

City of Shasta Lake

Water Rate Study

City Council Meeting – March 5, 2024



Water Resources Economics

PROMOTING THE VALUE AND PRICE OF
WATER SERVICE



Agenda

- Rate Study Overview
- Financial Plan
- Water Rate Structure
- Drought Considerations
- Next Steps

Rate Study Overview



Proposition 218

- Applies to property-related fees for service including retail 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
- Procedural requirements:
 - Rates must be adopted at a public hearing
 - All customers must be mailed a public hearing notice no fewer than 45 days before the hearing
 - Rates may not be adopted if a majority of customers submit a formal protest

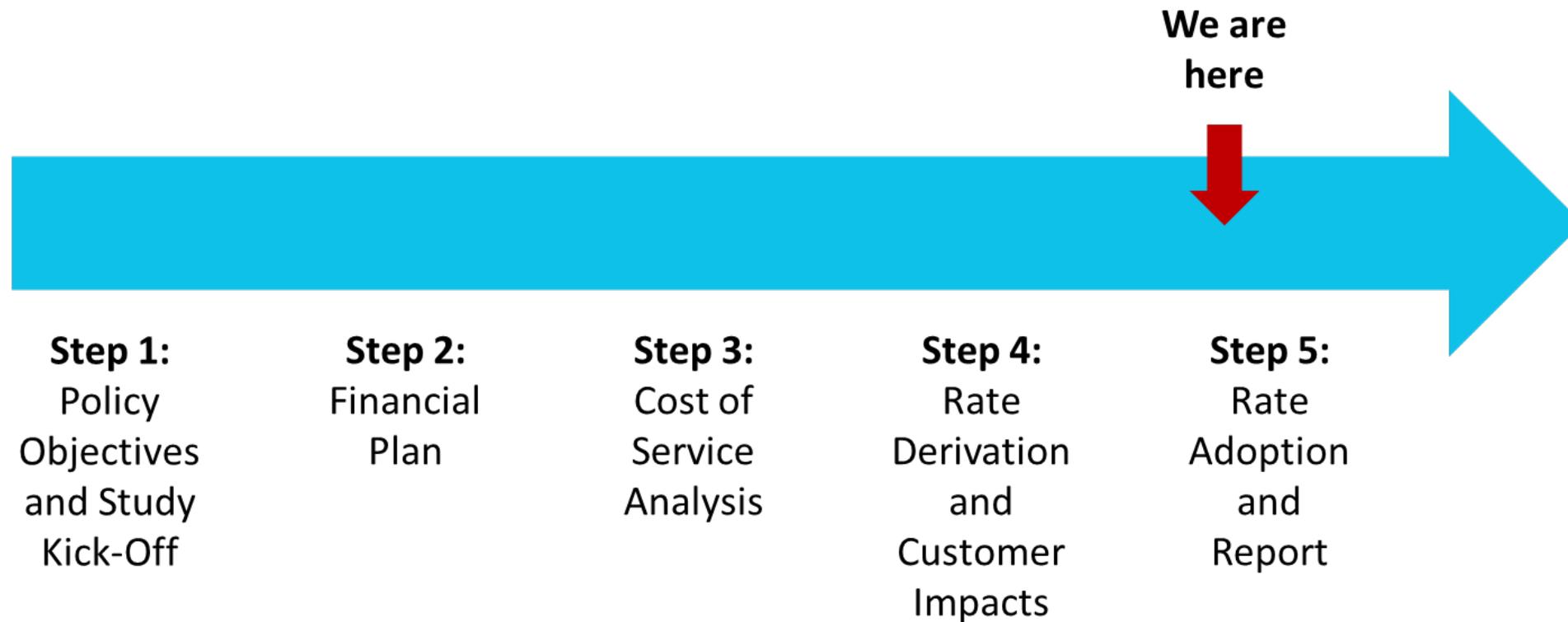


Rate Study Process

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



Rate Study Process





Ad Hoc Committee Meetings

- December 6, 2023:
 - Rate study overview
 - Received direction on rate structure options (uniform consumption charge, fixed revenue percentage, lifeline rates)
- February 1, 2024:
 - Financial plan and rate structure review
 - Received direction on financial plan scenario (debt financing tank project)
- February 14, 2024:
 - Rate structure review and drought rate policies and options
 - Received direction on water and drought rates

Financial Plan



Financial Plan Background

- City has not increased water rates since FY 2021
 - CPI has increased approximately 18% since then
- Current rate revenues of \$3.95M per year barely cover O&M expenses and debt service payments in FY 2024
 - No capacity to fund any CIP with current revenues
- City needs a rate increase to fund future O&M, debt service, CIP, and reserve targets



Capital Projects

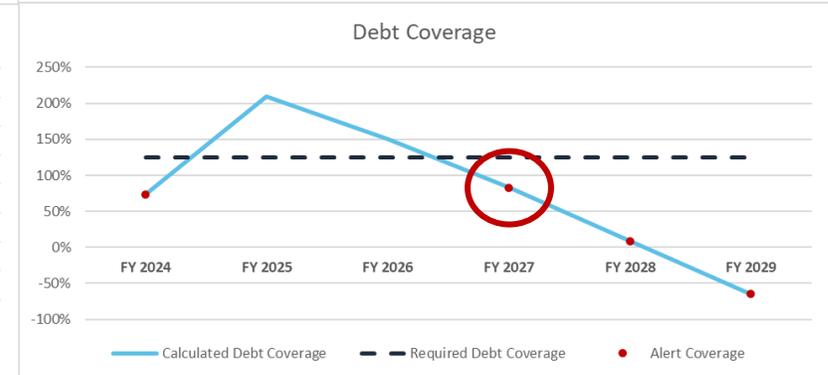
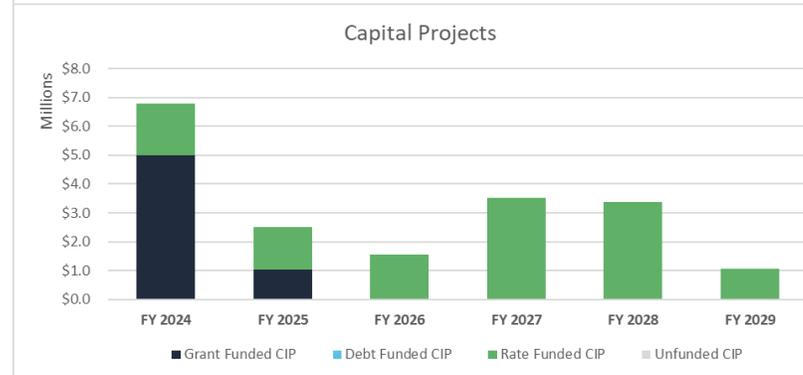
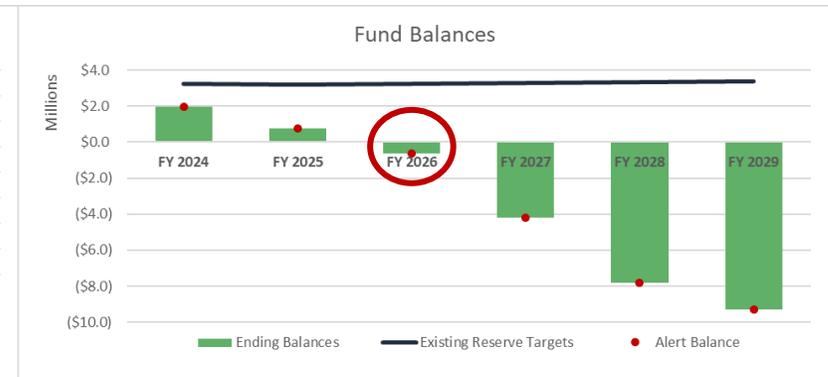
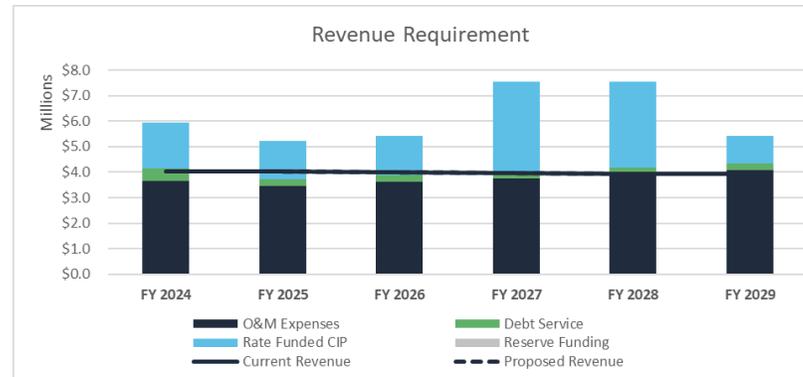
Capital Improvement Program	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Storage Tank Maintenance	\$275,000	\$286,000	\$297,440	\$309,338	\$321,711	\$334,580
Centimudi Tank	\$5,000,000	\$0	\$0	\$0	\$0	\$0
PRV Replacement Project	\$100,000	\$104,000	\$108,160	\$112,486	\$116,986	\$121,665
Water Improvements 22-23 (Ranchera Water)	\$1,143,000	\$0	\$0	\$0	\$0	\$0
WTP-Centrifuge Skid Unit	\$0	\$468,000	\$0	\$0	\$0	\$0
WTP-UCMR5 Testing	\$10,000	\$0	\$0	\$0	\$0	\$0
WTP-20" Mag Meter (Raw Water Line)	\$30,000	\$0	\$0	\$0	\$0	\$0
WTP-Filter 2-Clarifier Beads	\$175,000	\$0	\$0	\$0	\$0	\$0
Filter to Waste Improvements	\$0	\$0	\$540,800	\$0	\$0	\$0
WTP - Raw Water Tank Demo/Replacement	\$0	\$0	\$0	\$2,249,728	\$2,339,717	\$0
Lake Blvd. Water Transmission Line (Design)	\$0	\$1,040,000	\$0	\$0	\$0	\$0
Water Master Plan update	\$0	\$0	\$216,320	\$0	\$0	\$0
Water Meter ERT Replacement	\$0	\$260,000	\$270,400	\$281,216	\$0	\$0
BOR Raw Water Pumps- Upgrade SCADA/Comms	\$0	\$0	\$108,160	\$0	\$0	\$0
WTP Backwash Basin Pumps	\$0	\$260,000	\$0	\$0	\$0	\$0
SCADA Radios (City Wide)	\$0	\$104,000	\$0	\$0	\$0	\$0
Water Improvements 2027 (Project TBD)	\$0	\$0	\$0	\$562,432	\$0	\$0
Water Improvements 2028 (Project TBD)	\$0	\$0	\$0	\$0	\$584,929	\$0
Water Improvements 2029 (Project TBD)	\$0	\$0	\$0	\$0	\$0	\$608,326
Total - Capital Projects (Inflated)	\$6,788,000	\$2,522,000	\$1,541,280	\$3,515,200	\$3,363,343	\$1,064,571

- City has \$6M of total grant funding for Centimudi Tank and Lake Blvd. Water Transmission Line Design projects



Financial Plan Scenario: Status Quo

Year	Change
Rate Increase	
FY 2025	0%
FY 2026	0%
FY 2027	0%
FY 2028	0%
FY 2029	0%
Debt Proceeds	
FY 2026	None





Financial Plan Scenario: Debt Funded

Year	Change
Rate Increase	
FY 2025	25%
FY 2026	6%
FY 2027	6%
FY 2028	6%
FY 2029	6%
Debt Proceeds	
FY 2026	\$6M



Water Rate Structure



Rate Structure Changes

- Based on direction from Ad Hoc Committee, we evaluated the following rate structure options:
 - **Uniform consumption charge** for all customer classes
 - **Increasing fixed revenue percentage** from 46% to ~55%
 - Evaluating **Lifeline discount on fixed charge** instead of consumption charge



Lifeline Discount

- Current Lifeline discount is funded by General Fund
 - Discount on Tier 1 usage
 - Current annual discount is approximately \$15.3K to 491 customers
- Ad-Hoc Committee recommended to change discount structure to reflect on monthly fixed charge
 - For a **\$4/month discount** to Lifeline customers, annual discount is approximately \$23.6K



Proposed Rates: 5-Year Schedule

Monthly Service Charges	Current	Proposed FY 2025	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
Lifeline	\$31.08	\$40.29	\$42.95	\$45.77	\$48.76	\$51.93
5/8"	\$31.08	\$44.29	\$46.95	\$49.77	\$52.76	\$55.93
1"	\$70.45	\$108.89	\$115.43	\$122.36	\$129.71	\$137.50
1.5"	\$136.06	\$216.55	\$229.55	\$243.33	\$257.93	\$273.41
2"	\$214.79	\$345.75	\$366.50	\$388.49	\$411.80	\$436.51
3"	\$398.52	\$647.23	\$686.07	\$727.24	\$770.88	\$817.14
4"	\$660.97	\$1,077.89	\$1,142.57	\$1,211.13	\$1,283.80	\$1,360.83
6"	\$1,317.12	\$2,154.57	\$2,283.85	\$2,420.89	\$2,566.15	\$2,720.12
8"	\$2,104.51	\$3,446.57	\$3,653.37	\$3,872.58	\$4,104.94	\$4,351.24
10"	\$3,810.49	\$6,245.90	\$6,620.66	\$7,017.90	\$7,438.98	\$7,885.32
12"	\$5,647.71	\$9,260.58	\$9,816.22	\$10,405.20	\$11,029.52	\$11,691.30



Proposed Rates: 5-Year Schedule

Monthly Private Fire Charges	Current	Proposed FY 2025	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
2" or Less	\$5.53	\$16.93	\$17.95	\$19.03	\$20.18	\$21.40
3" or Less	\$16.06	\$46.17	\$48.95	\$51.89	\$55.01	\$58.32
4" or Less	\$34.22	\$96.60	\$102.40	\$108.55	\$115.07	\$121.98
6" or Less	\$99.42	\$277.62	\$294.28	\$311.94	\$330.66	\$350.50
8" or Less	\$211.86	\$589.82	\$625.21	\$662.73	\$702.50	\$744.65
10" or Less	\$381.00	\$1,059.43	\$1,123.00	\$1,190.38	\$1,261.81	\$1,337.52
12" or Less	\$615.41	\$1,710.30	\$1,812.92	\$1,921.70	\$2,037.01	\$2,159.24



Proposed Rates: 5-Year Schedule

Consumption Charges	Current	Proposed FY 2025	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
Residential						
Tier 1	\$2.44	\$2.85	\$3.03	\$3.22	\$3.42	\$3.63
Tier 2	\$2.79	\$2.85	\$3.03	\$3.22	\$3.42	\$3.63
Tier 3	\$3.50	\$2.85	\$3.03	\$3.22	\$3.42	\$3.63
Multi-Family & Mobile	\$2.58	\$2.85	\$3.03	\$3.22	\$3.42	\$3.63
Commercial & Industrial	\$2.63	\$2.85	\$3.03	\$3.22	\$3.42	\$3.63
Commercial Irr. & Govt.	\$2.86	\$2.85	\$3.03	\$3.22	\$3.42	\$3.63
Schools	\$3.07	\$2.85	\$3.03	\$3.22	\$3.42	\$3.63



Residential Customer Impacts

Residential Customer Impacts	Billed Usage (hcf)	Proposed Bill	Current Bill	Difference (\$)	Difference (%)
Very Low Use (10th percentile)	2	\$49.99	\$35.96	\$14.03	39%
Low Use (25th percentile)	4	\$55.69	\$40.84	\$14.85	36%
Median Use	7	\$64.24	\$48.16	\$16.08	33%
Average Use	11	\$75.64	\$58.27	\$17.37	30%
High Use (75th percentile)	14	\$84.19	\$66.64	\$17.55	26%
Very High Use (90th percentile)	25	\$115.54	\$100.88	\$14.66	15%

Drought Considerations



Risk and Policies for Drought Conditions

Water Supply Cost for Constrained Year

- **Pass-through rate** provision to recover incremental cost of water
- Must be cost-based
- Does not necessarily require usage reduction from customers

Government Mandated Water Restrictions

- **Drought rate** to recover lost commodity revenue due to usage reductions
- Must be cost-based
- Does require usage reduction
- Independent of water supply cost increases

Enforcement of Mandated Restrictions

- **Drought penalty** used to enforce usage reductions
- Is not cost-based, but should be “reasonable”
- Considered a misdemeanor
- Not included in Proposition 218 notice



Proposed Passthrough Rate/Surcharge

- Based on direction from Ad Hoc Committee, we calculated a passthrough rate/surcharge for constrained years
 - Surcharge is the maximum incremental amount that the City would pay for water supply in constrained years
- Surcharge for McConnell Water: \$0.17 per hcf
- Surcharge for ACID Water: \$0.24 per hcf
- Combined surcharge: \$0.41 per hcf



Proposed Drought Rates

Drought Rates	Proposed FY 2025	Proposed FY 2026	Proposed FY 2027	Proposed FY 2028	Proposed FY 2029
Baseline - No Reduction	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Stage 1 - 10% Reduction	\$0.32	\$0.34	\$0.37	\$0.40	\$0.43
Stage 2 - 20% Reduction	\$0.72	\$0.77	\$0.82	\$0.87	\$0.93
Stage 3 - 30% Reduction	\$1.23	\$1.31	\$1.39	\$1.48	\$1.57
Stage 4 - 40% Reduction	\$1.90	\$2.02	\$2.15	\$2.28	\$2.42
Stage 5 - 50% Reduction	\$2.85	\$3.03	\$3.22	\$3.42	\$3.63
Stage 6 - 60% Reduction	\$4.28	\$4.54	\$4.82	\$5.11	\$5.42



Drought Scenarios

Drought Scenario	No Drought (Non- Constrained)	Stage 2 Drought w/ No Reduction (Non- Constrained)	Stage 2 Drought w/ 20% Reduction (Non- Constrained)	Stage 2 Drought w/ 20% Reduction (Constrained)
Residential Customer w/ Monthly Usage (hcf)	5/8" Meter 11	5/8" Meter 11	5/8" Meter 9	5/8" Meter 9
Monthly Service Charge	\$44.29	\$44.29	\$44.29	\$44.29
Consumption Charge	\$31.35	\$31.35	\$25.65	\$25.65
Drought Rate	\$0.00	\$7.92	\$6.48	\$6.48
Pass-through Supply Rate	\$0.00	\$0.00	\$0.00	\$3.69
Total Water Bill	\$75.64	\$83.56	\$76.42	\$80.11



Next Steps

- Report and documentation
- Prop 218 Notice
- Public Hearing May 21, 2024
- Second Reading June 4, 2024



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