allocation of Revenue Requirements



Wastewater

Distribution of System Cost to Customer Classes



Wastewater

Steps of Rate Calculation

- Cost of service analysis results in cost to serve each class
- Resulting rates = Total cost per class / Rate base for that class
- Rate base for the City's customer classes:
 - › Residential – dwelling unit
 - › Non-Residential – hundred cubic feet (ccf) of water usage
 - › Schools – 100 students (ADA)
 - › Septage – gallons



Wastewater

Proposed Rates – Monthly Residential and Septage

Rate Component	Current	January 2020	July 2020	July 2021	July 2022	July 2023
Residential (\$/dwelling unit)						
Single Family	\$25.03	\$26.68	\$29.09	\$31.71	\$34.57	\$37.69
Multiple Family	\$18.80	\$20.01	\$21.82	\$23.79	\$25.94	\$28.28
Septage Charge (\$/gal)	\$0.11	\$0.11	\$0.12	\$0.14	\$0.16	\$0.18



Wastewater

Proposed Rates – Monthly Non-Residential

Rate Component	Current	January 2020	July 2020	July 2021	July 2022	July 2023
Non-Residential (\$/ccf)						
Low Strength I	\$2.05	\$2.32	\$2.53	\$2.76	\$3.01	\$3.29
Low Strength II	\$2.16	\$2.76	\$3.01	\$3.29	\$3.59	\$3.92
Low Strength III	\$2.64	\$3.19	\$3.48	\$3.80	\$4.15	\$4.53
Medium Strength I	\$3.17	\$3.62	\$3.95	\$4.31	\$4.70	\$5.13
Medium Strength II	\$3.64	\$4.06	\$4.43	\$4.83	\$5.27	\$5.75
Medium Strength III	\$4.11	\$4.49	\$4.90	\$5.35	\$5.84	\$6.37
High Strength I	\$4.60	\$4.93	\$5.38	\$5.87	\$6.40	\$6.98
High Strength II	\$5.00	\$5.36	\$5.85	\$6.38	\$6.96	\$7.59
Large Volume User	\$2.76	\$3.19	\$3.48	\$3.80	\$4.15	\$4.53
Minimum Charge (\$)	\$18.80	\$20.01	\$21.82	\$23.79	\$25.94	\$28.28
Schools (\$/100 ADA)						
Elementary	\$59.68	\$64.49	\$70.30	\$76.63	\$83.53	\$91.05
Secondary & High	\$99.47	\$103.18	\$112.47	\$122.60	\$133.64	\$145.67



Wastewater

Rate Impacts – Monthly Residential and Septage

Rate Component	Current	Proposed 2020	Difference (\$)
Residential (\$/dwelling unit)			
Single Family	\$25.03	\$26.68	\$1.66
Multiple Family	\$18.80	\$20.01	\$1.22
Septage Charge (\$/gal)	\$0.11	\$0.11	\$0.00

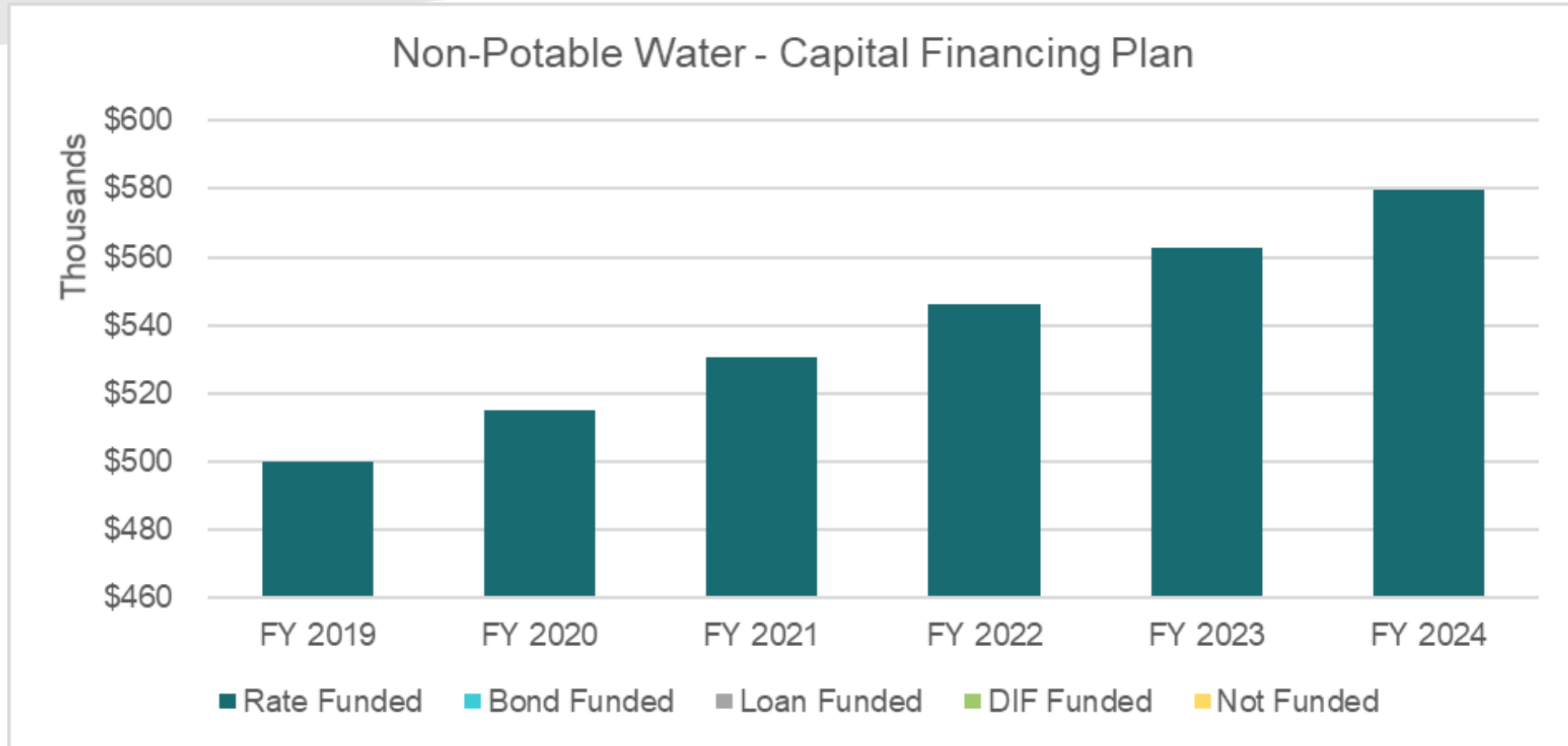


Wastewater Rates Impacts – Monthly Non-Residential

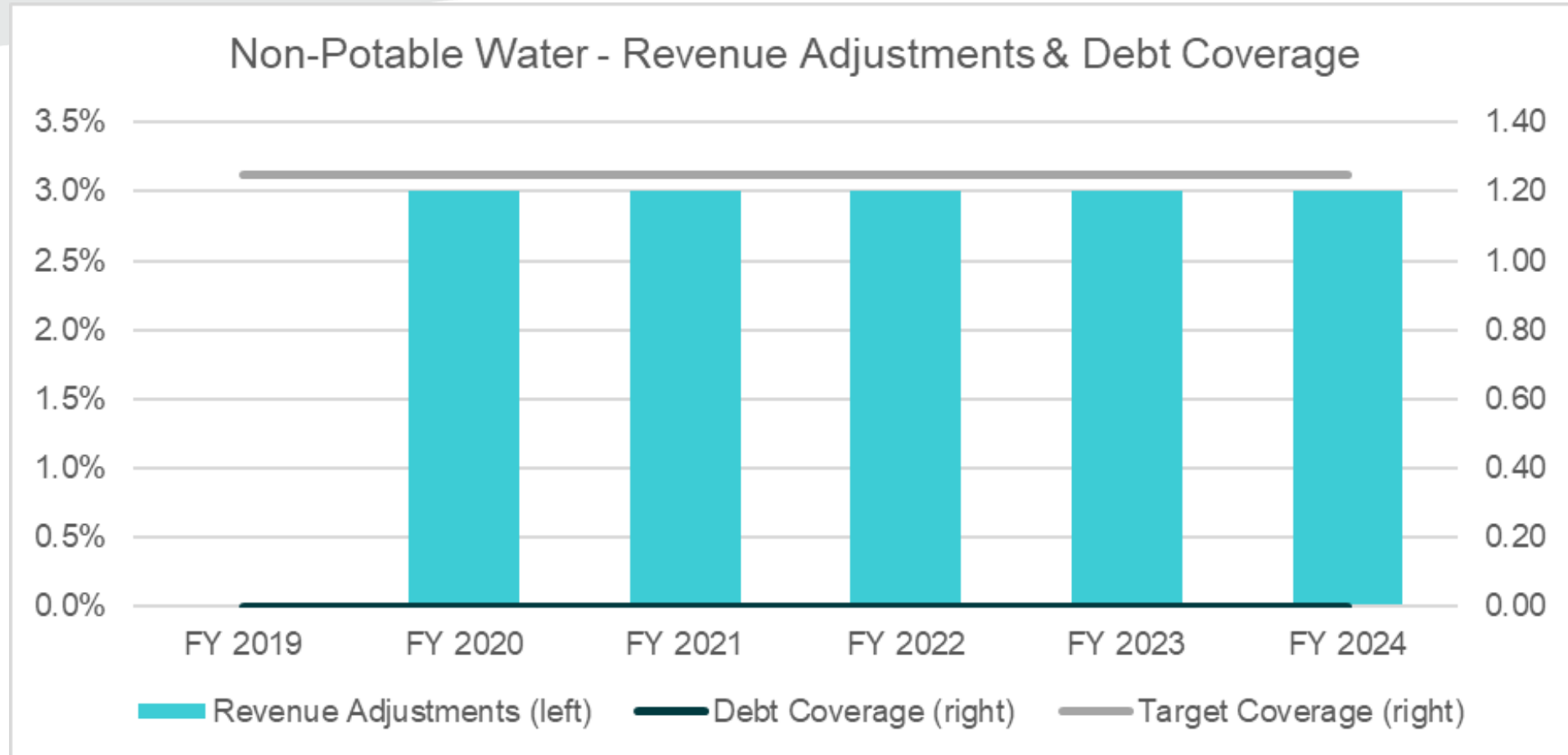
Rate Component	Current	Proposed (2020)	Difference (\$)
Non-Residential (\$/ccf)			
Low Strength I	\$2.05	\$2.32	\$0.27
Low Strength II	\$2.16	\$2.76	\$0.60
Low Strength III	\$2.64	\$3.19	\$0.55
Medium Strength I	\$3.17	\$3.62	\$0.45
Medium Strength II	\$3.64	\$4.06	\$0.42
Medium Strength III	\$4.11	\$4.49	\$0.38
High Strength I	\$4.60	\$4.93	\$0.33
High Strength II	\$5.00	\$5.36	\$0.36
Large Volume User	\$2.76	\$3.19	\$0.43
Minimum Charge (\$)	\$18.80	\$20.01	\$1.22
Schools (\$/100 ADA)			
Elementary	\$59.68	\$64.49	\$4.81
Secondary & High	\$99.47	\$103.18	\$3.71



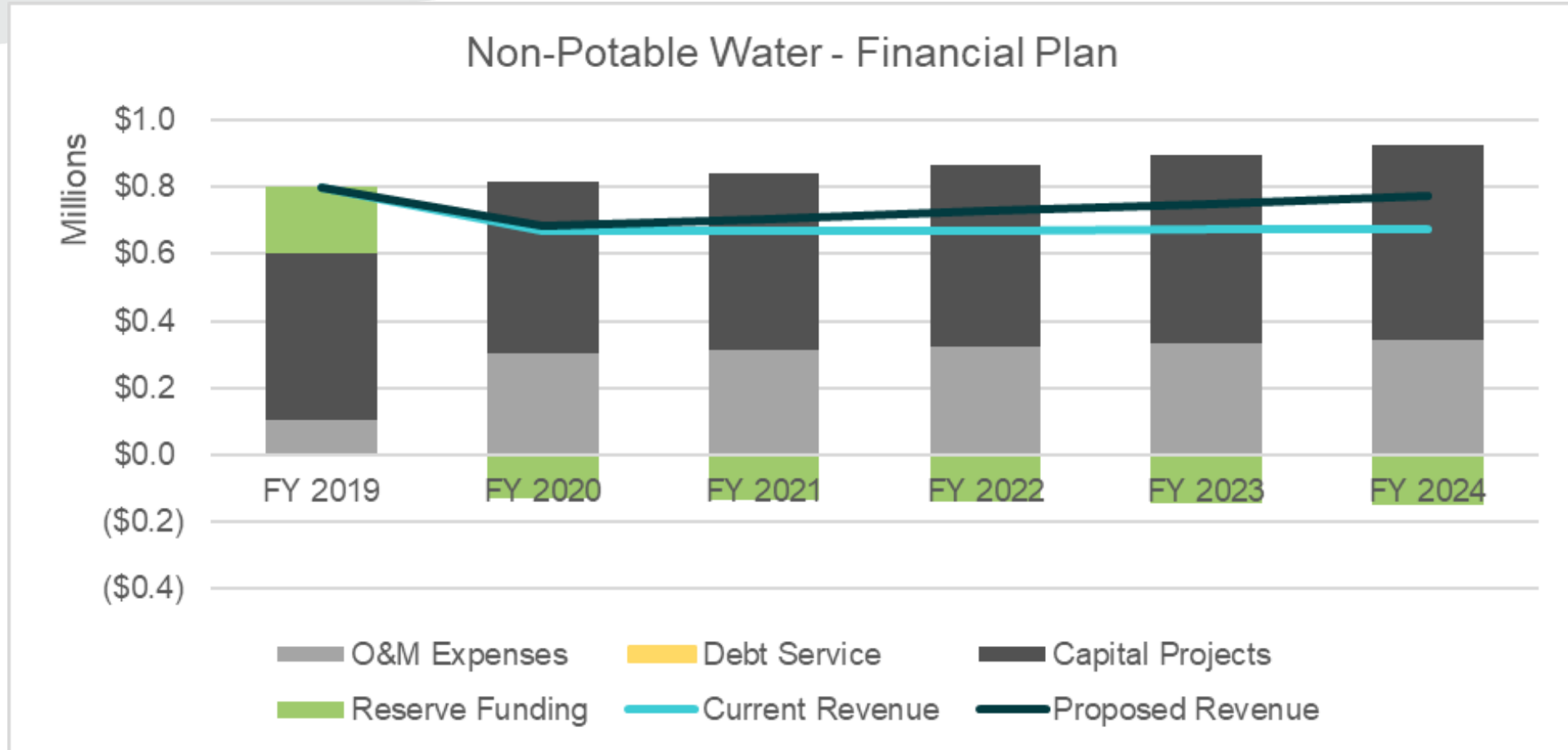
Non-Potable Water Capital Financing Plan



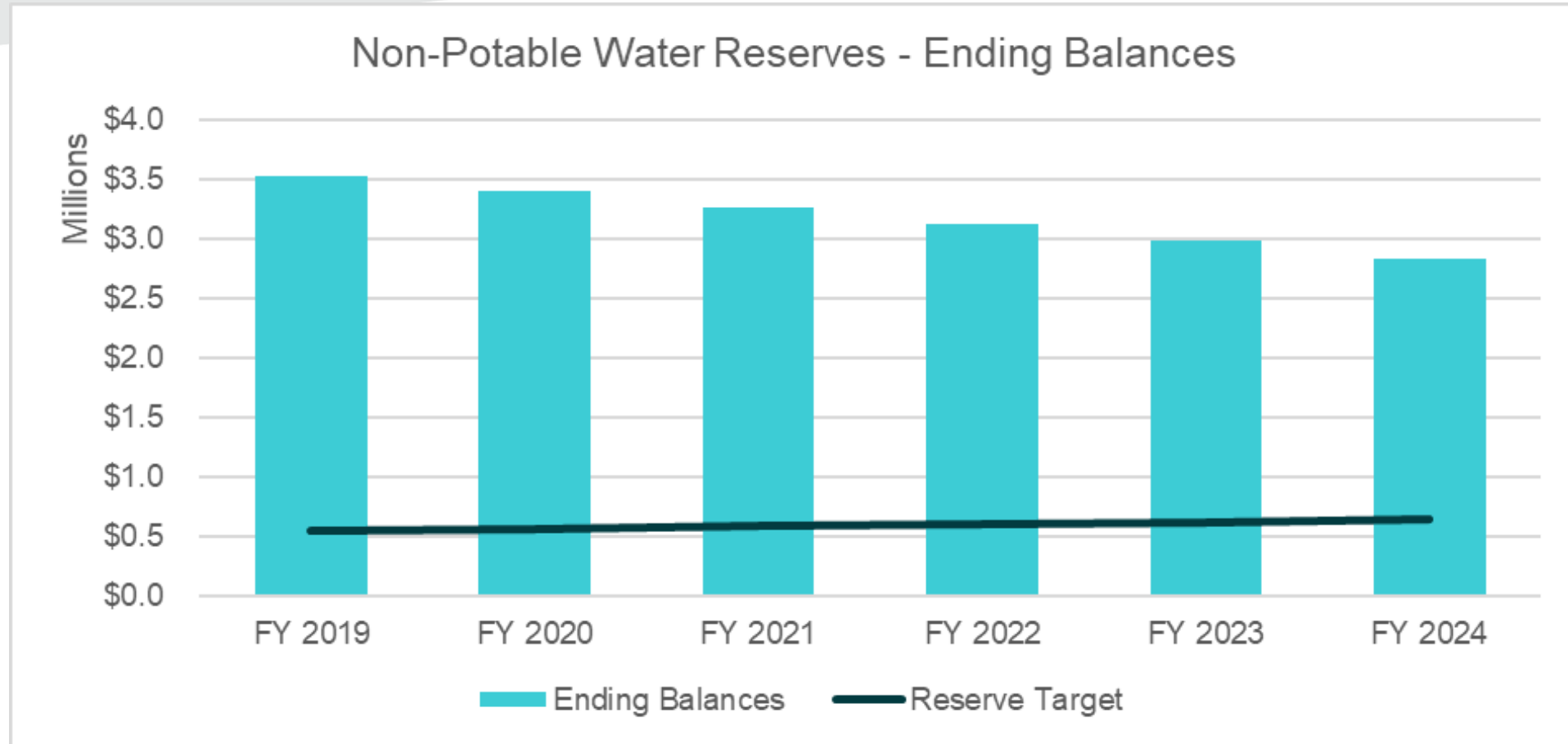
Non-Potable Water Revenue Adjustments and Debt Coverage



Non-Potable Water Proposed Financial Plan



Non-Potable Water Projected Reserve Balances



Reserve target = 25% of O&M expenses and 5-year average rate-funded CIP costs

Non-Potable Water Proposed Rates

Meter Size and Class	Current	January 2020	July 2020	July 2021	July 2022	July 2023
Service Charge (\$/meter size)						
3/4"	\$6.91	\$7.12	\$7.34	\$7.57	\$7.80	\$8.04
1"	\$10.33	\$10.64	\$10.96	\$11.29	\$11.63	\$11.98
1 1/2"	\$18.65	\$19.21	\$19.79	\$20.39	\$21.01	\$21.65
2"	\$27.58	\$28.41	\$29.27	\$30.15	\$31.06	\$32.00
3"	\$47.75	\$49.19	\$50.67	\$52.20	\$53.77	\$55.39
4"	\$73.73	\$75.94	\$78.22	\$80.57	\$82.99	\$85.48
6"	\$136.08	\$140.17	\$144.38	\$148.72	\$153.19	\$157.79
8"	\$200.52	\$206.54	\$212.74	\$219.13	\$225.71	\$232.49
Usage Rate (\$/ccf)						
Non-Potable Water	\$0.99	\$1.02	\$1.06	\$1.10	\$1.14	\$1.18
Conversion Customer	\$0.64	\$0.66	\$0.68	\$0.71	\$0.74	\$0.77



Next Steps

- Finalize rates based on today's discussion
- Present to Council
- Prepare report (administrative record)
- Proposition 218 process



Thank you!

Contact: Sudhir Pardiwala
626 583 1894 / spardiwala@raftelis.com

