

Coastside County Water District

2024 Water Cost-of-Service Rate Study

Board Meeting – April 30, 2024



Water Resources Economics

PROMOTING THE VALUE AND PRICE OF
WATER SERVICE



Agenda

- Introductions
- Rate Study Overview
- Financial Plan Scenarios
- Cost-of-Service
- Preliminary Water Rates
- Next Steps and Discussion



Introductions

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Goals of Today's Workshop

- Review the rate study process
- Evaluate financial plan scenarios
- Discuss cost-of-service concepts
- Review preliminary water rates



Rate Study Overview



Rate Study Process

- 1. Policy framework:** Identify key policy objectives (revenue stability, customer affordability, conservation, etc.)
- 2. Financial plan:** Develop multi-year projections to determine annual rate revenue requirement
- 3. Cost-of-service analysis:** Allocate the rate revenue requirement to customers in proportion to use of and burden on the water system
- 4. Rate design:** Identify appropriate rate structure and calculate rates
- 5. Documentation:** Develop a study report for transparency and defensibility



Proposition 218

(Article XIIIC and XIID of California Constitution)

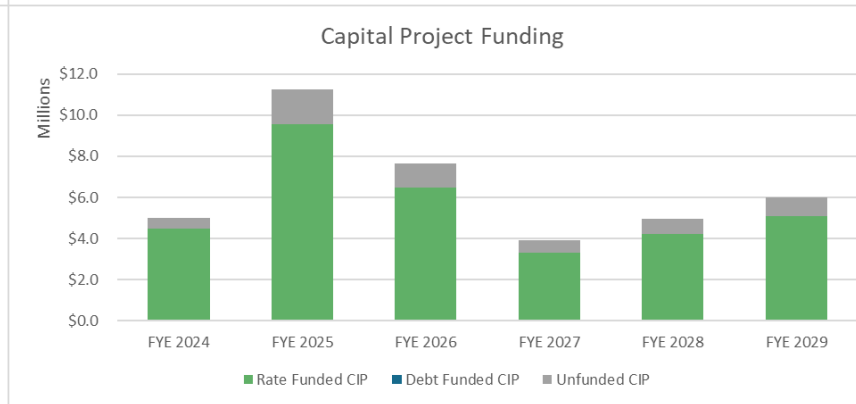
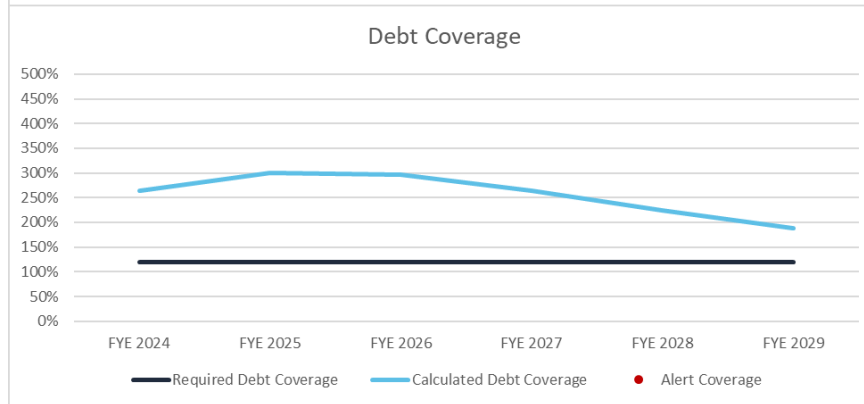
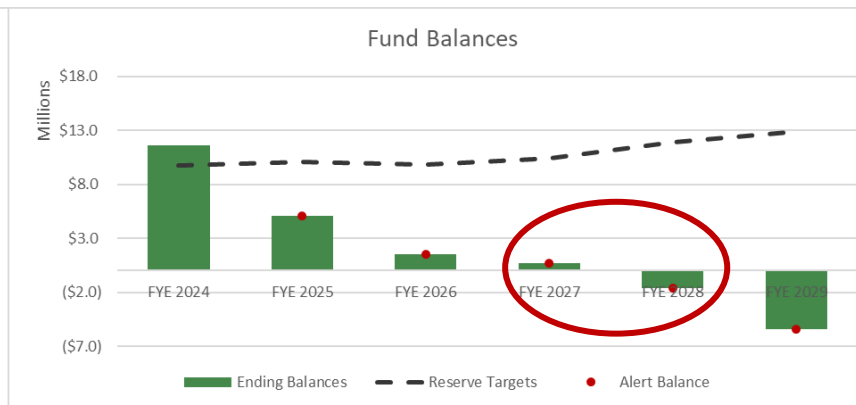
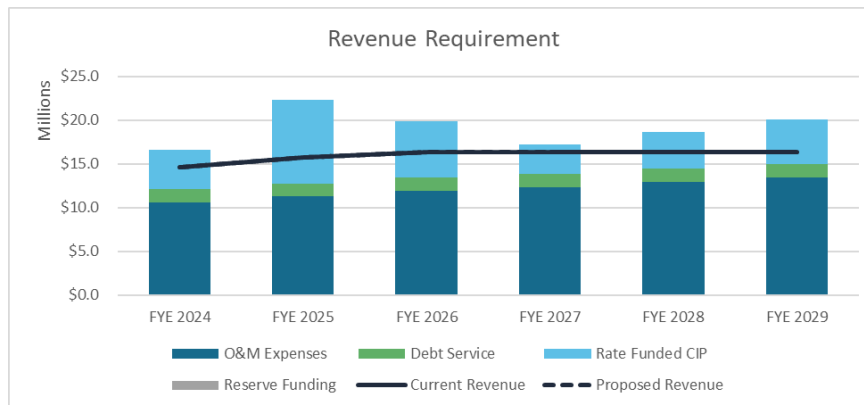
- Proposition 218 requirements for water rates:
 - Rates must be proportional to and may not exceed the cost of providing water service
 - One customer class (residential, commercial, etc.) may not subsidize another customer class
 - **Retail water agencies typically conduct a “cost-of-service analysis” at least once every 5 years to ensure a sufficient nexus between rates and costs**
 - Last cost-of-service analysis for CCWD was in 2018



Financial Plan Scenarios



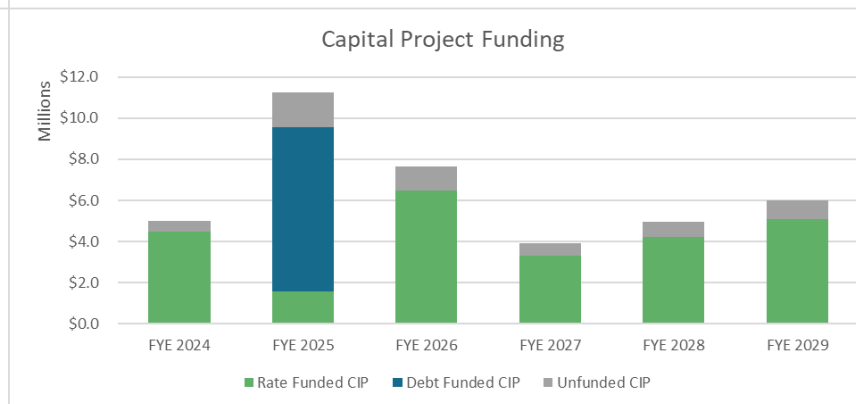
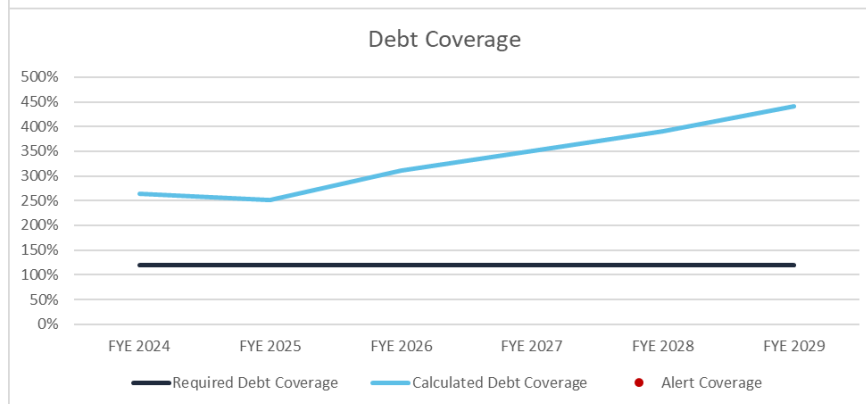
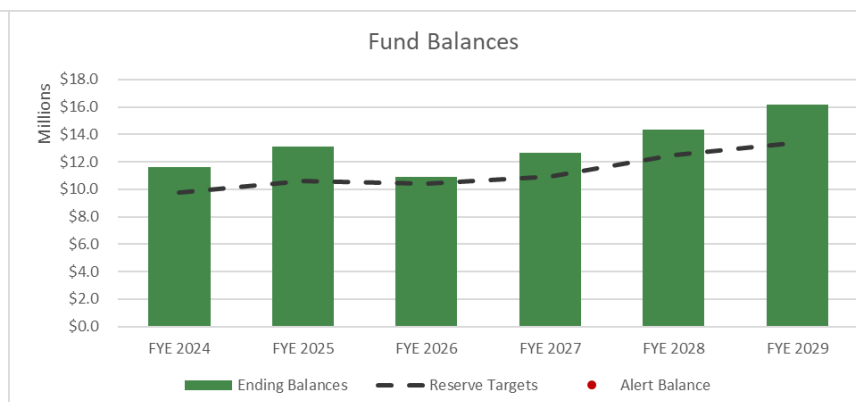
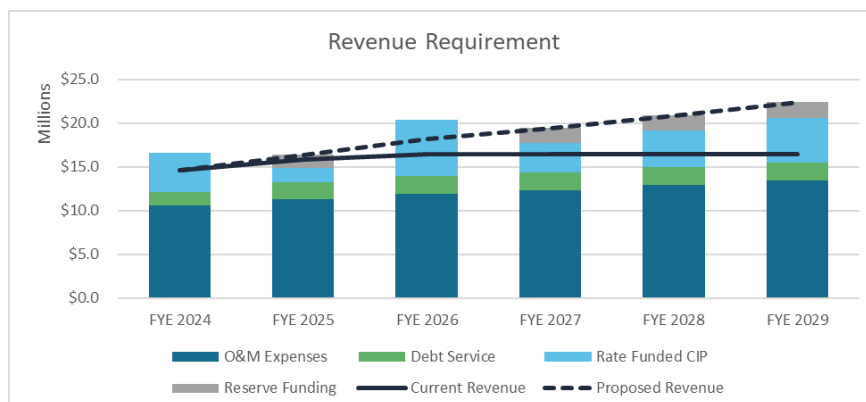
Financial Plan – Status Quo



Fiscal Year	Rev. Adj.	New Debt	CIP Comp.
2025	0.0%	\$0	85%
2026	0.0%	\$0	85%
2027	0.0%	\$0	85%
2028	0.0%	\$0	85%
2029	0.0%	\$0	85%



Financial Plan – With Debt



Fiscal Year	Rev. Adj.	New Debt	CIP Comp.
2025	8.0%	\$8.0M	85%
2026	8.0%	\$0	85%
2027	8.0%	\$0	85%
2028	8.0%	\$0	85%
2029	8.0%	\$0	85%



Financial Model Review



Cost-of-Service



Financial Plan vs. Cost-of-Service

Financial Plan

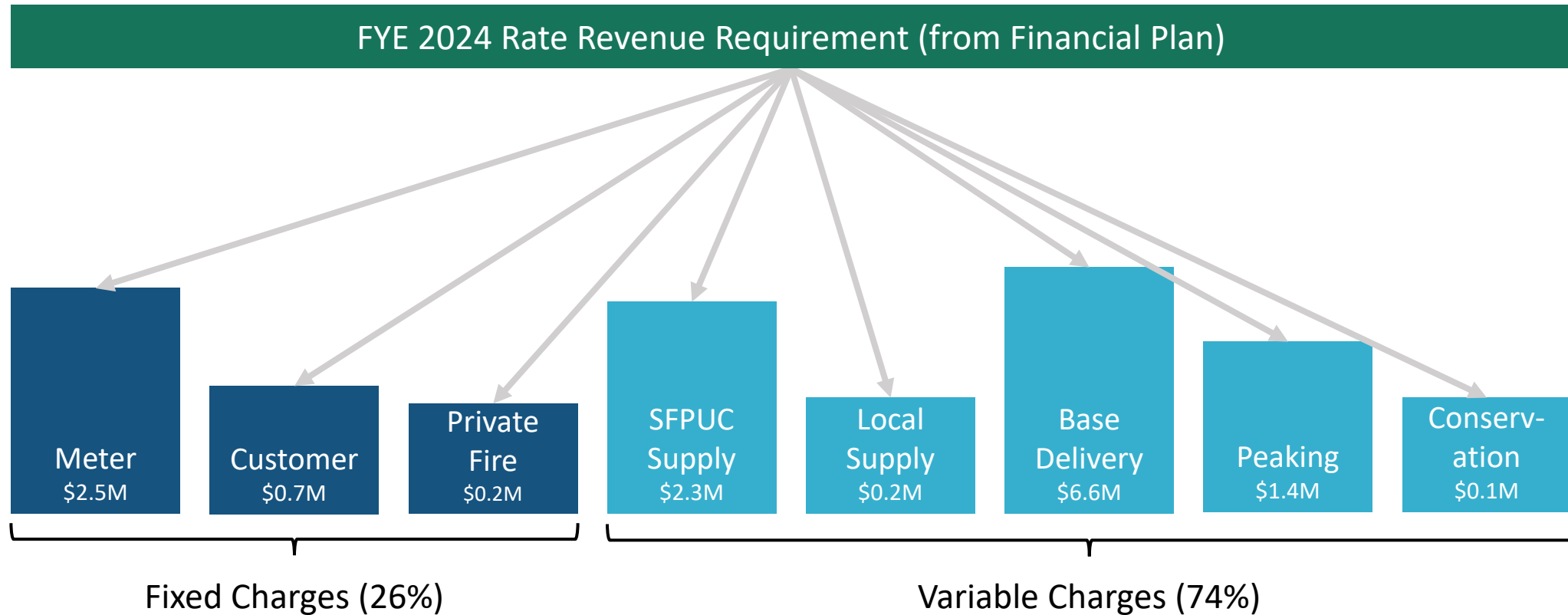
- Determines total revenue increase needed for all customers (“revenue requirement”)
 - “How big is the pie?”
- Establishes revenue needs to meet financial targets, such as CIP funding, reserve balances, debt coverage, etc.

Cost-of-Service

- Determines how revenue requirement should be divided between customers
 - “How do we slice the pie?”
- Establishes a nexus between how a customer uses the system vs. how much they are charged for service



Cost-of-Service Allocations



Keeping current fixed/variable percentage of 26%



Changes and Challenges

- The District's last cost-of-service (COS) analysis was during 2018 study
 - Agencies typically complete a COS every 5 years
- Changes in the water system since prior COS are reflected in new COS
 - Customer use characteristics: total water use, peaking, etc.
 - Capital investments, operational changes
- A COS is a “snapshot in time” – it reestablishes the nexus based on the most recent customer and cost data



Changes and Challenges (cont'd)

- Compared to 2018, water rates are now under more legal scrutiny
 - Administrative records/reports are more detailed
 - Analyses are more technical and rigorous
 - Every allocation and calculation must have a clear rationale
- Fire protection cost allocation methodology has been updated
 - More accurate calculation to allocate capacity required for fire protection
 - Linear fire line ratios vs. fire capacity ratios (Hazen-Williams equation)
 - Fire capacity is industry standard



Preliminary Water Rates



Proposed Monthly Base Charges

(With \$8.0 Debt Issuance, 8.0% Rev. Adj.)

Monthly Base Charge	Current Charge	Proposed Charge	Difference (\$)	Number of Accounts
5/8 inch	\$35.81	\$38.36	\$2.55	6,114
3/4 inch	\$52.92	\$53.32	\$0.40	201
1 inch	\$87.10	\$83.26	(\$3.84)	187
1.5 inch	\$172.59	\$158.09	(\$14.50)	31
2 inch	\$275.18	\$247.89	(\$27.29)	35
3 inch	\$600.02	\$532.27	(\$67.75)	5
4 inch	\$1,078.79	\$951.34	(\$127.45)	2
6 inch		\$2,028.96		0



Proposed Monthly Private Fire Charges

(With \$8.0 Debt Issuance, 8.0% Rev. Adj.)

Monthly Private Fire Charge	Current Charge	Proposed Charge	Difference (\$)	Number of Accounts
3/4 inch	\$6.01	\$8.87	\$2.86	10
1 inch	\$8.01	\$9.37	\$1.36	753
1.5 inch	\$12.02	\$11.19	(\$0.83)	50
2 inch	\$16.02	\$14.31	(\$1.71)	89
3 inch	\$24.03	\$25.52	\$1.49	4
4 inch	\$32.04	\$44.86	\$12.82	130
6 inch	\$48.06	\$114.26	\$66.20	61
8 inch	\$64.08	\$233.97	\$169.89	15
10 inch	\$80.10	\$414.03	\$333.93	1



Proposed Commodity Charges

(With \$8.0 Debt Issuance, 8.0% Rev. Adj.)

Consumption Charges	Current Charge	Proposed Charge	Difference (\$)	Annual Use (hcf)
Single Family Residential				
Tier 1	\$11.40	\$12.31	\$0.91	225,000
Tier 2	\$16.66	\$18.29	\$1.63	95,000
Tier 3	\$20.16	\$22.15	\$1.99	48,000
Multi-Family	\$15.19	\$14.69	(\$0.50)	39,000
All Other Customers	\$16.19	\$17.60	\$1.41	243,000



Residential Impacts (5/8" Meter, No Fire)

(With \$8.0 Debt Issuance, 8.0% Rev. Adj.)

Usage Level	Monthly Usage (hcf)	Current Bill	Proposed Bill	Difference (\$)	Difference (%)
Very Low Usage	1	\$47.21	\$50.67	\$3.46	7.3%
Low Usage	2	\$58.61	\$62.98	\$4.37	7.5%
Median Usage	4	\$81.41	\$87.60	\$6.19	7.6%
Average Usage	5	\$98.07	\$105.89	\$7.82	8.0%
High Usage	7	\$131.39	\$142.47	\$11.08	8.4%
Very High Usage	10	\$188.37	\$205.06	\$16.69	8.9%



Residential Impacts (5/8" Meter, 1" Fire)

(With \$8.0 Debt Issuance, 8.0% Rev. Adj.)

Usage Level	Monthly Usage (hcf)	Current Bill w/ 1" Fire	Proposed Bill w/ 1"	Difference (\$)	Difference (%)
Very Low Usage	1	\$55.22	\$60.04	\$4.82	8.7%
Low Usage	2	\$66.62	\$72.35	\$5.73	8.6%
Median Usage	4	\$89.42	\$96.97	\$7.55	8.4%
Average Usage	5	\$106.08	\$115.26	\$9.18	8.7%
High Usage	7	\$139.40	\$151.84	\$12.44	8.9%
Very High Usage	10	\$196.38	\$214.43	\$18.05	9.2%



All Other Impacts (No Private Fire)

(With \$8.0 Debt Issuance, 8.0% Rev. Adj.)

Customer Type	Meter Size	Monthly Usage (hcf)	Current Bill	Proposed Bill	Difference (\$)	Difference (%)
Agriculture	2 inch	600	\$9,989.18	\$10,807.89	\$818.71	8.2%
Commercial Grocery	1.5 inch	150	\$2,601.09	\$2,798.09	\$197.00	7.6%
Commercial Grocery	1 inch	200	\$3,325.10	\$3,603.26	\$278.16	8.4%
Commercial Retail	1 inch	50	\$896.60	\$963.26	\$66.66	7.4%
Commercial Contractor/Office	1 inch	11	\$265.19	\$276.86	\$11.67	4.4%
Hotel	4 inch	850	\$14,840.29	\$15,911.34	\$1,071.05	7.2%
Hotel	2 inch	300	\$5,132.18	\$5,527.89	\$395.71	7.7%
Hotel	1.5 inch	64	\$1,208.75	\$1,284.49	\$75.74	6.3%
Restaurant	1 inch	205	\$3,406.05	\$3,691.26	\$285.21	8.4%
Restaurant	3/4 inch	78	\$1,315.74	\$1,426.12	\$110.38	8.4%



All Other Impacts (With Private Fire)

(With \$8.0 Debt Issuance, 8.0% Rev. Adj.)

Customer Type	Meter Size	Monthly Usage (hcf)	Private Fire Line	Current Bill w/ Fire	Proposed Bill w/ Fire	Difference (\$)	Difference (%)
Agriculture	2 inch	600	none	\$9,989.18	\$10,807.89	\$818.71	8.2%
Commercial Grocery	1.5 inch	150	6 inch	\$2,649.15	\$2,912.35	\$263.20	9.9%
Commercial Grocery	1 inch	200	8 inch	\$3,389.18	\$3,837.23	\$448.05	13.2%
Commercial Retail	1 inch	50	6 inch	\$944.66	\$1,077.52	\$132.86	14.1%
Commercial Contractor/Office	1 inch	11	none	\$265.19	\$276.86	\$11.67	4.4%
Hotel	4 inch	850	6 inch	\$14,888.35	\$16,025.60	\$1,137.25	7.6%
Hotel	2 inch	300	4 inch	\$5,164.22	\$5,572.75	\$408.53	7.9%
Hotel	1.5 inch	64	8 inch	\$1,272.83	\$1,518.46	\$245.63	19.3%
Restaurant	1 inch	205	4 inch	\$3,438.09	\$3,736.12	\$298.03	8.7%
Restaurant	3/4 inch	78	none	\$1,315.74	\$1,426.12	\$110.38	8.4%



Next Steps and Discussion

- Adopt 3 years of rates
- Finalize water rates
- Develop water shortage rates
- Prepare draft report
- Future meetings:
 - Board meeting to approve Prop 218 Notice
 - Public Hearing (in-person)



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