



City of Petaluma



Water & Sewer Rate Study

May 15, 2023



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

DRAFT 5-11-23



Presentation Overview



- Background
- Water & Sewer Systems
- Water & Sewer Rates
- Financial Challenges
- Projected Rates
- Low Income Discount
- Next Steps

Purpose: Discuss findings & draft recommendations & receive input



Background

- **Water & sewer utilities are financially self-supporting enterprises**
 - Rates are main source of funding and need to be adequate to fund the costs of providing service including operating, maintenance, debt service, & capital improvement needs
- **City serves roughly 20,000 accounts**
 - Residential customers account for over 90% of customers & roughly 2/3rds of water use
- **Water System**
 - Over 270 miles of water pipelines, 11 storage tanks/reservoirs, 9 booster pump stations
 - Water supply mostly imported from Sonoma County Water Agency (SCWA) supplemented by a small amount of groundwater pumped from City wells
- **Wastewater System**
 - Over 190 miles of sewer pipelines, 9 sewer pump stations
 - Wastewater treatment at Ellis Creek Water Recycling Facility
 - Effluent either a) disposed to Petaluma River in winter, or b) treated to higher regulatory standards and used as recycled water for landscape and agricultural irrigation
- **Many facilities are approaching the end of their useful lives and will need to be rehabilitated or replaced in future years**

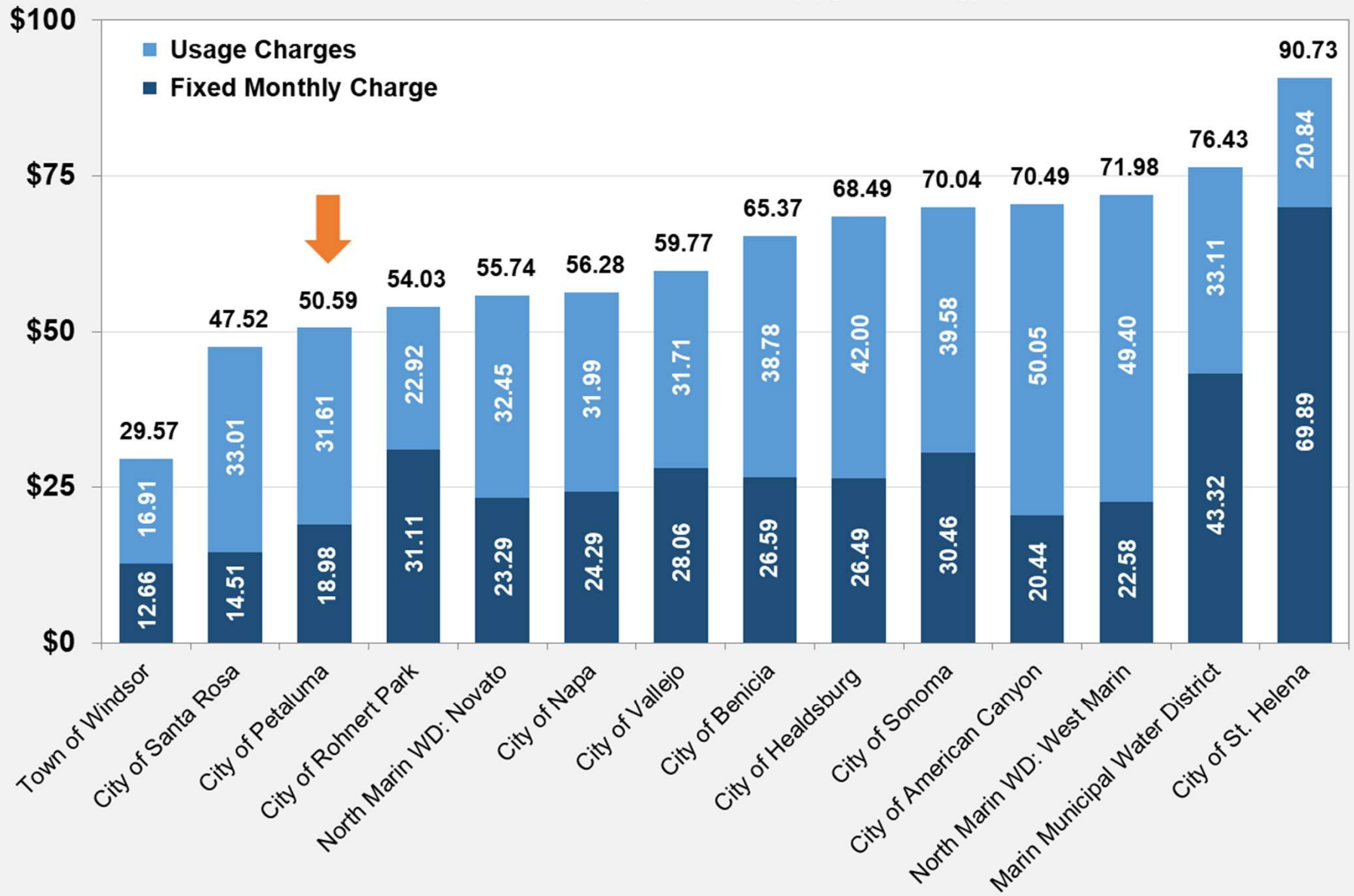


Water & Sewer Rates

- **City has historically provided strong financial management via adoption of gradual annual rate increases most years**
 - Last adopted a 5-years of rate increase in 2017
 - Also implemented rate structure modifications to better align rates with cost of service
 - Increases were temporarily deferred to provide rate relief during Coronavirus pandemic
- **Typical residential bills are in the middle range based on a regional survey**
 - Water rates in lower range
 - Sewer rates in middle range
 - Bills for low-use customers in lower-middle range
- **Prior rate increases put water & sewer utilities on stronger financial footing**
- **However, both utilities are facing increased costs for operations and capital improvement needs that will require continuation of gradual rate increases**

Single Family Residential Monthly Water Rate Survey

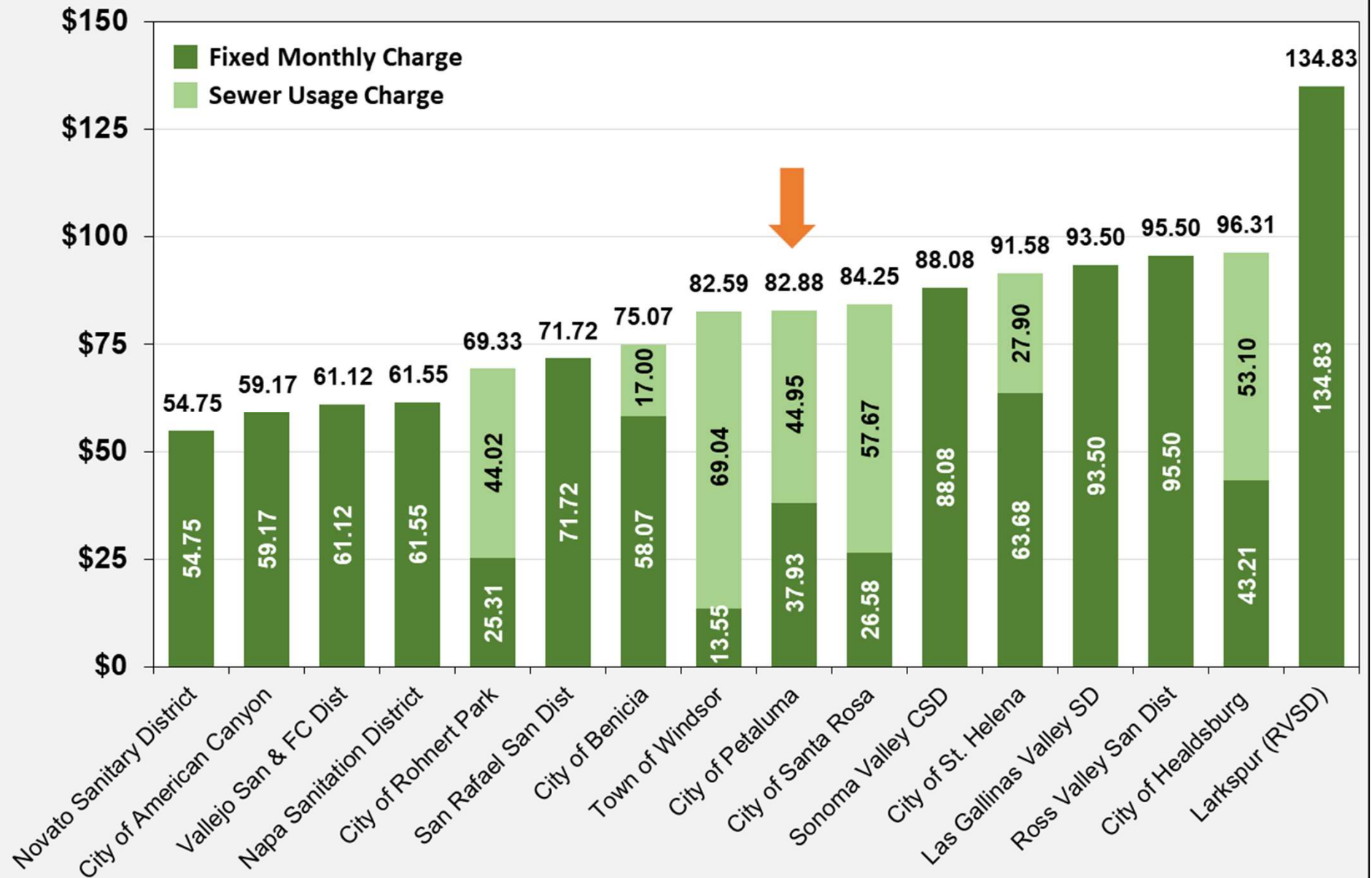
Based on 7 hcf monthly water use (approx. 172 gpd)



Rates Effective January 2023

Single Family Residential Monthly Sewer Rate Survey

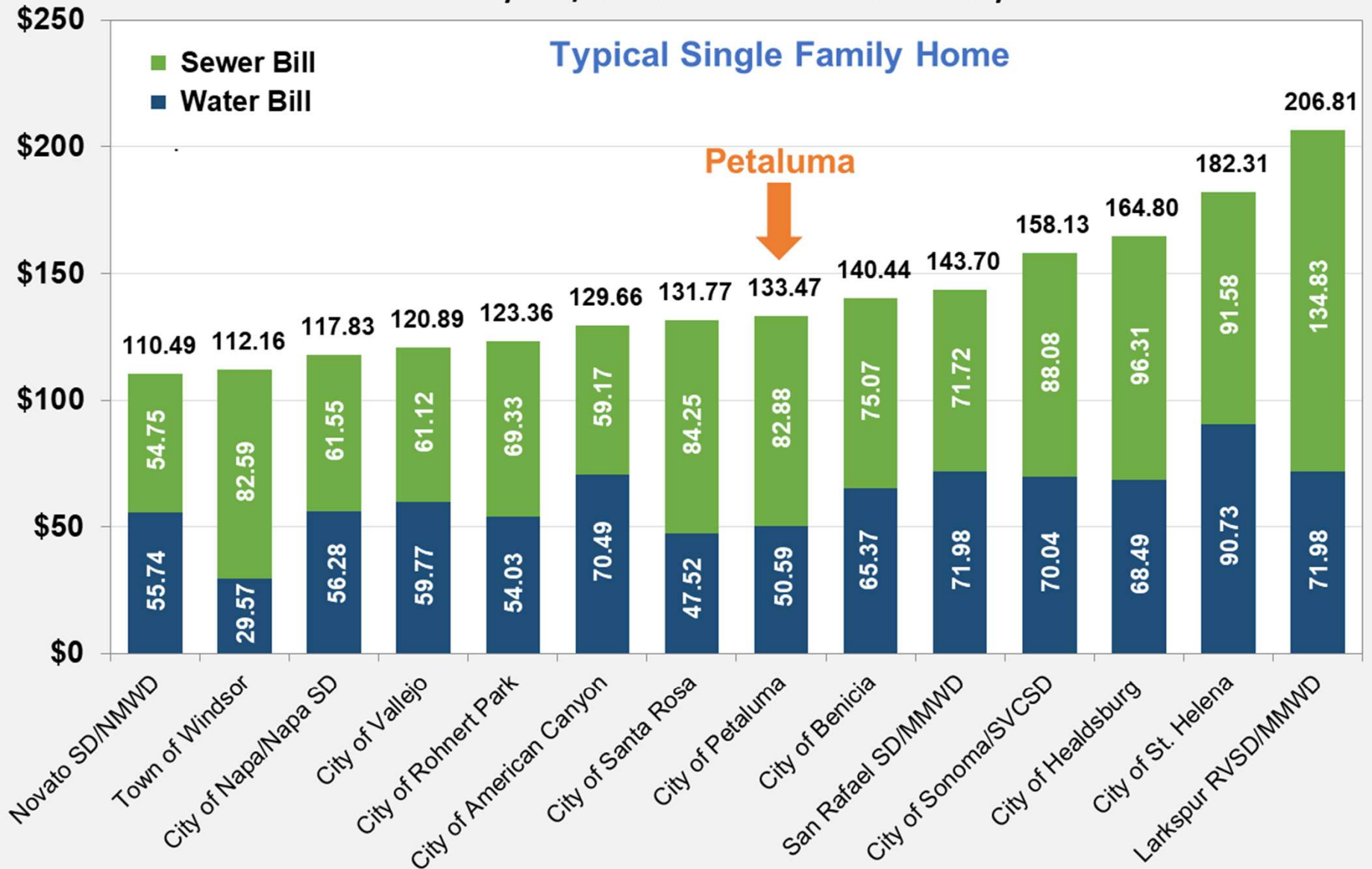
Based on flat rate or 5 hcf of monthly winter water use



Rates Effective January 2023

Single Family Residential Monthly Water & Wastewater Rate Survey

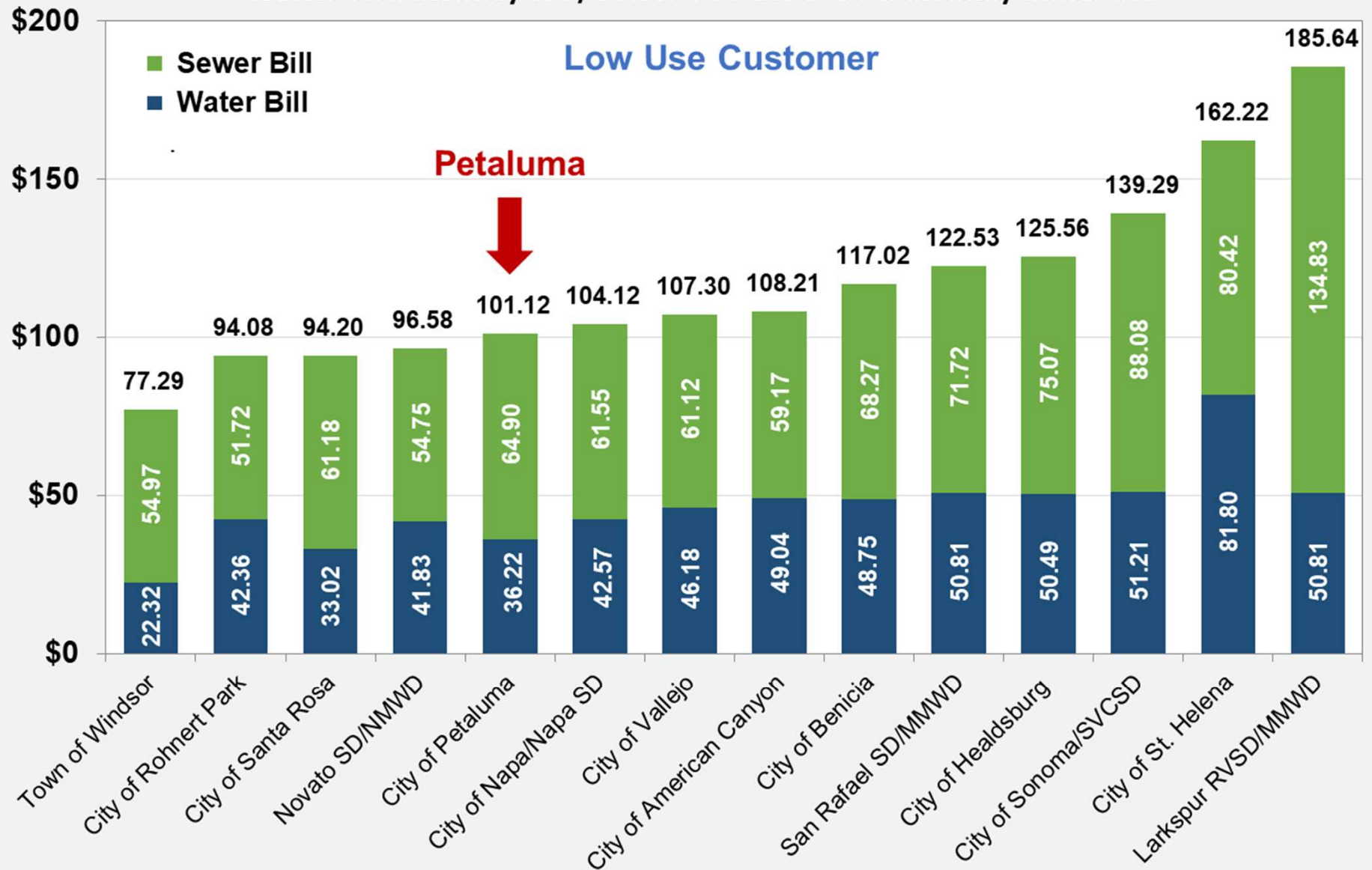
Water: 7 hcf monthly use / Sewer: flat rate or 5 hcf monthly winter use



Rates Effective January 2023

Single Family Residential Monthly Water & Sewer Rate Survey

Water: 4 hcf monthly use / Sewer: flat rate or 3 hcf monthly winter use



Rates Effective January 2023



Rate Study Overview

■ **10-Year Water & Sewer Financial Plans**

- Developed 10-year financial projections to identify future operating, capital, and debt service funding needs for each utility
- Phase in rate increases as gradually as possible to minimize the annual impact on customers

■ **No modifications to City's water or sewer rate structures proposed**

- Prior rate study modified rate structures & realigned rates with cost of service
- Maintain continuity of rate structure; all customers face same % rate increases

■ **Developed new Water Shortage Emergency Rates designed to support financial stability during droughts & water shortages**

■ **Collaborative process with City staff**

■ **Water & sewer enterprises in good financial shape but face financial challenges that will require gradual annual rate increases**



Financial Challenges

■ Capital Improvement Needs of Aging Infrastructure



- Updated Master Plans are in progress & identify substantial funding needs
- Purpose: Replace aging infrastructure, address deficiencies, expand recycled water system, and improve water & sewer system reliability to support safe & reliable operations
- Capital improvements have been prioritized & spread over future years to extent possible
- High-priority capital funding needs over the next five years:
 - **Water: \$54 million** (est. grant funding \$22M; net funding req't = \$33M)
 - **Wastewater: \$70 million** (excludes major future rehab/upgrade of ECWRF)
 - **Recycled Water: \$42 million** (est. grant funding \$19M; net funding req't = \$23M)
Recycled Water CIP costs allocated 77% to Wastewater and 23% to Water
- City successful in obtaining grant funding (Advanced Metering Infrastructure, tertiary wastewater treatment, etc.) and is in process of seeking additional grant funding



Financial Challenges

■ Sonoma County Water Agency (SCWA) Wholesale Water Rate Increases

- SCWA wholesale rates increasing 9.4% effective July 1, 2023
- Projected to increase more than 50% over next 5 years

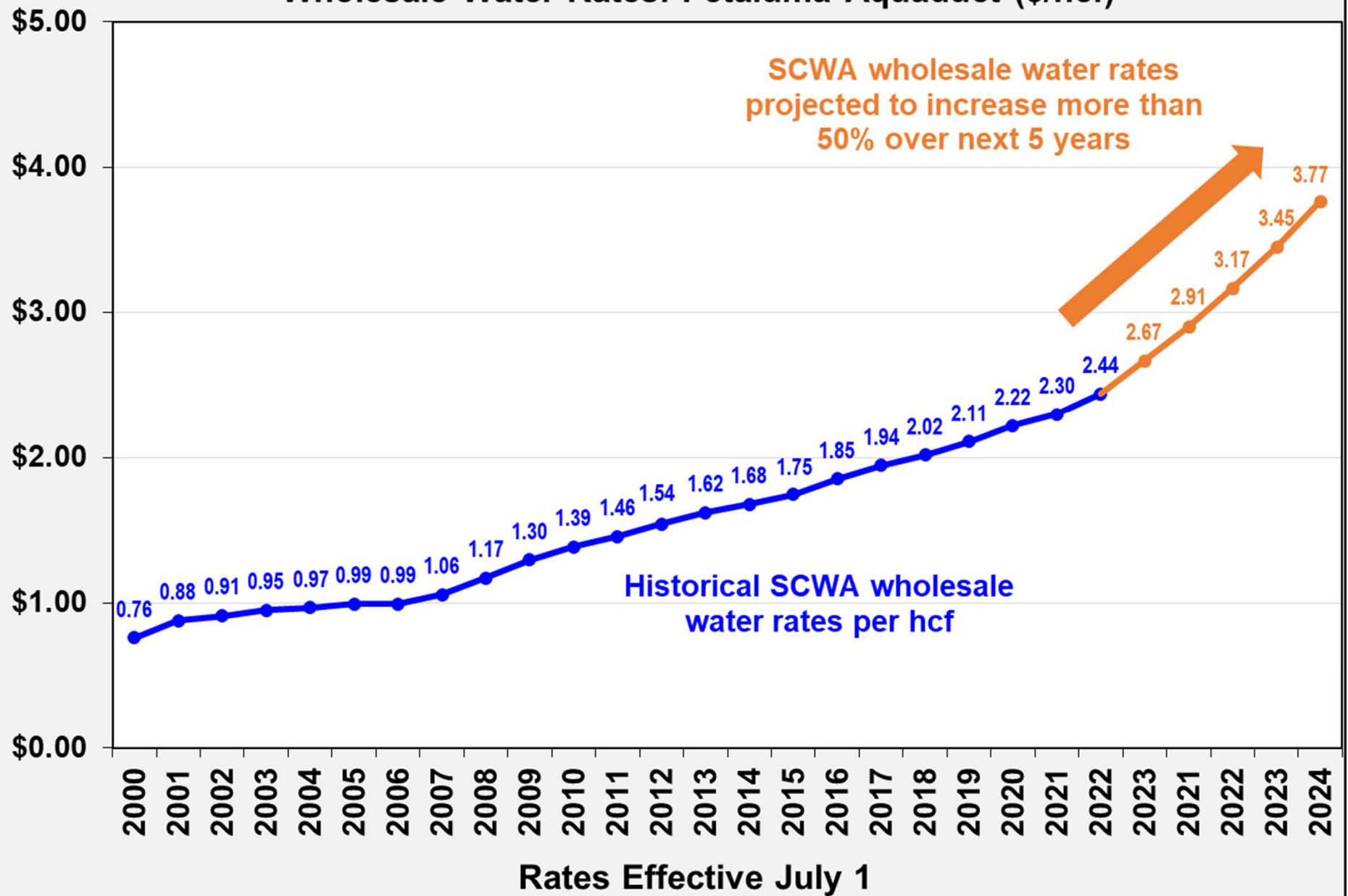
■ Keep Up with Cost Inflation

- City faces ongoing inflationary increases for operating & maintenance expenses (utilities, staffing, chemicals, insurance, etc.)
- Annual rate adjustments needed to keep up with cost inflation



Sonoma County Water Agency

Wholesale Water Rates: Petaluma Aquaduct (\$/hcf)





Projected Water Rates

- BWA developed 10-year financial projections to identify future funding needs & evaluate rate increases to support the costs of providing service
- Gradual annual rate increases needed to support water system operating & maintenance expenses, debt requirements, and capital program
- Proposed rate increases phased in over 5 years & include 3 components
 - Base City Rate Increases

Projected Base City Water Rate Increases				
Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
2.5%	2.5%	2.5%	2.5%	2.5%

- **Plus annual pass-through for CPI inflation** (% increase to all water rates)
- **Plus annual pass-through for SCWA wholesale rate increases**
(\$ per hcf increase to Water Consumption Charges)



Proposed Water Rates						
		Current Water Rates	Proposed Rates Effective On or After			
			Sept 1 2023	July 1 2024	July 1 2025	July 1 2026
FIXED MONTHLY CHARGES						
Fixed monthly charge billed based meter size or per multi-family dwelling unit.						
<u>Residential</u>						
Single Family: Up to 1-inch meter	\$18.98	\$20.03	\$20.54	\$21.05	\$21.58	\$22.11
Multi-Family: Per Dwelling Unit	11.39	12.02	12.32	12.63	12.95	13.27
<u>All Other Customers</u>						
5/8 & 3/4-inch meter	\$18.98	\$20.03	\$20.54	\$21.05	\$21.58	\$22.11
1-inch meter	30.13	31.81	32.60	33.41	34.25	35.10
1-1/2-inch meter	58.02	61.25	62.79	64.35	65.96	67.61
2-inch meter	91.47	96.57	98.98	101.46	103.99	106.58
3-inch meter	169.56	179.01	183.49	188.08	192.79	197.61
4-inch meter	281.10	296.77	304.19	311.79	319.59	327.58
6-inch meter	559.96	591.18	605.96	621.11	636.64	652.56
WATER CONSUMPTION CHARGES						
Volumetric charges billed per hundred cubic feet (hcf) of metered water use.						
<u>Single Family Residential</u>						
Tier 1	0 - 4 hcf	\$4.31	\$4.78	\$4.90	\$5.01	\$5.26
Tier 2	4.01 - 8 hcf	4.79	5.29	5.41	5.54	5.81
Tier 3	8.01 - 16 hcf	5.48	6.02	6.16	6.31	6.62
Tier 4	>16 hcf	6.42	7.01	7.17	7.35	7.71
All Other Customers		4.79	5.29	5.41	5.54	5.81
Temporary Service & Water Haulers		7.18	7.81	8.00	8.19	8.59



Water Rate Impacts

Projected Water Rate Increases with SCWA & Inflation Pass-Throughs					
	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
Base City Rate Increases	2.5%	2.5%	2.5%	2.5%	2.5%
Est. Inflation Pass-Through	3.0%	2.5%	2.5%	2.5%	2.5%
SCWA Wholesale Rate Increase*	\$0.23	\$0.24	\$0.26	\$0.29	\$0.31
Net Increase	8.8%	8.2%	8.3%	8.3%	8.3%

* Pass-through to Water Consumption Charges only.

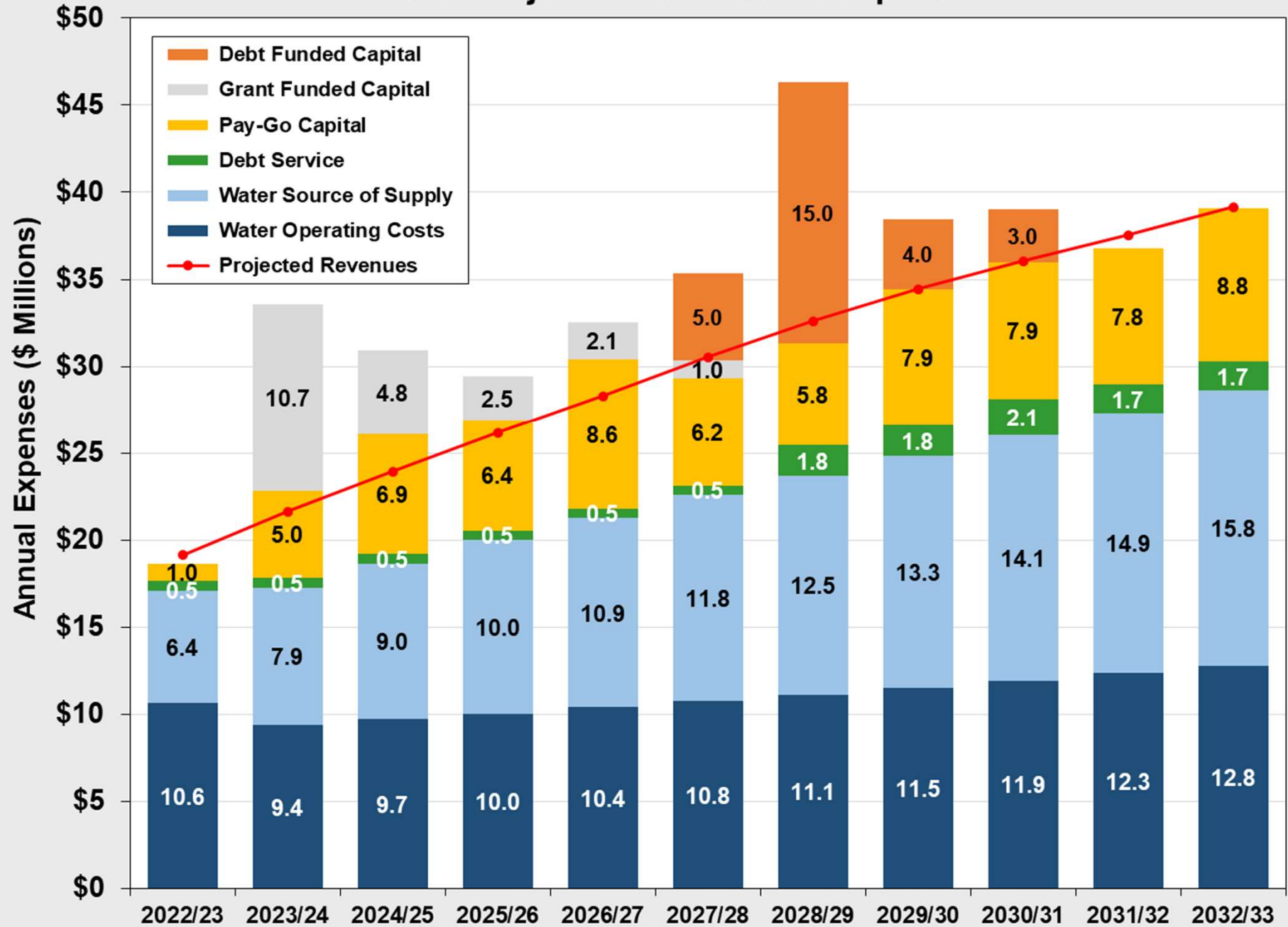
- **Projected rate increases shown; actual future increases may vary**
- **City maintains the flexibility to implement rates lower than authorized**

Projected Monthly Water Bills for a Single Family Home							
	Use (hcf)	Current Year	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
Low Use	4	\$36.22	\$39.15	\$42.05	\$45.12	\$48.44	\$51.93
Average Use	7	50.59	55.02	59.39	64.08	69.08	74.40
Mod-High Use	12	77.30	84.39	91.37	98.88	106.88	115.41

Note: Projected bills include base City rate increases plus estimates of future annual pass-through rate adjustments for wholesale water rate increases and inflation.

City of Petaluma

Water Projected Revenues & Expenses





Projected Wastewater Rates

- BWA developed 10-year financial projections to identify future funding needs & evaluate rate increases to support the costs of providing service
- Gradual annual rate increases needed to support sewer system operating & maintenance expenses, debt requirements, and capital program
- Proposed rate increases phased in over 5 years & include 2 components
 - Base City Rate Increases

Projected Base City Wastewater Rate Increases				
Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
2.0%	2.0%	2.0%	2.0%	2.0%

- Plus annual pass-through for CPI inflation (% increase to all water rates)



Proposed Wastewater Rates

Current Wastewater Rates	Proposed Rates Effective on or After					
	Sept 1	July 1	July 1	July 1	July 1	
	2023	2024	2025	2026	2027	
FIXED MONTHLY CHARGES						
Fixed monthly charges billed per residential dwelling unit or based on non-residential meter size.						
RESIDENTIAL						
Fixed monthly charge per dwelling unit						
Single Family Residential	\$37.93	\$39.85	\$40.64	\$41.46	\$42.29	\$43.14
Multi-Unit Residential	32.24	33.88	34.55	35.24	35.95	36.67
Unmetered Residential	100.88	105.99	108.11	110.27	112.48	114.72
NON-RESIDENTIAL						
Fixed monthly charge based on meter size						
Up to 3/4-inch meter	\$37.93	\$39.85	\$40.64	\$41.46	\$42.29	\$43.14
1-inch meter	62.43	65.59	66.90	68.24	69.61	71.00
1-1/2 inch meter	123.66	129.91	132.51	135.16	137.86	140.62
2-inch meter	197.15	207.12	211.26	215.49	219.79	224.19
WASTEWATER COMMODITY CHARGES						
Volumetric charges billed per hundred cubic feet (hcf) of estimated sewer discharge.						
RESIDENTIAL						
Based on a) average of two lowest of four low use months of metered winter water use or b) actual water use						
Single Family Residential	\$8.99	\$9.45	\$9.63	\$9.83	\$10.02	\$10.22
Multi-Unit Residential	8.99	9.45	9.63	9.83	10.02	10.22
COMMERCIAL						
Billed based on metered water use						
Low Strength	\$8.66	\$9.09	\$9.28	\$9.47	\$9.65	\$9.85
Medium Strength	11.78	12.38	12.63	12.89	13.14	13.41
High Strength	16.01	16.82	17.16	17.50	17.85	18.21
METERED INDUSTRIAL						
Based on metered use & estimated wastewater loadings						
Flow (\$/hcf)	\$7.44	\$7.82	\$7.97	\$8.13	\$8.29	\$8.46
BOD (\$/lb)	1.26	1.33	1.36	1.39	1.42	1.45
SS (\$/lb)	1.43	1.50	1.53	1.57	1.60	1.63

Note: Rates shown are subject to add'l annual pass-through rate adjustments for inflation starting July 1, 2024.



Wastewater Rate Impacts

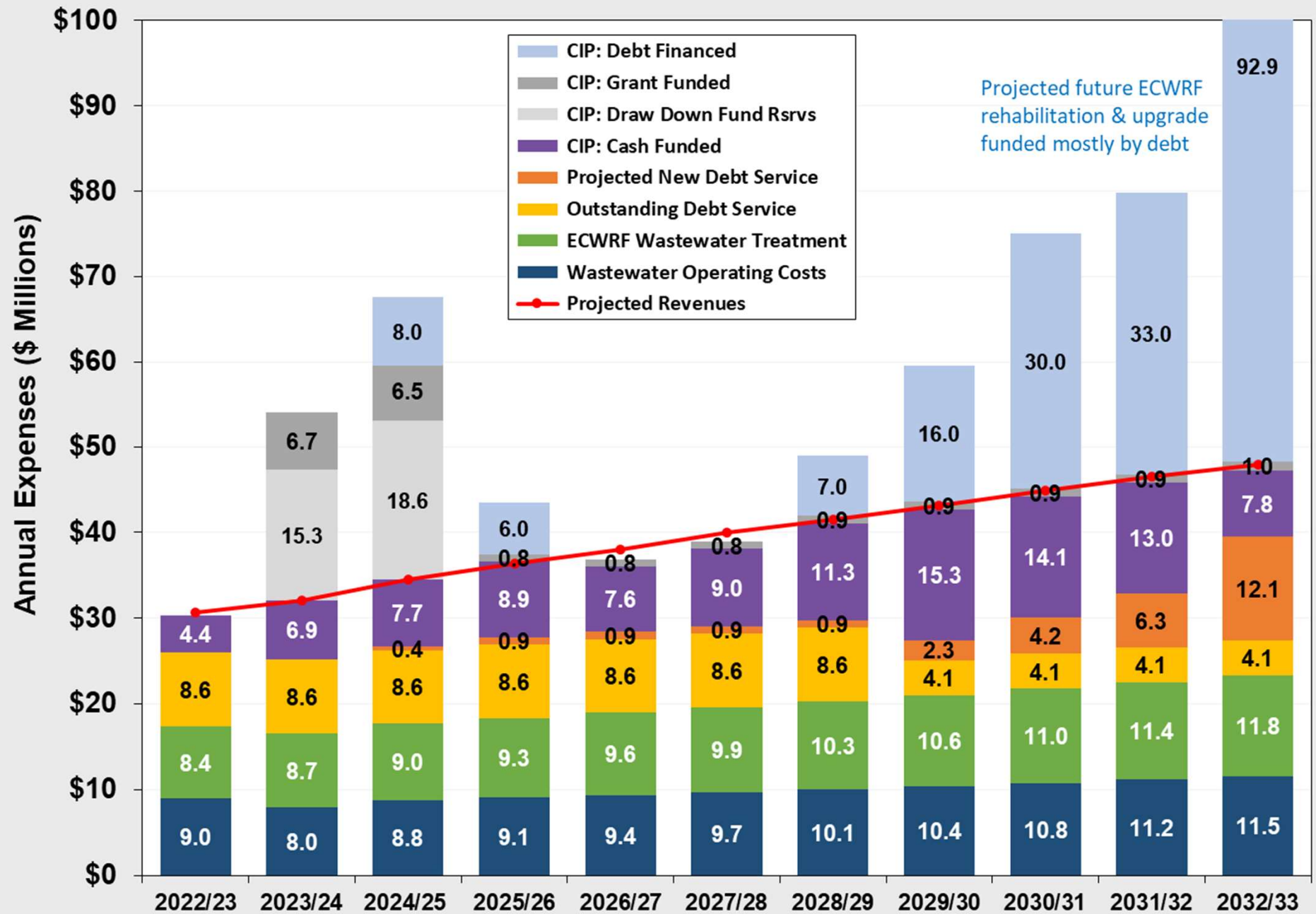
Projected Wastewater Rate Increases with Inflation Pass-Throughs					
	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
Base City Rate Increases	2.0%	2.0%	2.0%	2.0%	2.0%
Est. Inflation Pass-Through	3.0%	2.5%	2.5%	2.5%	2.5%
Net Increase	5.1%	4.6%	4.5%	4.5%	4.5%

- Projected rate increases shown; actual future increases may vary
- City maintains flexibility to implement rates lower than authorized

Projected Monthly Wastewater Bills for a Single Family Home							
	Use (hcf)	Current Year	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
Low Use	3	\$64.90	\$68.19	\$71.27	\$74.53	\$77.92	\$81.45
Average Use	5	82.88	87.08	91.02	95.17	99.51	104.01
Mod-High Use	8	109.85	115.41	120.63	126.15	131.88	137.84

Note: Projected bills include base City rate increases plus estimates of future annual pass-through rate adjustments for inflation.

City of Petaluma Wastewater Projected Revenues & Expenses



Projected Monthly Water & Wastewater Bills							
	Use (hcf)	Current Year	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
Low Use							
Water	4	\$36.22	\$39.15	\$42.05	\$45.12	\$48.44	\$51.93
Wastewater	3	<u>64.90</u>	<u>68.19</u>	<u>71.27</u>	<u>74.53</u>	<u>77.92</u>	<u>81.45</u>
Total		101.12	107.34	113.32	119.65	126.36	133.38
Typical Use							
Water	7	\$50.59	\$55.02	\$59.39	\$64.08	\$69.08	\$74.40
Wastewater	5	<u>82.88</u>	<u>87.08</u>	<u>91.02</u>	<u>95.17</u>	<u>99.51</u>	<u>104.01</u>
Total		133.47	142.10	150.41	159.25	168.59	178.41
Mod-High Use							
Water	12	\$77.30	\$84.39	\$91.37	\$98.88	\$106.88	\$115.41
Wastewater	8	<u>109.85</u>	<u>115.41</u>	<u>120.63</u>	<u>126.15</u>	<u>131.88</u>	<u>137.84</u>
Total		187.15	199.80	212.00	225.03	238.76	253.25

- Includes base rate increases + projected SCWA water & CPI pass-throughs
- Combined water & wastewater charges expected to remain in middle range
- Other regional agencies are also increasing rates



Water Shortage Emergency Rates

- Rate adjustments designed to support financial stability during periods of drought and emergency water shortages
- Adjustments aligned with UWMP Water Shortage Contingency Plan Levels which range from Level 1: 10% shortage to Level 6: >50% shortage
- Adjustments developed to support both Water and Wastewater Utilities
- Proposed adjustments are maximums; City would retain ability to implement adjustments below the maximum levels
- Goal is to obtain Prop 218 authorization to give Council flexibility to phase in rate adjustments in response to escalating droughts or water shortages

Proposed Maximum Water Shortage Emergency Rate Adjustments					
	Water Shortage Level				
	Level 2	Level 3	Level 4	Level 5	Level 6
Water Shortage or Mandated Reduction	Up to 20%	Up to 30%	Up to 40%	Up to 50%	> 50%
Maximum Rate Adjustment %	8%	16%	27%	41%	62%
Maximum Rate Adjustment * Effective Sept-1, 2023 (\$/hcf)	\$0.42	\$0.85	\$1.43	\$2.17	\$3.28

* Maximum authorized adjustments would be adjusted on July 1 each year based on the Maximum Rate Adjustment % for each Water Shortage Level multiplied by the uniform Water Consumption Charge implemented each year.

Projected Maximum Wastewater Rate Adjustments for Water Shortage Emergencies					
	Water Shortage Level				
	Level 2	Level 3	Level 4	Level 5	Level 6
Water Shortage or Mandated Reduction	Up to 20%	Up to 30%	Up to 40%	Up to 50%	> 50%
Maximum Rate Adjustment %	5%	7%	10%	14%	20%
Maximum Rate Adjustment * Effective Sept-1, 2023 (\$/hcf)	\$0.47	\$0.66	\$0.94	\$1.32	\$1.89

* Maximum authorized adjustments would be adjusted on July 1 each year based on the Maximum Rate Adjustment % for each Water Shortage Level multiplied by the Residential Wastewater Commodity Charge implemented each year.



LIHWAP Assistance Program

- Petaluma participates in the federally-funded LIHWAP assistance program
- Administered by California's Dept of Community Services & Development
- Helps low-income households pay arrearages (past due bills) & utility bills
- Priority is to maintain or restore service and avoid disconnection due to delinquency and non-payment
- Info available at csd.ca.gov/lihwap
- Info also on City's website at cityofpetaluma.org/billing-water-sewer or by searching for "Water & Sewer Billing" or by contacting City



Office of Community Services

Low-Income Household Water Assistance Program | LIHWAP



Low-Income Discount Program

- City in process of developing a Customer Assistance Program to provide utility rate discounts to customers based on income eligibility
- Currently evaluating alternatives
- Discounts cannot be funded by other customers' rates and would likely require an annual contribution from the General Fund
- Eligibility to be based on participation in PG&E CARE Program, Recology CARE Program, & potentially other state & federal aid programs
- Issue will be brought back to Council for consideration
- Goal is to have discount program up & running when new rates go into effect on Sept-1, 2023





Summary of Key Issues

■ Water Rates

- Proposed Increases: 2.5% base City rate increases each year for next 5 years
- Continue City's historical practice of authorizing additional annual pass-throughs for a) SCWA wholesale water rate increases and b) CPI inflation

■ Wastewater Rates

- Proposed Increases: 2.0% base City rate increases each year for next 5 years
- Continue City's historical practice of authorizing annual pass-through for CPI inflation

■ Water Shortage Emergency Rate Adjustments

- Consider authorizing maximum water and wastewater rate adjustments to support financial stability during periods of drought and required cutbacks
- City can phase in adjustments as needed in response to escalating drought conditions

■ Low Income Discount Program

- Staff evaluating options & will bring recommendations for Council for consideration
- Goal is for City discount program to become effective when new rates go into effect

Next Steps

- **Receive input & hone recommendations as needed**
- **Present revised recommendations to Council on June 5**
- **Obtain direction to move forward with Prop 218 Process**
 - Send notice of proposed rates to all property owners & customers
 - Hold a Public Hearing at least 45 days after notices are mailed
 - Rate subject to “majority protest”; City cannot take action if written protests are received for more than 50% of parcels
- **Hold Public Hearing & consider adoption of proposed water & wastewater rates on August 7, 2023**
- **If adopted, new rates would become effective starting September 1, 2023 and on July 1 of subsequent years**



Questions & Discussion

