



# City of Petaluma



## Water & Sewer Rate Study

May 15, 2023



**BARTLE WELLS ASSOCIATES**  
INDEPENDENT PUBLIC FINANCE ADVISORS



# 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**

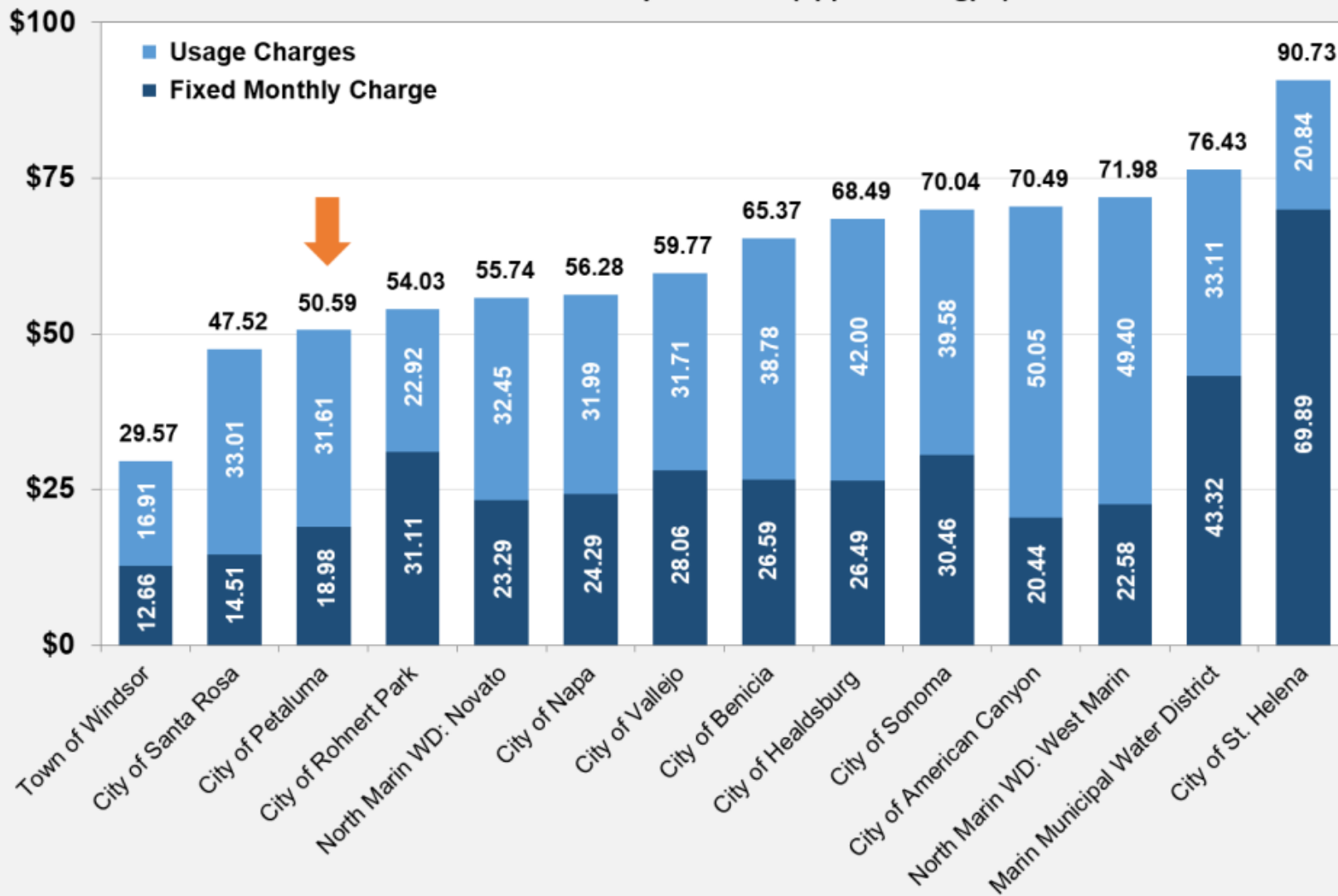


# Water & Sewer Rates

- **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

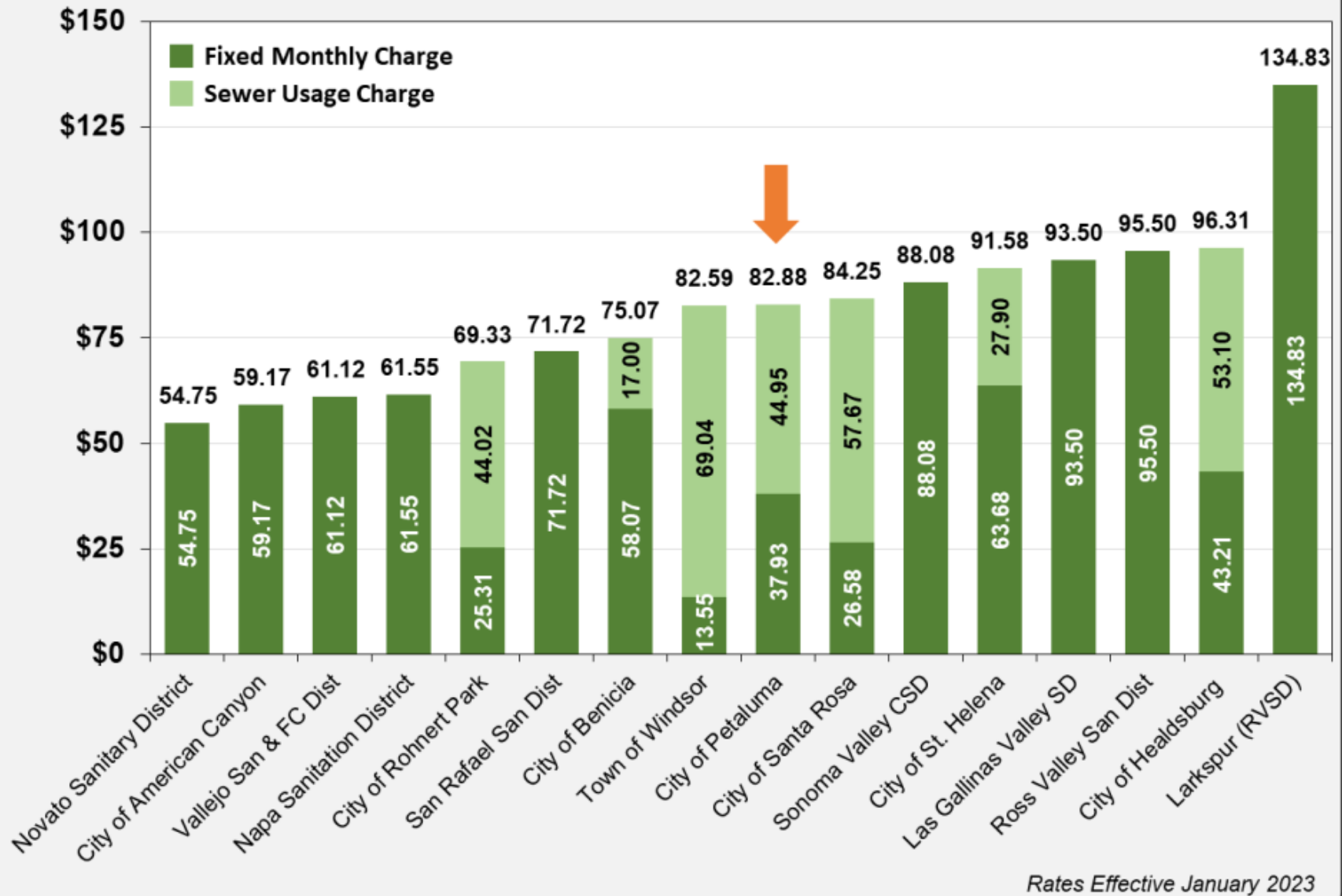
Based on 7 hcf monthly water use (approx. 172 gpd)



Rates Effective January 2023

# Single Family Residential Monthly Sewer Rate Survey

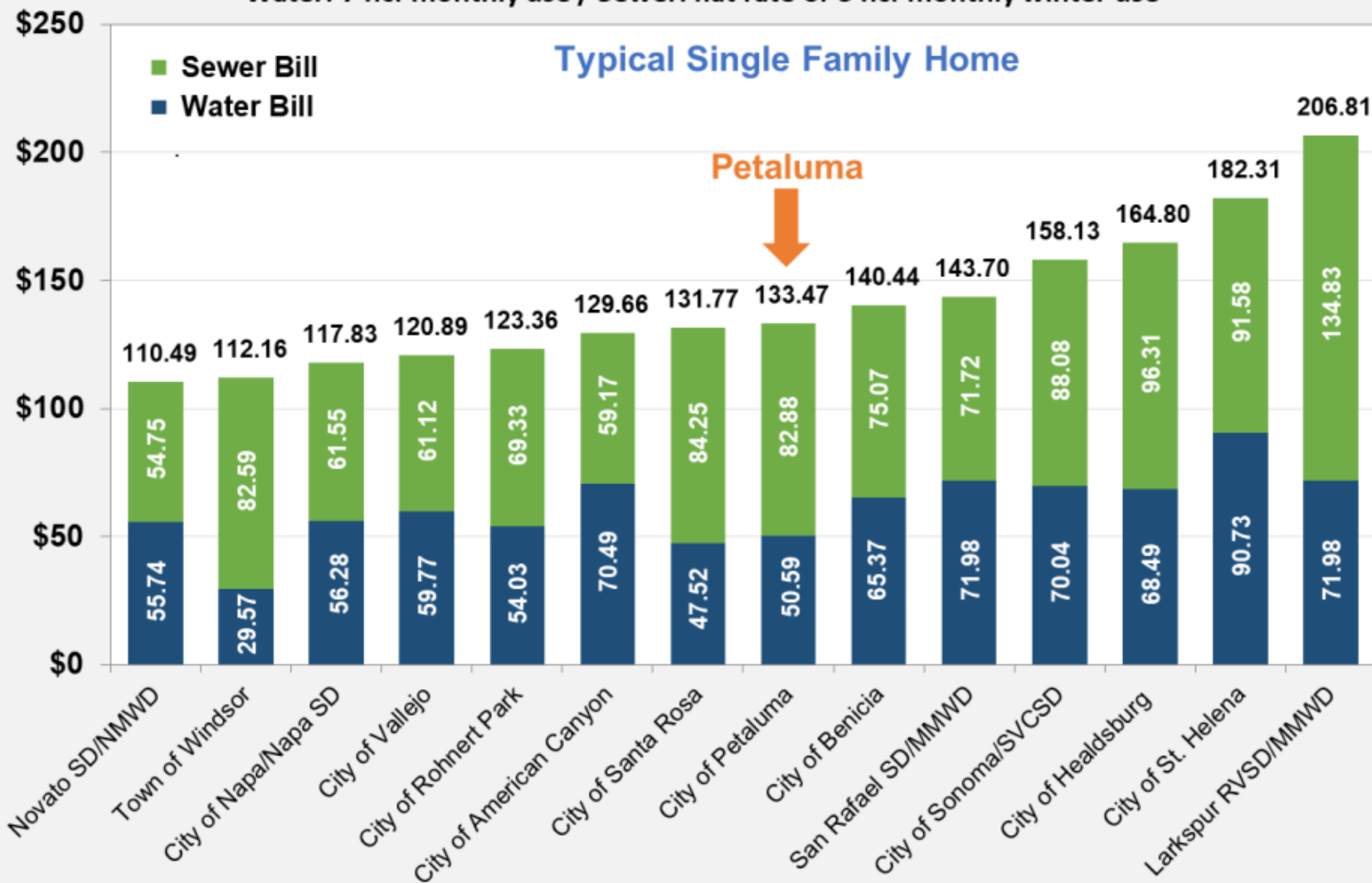
Based on flat rate or 5 hcf of monthly winter water use



Rates Effective January 2023

# Single Family Residential Monthly Water & Wastewater Rate Survey

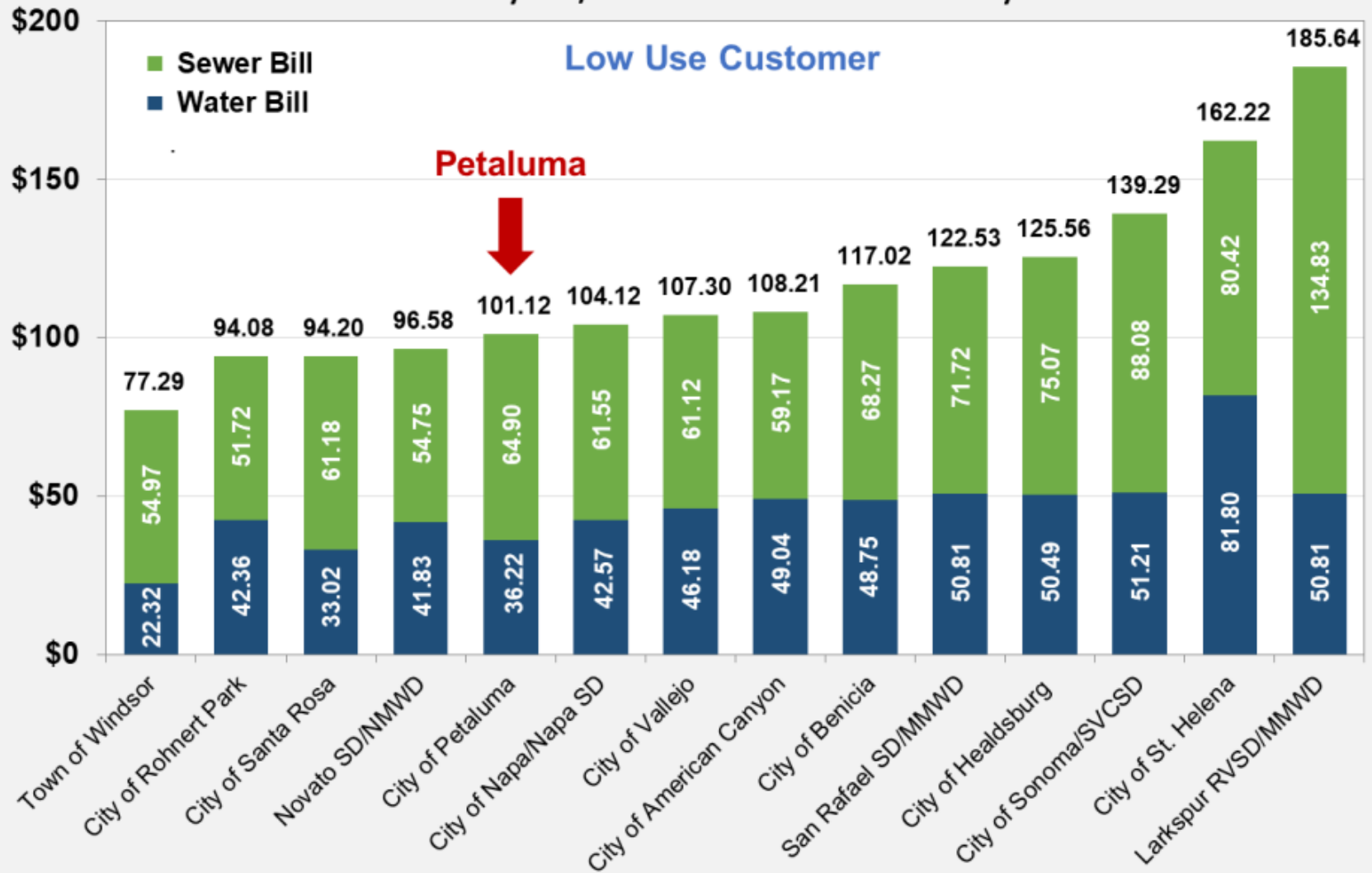
Water: 7 hcf monthly use / Sewer: flat rate or 5 hcf monthly winter use



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 the maximum 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

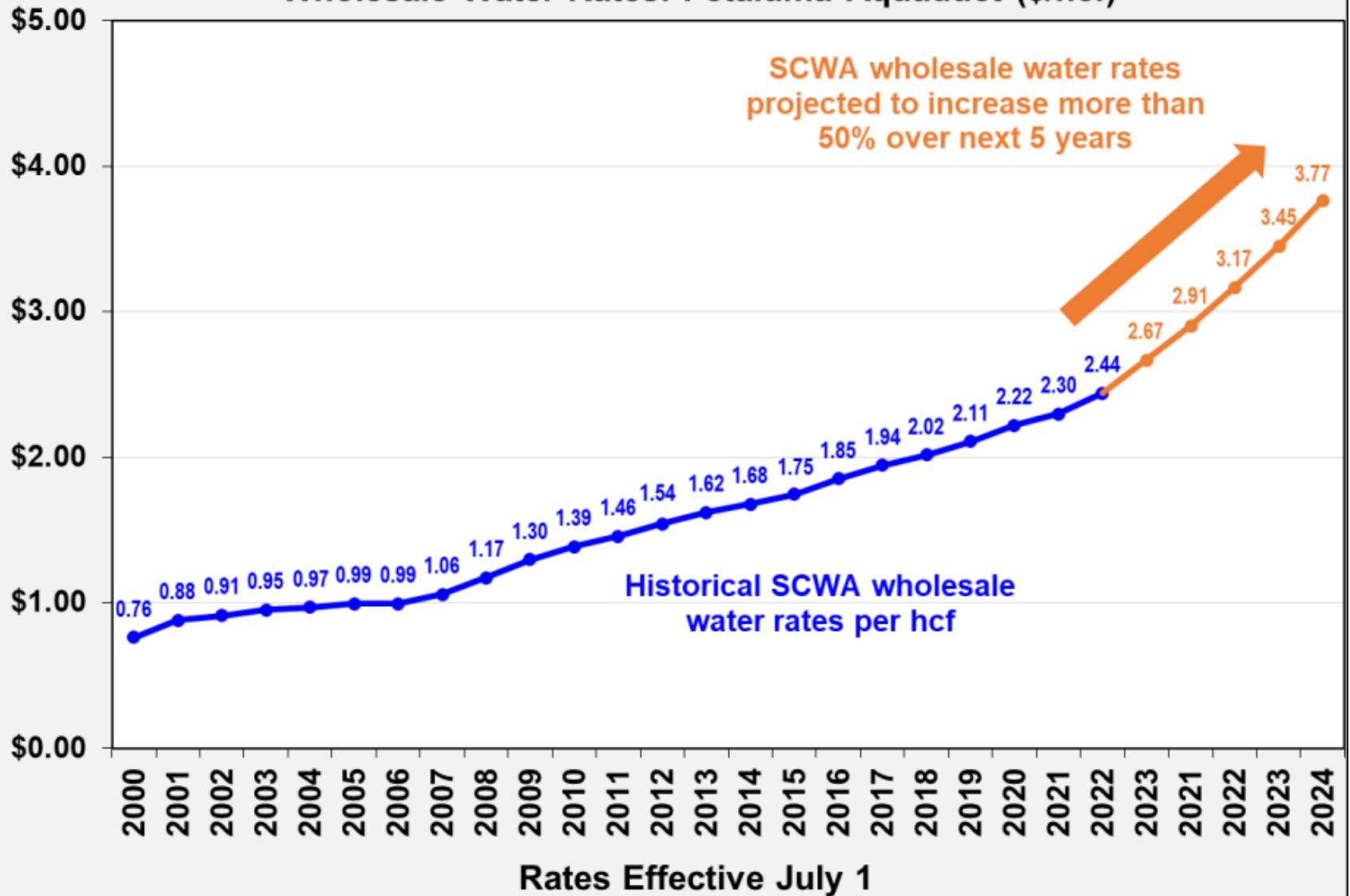
## ■ Keep Up with Cost Inflation

- 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.						
Residential						
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
All Other Customers						
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.						
Single Family Residential						
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

Note: Rates shown are subject to additional annual pass-through rate adjustments for inflation and wholesale water increases starting July 1, 2024.



# 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.

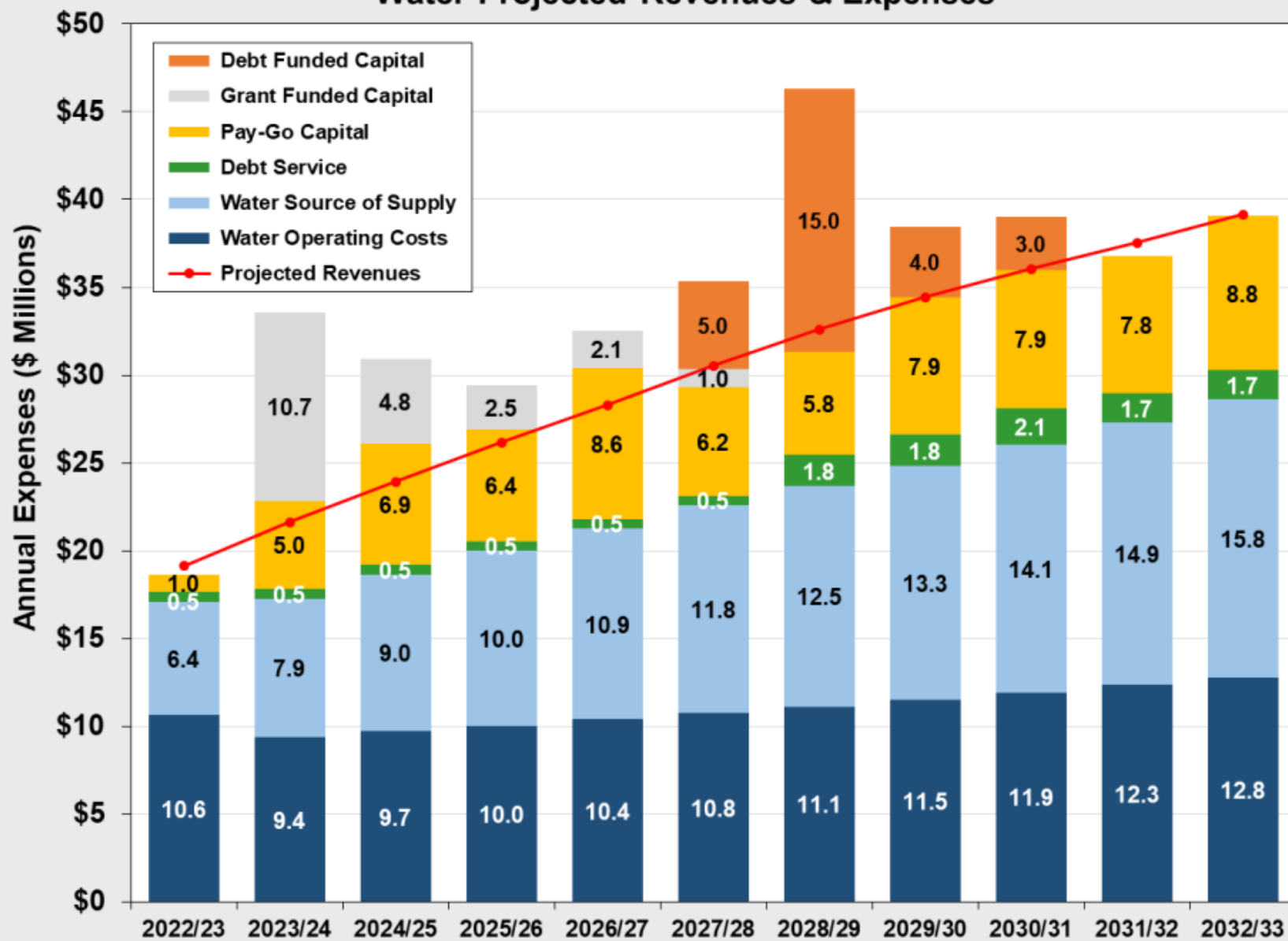
- Projected rate increases shown; actual future increases may vary
- City maintains the flexibility to implement rates lower than authorized

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



Proposed Wastewater Rates						
Current Wastewater Rates	Proposed Rates Effective on or After					
	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027	
<b>FIXED MONTHLY CHARGES</b>						
<i>Fixed monthly charges billed per residential dwelling unit or based on non-residential meter size.</i>						
<b>RESIDENTIAL</b>						
<i>Fixed monthly charge per dwelling unit</i>						
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
<b>NON-RESIDENTIAL</b>						
<i>Fixed monthly charge based on meter size</i>						
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
<b>WASTEWATER COMMODITY CHARGES</b>						
<i>Volumetric charges billed per hundred cubic feet (hcf) of estimated sewer discharge.</i>						
<b>RESIDENTIAL</b>						
<i>Based on a) average of two lowest of four low use months of metered winter water use or b) actual water use</i>						
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
<b>COMMERCIAL</b>						
<i>Billed based on metered water use</i>						
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
<b>METERED INDUSTRIAL</b>						
<i>Based on metered use &amp; estimated wastewater loadings</i>						
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



# 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

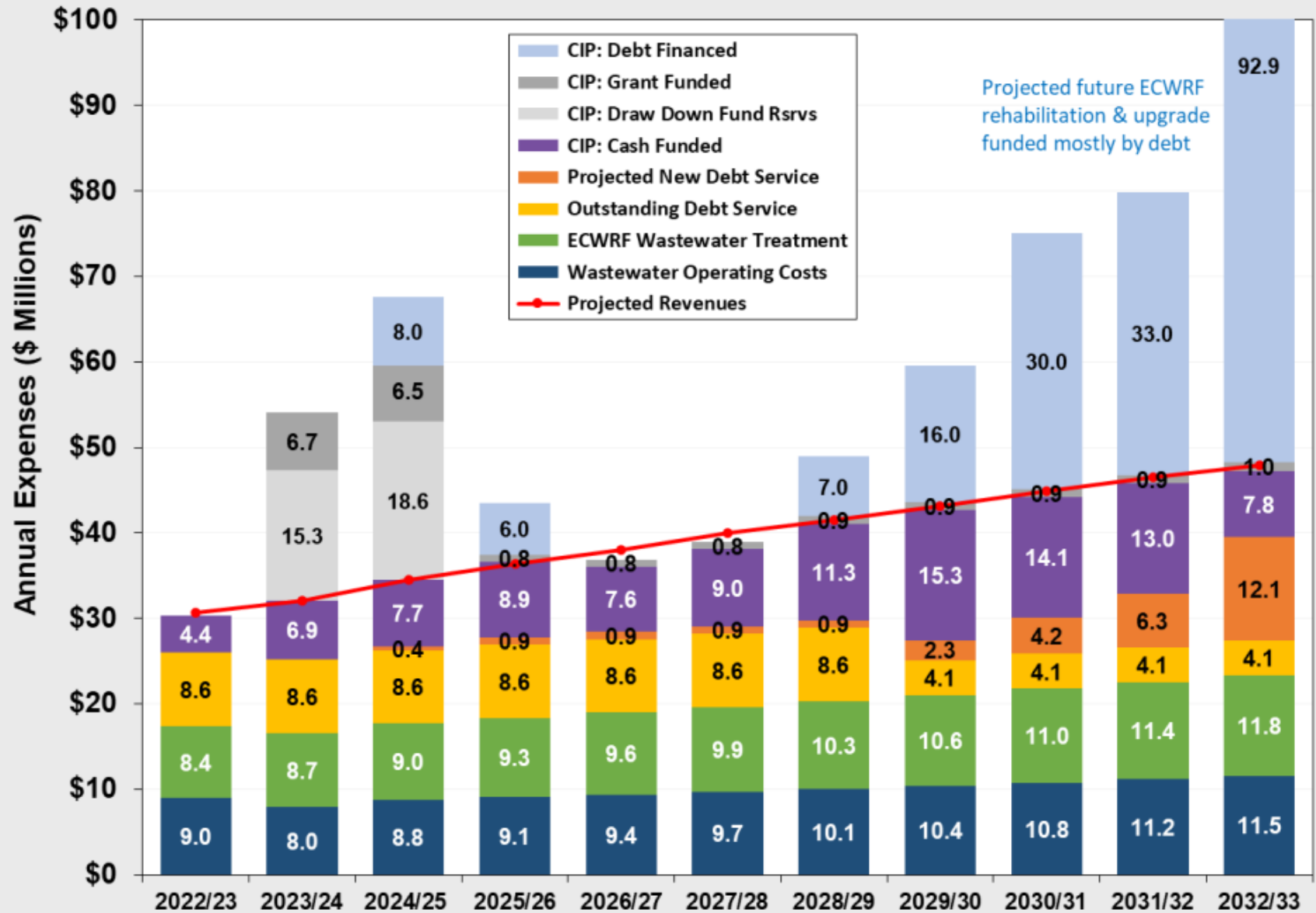
## Projected Monthly Wastewater Bills for a Single Family Home

	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
<b>Low Use</b>							
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
<b>Typical Use</b>							
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
<b>Mod-High Use</b>							
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 Contingency Plan

## Rate Adjustments

- 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 Contingency Plan 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 Shortages

	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](https://csd.ca.gov/lihwap)
- Info also on City's website at [cityofpetaluma.org/billing-water-sewer](https://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 Contingency Plan 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 this evening**
- **Present revised recommendations & draft report 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

