



Water & Wastewater Utility Rate Study

Summary of Findings & Recommendations



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

City of Petaluma

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Utility Rates & Finances

The City of Petaluma provides water and wastewater service to over 20,300 residential, commercial, institutional, and industrial accounts in and adjacent to the City. The City's water and wastewater utilities are accounted for as self-supporting enterprise funds. Revenues are derived primarily from water and wastewater service charges and must be adequate to fund the City's operating and capital programs.

The City last conducted a water and wastewater rate study in 2017 leading to adoption of five years of rate increases. The recommended rates included some rate structure modifications designed to realign rates with the cost of providing service. To help provide rate relief during Covid, the City temporarily deferred water rate increases in 2020 and wastewater rate increases in 2020 and 2021. Current water rates have been effective since August 1, 2021; wastewater rates have been effective since March 1, 2022.

The City has historically provided strong financial stewardship via adoption of gradual annual water and wastewater rate increases most years over the past 20 years. These increases have helped keep rates aligned with the cost of providing service and put the water and wastewater enterprises on a stronger financial footing.

Based on a regional survey of utility bills for a typical single family home, Petaluma's water bills are in the lower-middle range while wastewater bills are in the middle range. Together the City's combined water and wastewater bills for a typical home are in the middle range while bills for customers with lower levels of use are in the lower-middle range compared to other regional agencies. The City bills customers for water and wastewater service via combined monthly utility bill.

Water & Wastewater Systems

The City owns and operates a water system consisting of 5 pressure zones, 11 storage tanks/reservoirs, 9 pump stations, and over 270 miles of water distribution pipelines. Almost all of the City's water supply is purchased on a wholesale basis from the Sonoma County Water Agency (SCWA), with a small amount supplied by groundwater production from wells which the City anticipates operating mainly during droughts.

The City also owns and operates a wastewater system that includes over 190 miles of sewer pipelines, 9 sewer pump stations, and the Ellis Creek Water Recycling Facility, a wastewater treatment plant with 6.7 million gallons per day of dry weather flow capacity. Wastewater effluent is treated to stringent

regulatory standards and disposed to the Petaluma River during the winter, or subjected to additional high-level treatment and distributed through the City's recycled water system for agricultural or landscape irrigation uses. The City anticipates expanding its recycled water distribution system in future years with a long-term goal of recycling 100% of wastewater effluent with zero discharge to the Petaluma River.

Financial Challenges

The City's water and wastewater utilities are facing financial challenges that will require the City to continue its historical practice of implementing gradual annual rate increases in future years. Key financial challenges include:

- **Capital Improvement Needs of Aging Infrastructure** – The City has been working with an independent engineering consulting firm to develop updated Water and Wastewater Master Plans to evaluate and prioritize capital improvement needs. The City's water and wastewater systems both include a lot of aging infrastructure and are need of substantial capital improvements to address current deficiencies and rehabilitate, upgrade and/or replace aging infrastructure to support safe and reliable service. Updated capital improvement programs identify over \$150 million of utility infrastructure funding needs over the next five fiscal years. The City has been successful in obtaining grant funding to help fund some projects and is in process of seeking additional grant funding. However, the City anticipates needing to fund over \$120 million of water, recycled water, and wastewater capital projects over approximately the next five years.
- **Wholesale Water Rate Increases** – The City purchases almost all of its water supply from Sonoma County Water Agency (SCWA). SCWA has gradually increased wholesale water rates in 19 of the past 20 years. Wholesale rates are scheduled to increase 9.4% effective July 1, 2023 and are projected to continue increasing at similar rates in subsequent years.
- **Keep Up with Cost Inflation** – The City's utility enterprises are facing rising costs for operations, maintenance, and capital improvements due to inflation. Small annual rate adjustments are needed to keep up with cost inflation.

Rate Study Overview

In fiscal year 2022/23, Petaluma retained Bartle Wells Associates (BWA) to develop an updated water and wastewater rate study with the goal of developing rate recommendations for the next five years. Key objectives include:

- Recommend water and wastewater rates designed to recover each utility's cost of providing service including operating and maintenance expenses, debt service funding requirements, and adequate funding for capital improvement needs of the City's aging water and wastewater system infrastructure.
- Aim for steady, gradual annual rate increases to help minimize the annual impact on customers and mitigate the potential for larger, periodic rate spikes.

- Support the long-term financial stability of the water and wastewater utilities and maintain prudent level of fund reserves.
- Develop new Water Shortage Emergency Rate Adjustments for both water and wastewater rates designed to support the financial stability of the City's water and wastewater enterprises during periods of drought and water shortage emergencies.

As part of the study, BWA developed updated financial projections to identify future funding needs and evaluate rate increases needed to support water and wastewater utility operating and capital funding needs. Final recommendations were developed with substantial input from City staff.

Rate Recommendations

Based on the updated financial projections, BWA recommends the City continue its historical practice of implementing small annual rate increases to gradually increase funding for operating and capital needs while also passing through annual adjustments for wholesale water rate increases and inflation. Proposed rate increases will consist of two components:

A) Base City Rate Increases

These rate increases are needed to gradually increase funding for the City's operating and capital programs including upgrades and replacement of aging infrastructure. Proposed base City rate increases are shown below:

Projected Base City Water & Wastewater Rate Increases					
	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
WATER					
Base Rate Increases	2.5%	2.5%	2.5%	2.5%	2.5%
<i>Plus pass-through adjustments for a) SCWA wholesale water rates & b) CPI inflation</i>					
WASTEWATER					
Base Rate Increases	2.0%	2.0%	2.0%	2.0%	2.0%
<i>Plus pass-through adjustments for CPI inflation</i>					

As proposed, the percentage rate increases would apply on an across-the-board basis to all components of the City's utility rates. The prior 2017 rate study included some rate structure modifications designed to realign rates with the cost of providing service. No additional modifications to the City's water and wastewater rate structures are proposed at this time.

B) Annual Pass-Through Rate Adjustments

In addition, each year the City would pass through rate adjustments to account for SCWA wholesale water rate increases and inflation (not to exceed CPI). The annual inflation pass-through rate adjustment would

not exceed the change in the Consumer Price Index (CPI) from the index for December 2022 to the index for December immediately preceding an upcoming fiscal year. As such the CPI inflation adjustment would account for the change in CPI since the base year. In addition, the City's Water Consumption Charges would be adjusted each year to account for any increases in SCWA wholesale water rates for the Petaluma Aqueduct rounded to the nearest one cent per hcf. The pass-through adjustments would be in addition to the base City rate increases shown above.

Rate Impacts

The following table shows projected bills for single family homes with low use, typical use, and moderately high use. With the proposed rate increases and annual pass-throughs, the combined water and wastewater bills for a typical single family home are projected to increase by an average of roughly 6% per year over the next 5 years. Compared to other regional agencies, Petaluma's combined water and wastewater bills for a typical single family home are projected to remain in the middle range with implementation of the proposed rate increases.

Projected Monthly Water & Wastewater Bills							
	Use (hcf)	Current Year	July 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

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

Proposed Rates

The tables on the following pages show schedules of proposed water and wastewater rates a) with the base City rate increases only and also b) with base increases plus projected pass-through rate adjustments for inflation and SCWA wholesale water rate increases. Again, actual rates in future years would depend on the amount of pass-through rate adjustments implemented each year.

PROPOSED BASE WATER RATES						
	Current Water Rates	Proposed Base Rates Effective on or After				
		Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
CITY WATER RATE INCREASES		2.5%	2.5%	2.5%	2.5%	2.5%
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	\$19.45	\$19.94	\$20.44	\$20.95	\$21.47
Multi-Family: Per Dwelling Unit	11.39	11.67	11.96	12.26	12.57	12.88
<u>All Other Customers</u>						
5/8 & 3/4-inch meter	\$18.98	\$19.45	\$19.94	\$20.44	\$20.95	\$21.47
1-inch meter	30.13	30.88	31.65	32.44	33.25	34.08
1-1/2-inch meter	58.02	59.47	60.96	62.48	64.04	65.64
2-inch meter	91.47	93.76	96.10	98.50	100.96	103.48
3-inch meter	169.56	173.80	178.15	182.60	187.17	191.85
4-inch meter	281.10	288.13	295.33	302.71	310.28	318.04
6-inch meter	559.96	573.96	588.31	603.02	618.10	633.55
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	\$4.42	\$4.53	\$4.64	\$4.76	\$4.88
Tier 2 4.01 - 8 hcf	4.79	4.91	5.03	5.16	5.29	5.42
Tier 3 8.01 - 16 hcf	5.48	5.62	5.76	5.90	6.05	6.20
Tier 4 >16 hcf	6.42	6.58	6.74	6.91	7.08	7.26
All Other Water Use	4.79	4.91	5.03	5.16	5.29	5.42
Temporary Service & Water Haulers	7.18	7.36	7.54	7.73	7.92	8.12

Note: Proposed Base Rates will be adjusted each year to account for annual pass-throughs for CPI inflation and SCWA wholesale water rate increases.

Annual CPI inflation pass-throughs will be based on the percentage change in the Consumer Price Index from the index for December 2022 to the index for December immediately preceding the upcoming fiscal year.

Annual pass-throughs for wholesale water rate increases will be based on SCWA water rate increases for the Petaluma Aqueduct rounded to the nearest one cent per hcf.

PROJECTED WATER RATES WITH ANNUAL PASS-THROUGHS							
		Current Water Rates	Projected Rates Effective				
			Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
CITY WATER RATE INCREASES			2.5%	2.5%	2.5%	2.5%	2.5%
ESTIMATED CPI PASSTHROUGH ADJUSTMENTS			3.0%	2.5%	2.5%	2.5%	2.5%
Compounded CPI Adjustments			3.00%	5.58%	8.21%	10.92%	13.69%
PROJECTED SCWA WHOLESALE RATE INCREASES							
SCWA Wholesale Rate Projection \$2.44			\$2.67	\$2.91	\$3.17	\$3.45	\$3.77
Annual Increase			<u>0.23</u>	<u>0.24</u>	<u>0.26</u>	<u>0.29</u>	<u>0.31</u>
Wholesale Rate Increase from Base Year Rates			0.23	0.47	0.73	1.02	1.33
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	\$21.05	\$22.12	\$23.24	\$24.41
Multi-Family: Per Dwelling Unit 11.39			12.02	12.63	13.27	13.94	14.64
All Other Customers							
5/8 & 3/4-inch meter \$18.98			\$20.03	\$21.05	\$22.12	\$23.24	\$24.41
1-inch meter 30.13			31.81	33.41	35.10	36.88	38.75
1-1/2-inch meter 58.02			61.25	64.36	67.61	71.03	74.63
2-inch meter 91.47			96.57	101.46	106.59	111.98	117.65
3-inch meter 169.56			179.01	188.08	197.60	207.61	218.12
4-inch meter 281.10			296.77	311.79	327.58	344.16	361.59
6-inch meter 559.96			591.18	621.11	652.55	685.59	720.30
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	\$5.25	\$5.75	\$6.30	\$6.88
Tier 2 4.01 - 8 hcf 4.79			5.29	5.78	6.32	6.88	7.49
Tier 3 8.01 - 16 hcf 5.48			6.02	6.55	7.12	7.73	8.38
Tier 4 >16 hcf 6.42			7.01	7.59	8.21	8.87	9.58
All Other Customers 4.79			5.29	5.78	6.32	6.88	7.49
Temporary Service & Water Haulers 7.18			7.81	8.43	9.10	9.80	10.56

PROPOSED BASE WASTEWATER RATES						
Current Wastewater Rates	Proposed Base Rates Effective on or After					
	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027	
CITY SEWER RATE INCREASES	2.0%	2.0%	2.0%	2.0%	2.0%	
FIXED MONTHLY CHARGES						
<i>Fixed monthly charges billed per residential dwelling unit or based on non-residential meter size.</i>						
RESIDENTIAL						
<i>Fixed monthly charge per dwelling unit</i>						
Single Family Residential	\$37.93	\$38.69	\$39.46	\$40.25	\$41.06	\$41.88
Multi-Unit Residential	32.24	32.89	33.54	34.21	34.90	35.60
Unmetered Residential	100.88	102.90	104.96	107.06	109.20	111.38
NON-RESIDENTIAL						
<i>Fixed monthly charge based on meter size</i>						
Up to 3/4-inch meter	\$37.93	\$38.69	\$39.46	\$40.25	\$41.06	\$41.88
1-inch meter	62.43	63.68	64.95	66.25	67.58	68.93
1-1/2 inch meter	123.66	126.13	128.65	131.22	133.84	136.52
2-inch meter	197.15	201.09	205.11	209.21	213.39	217.66
3-inch meter	368.63	376.00	383.52	391.19	399.01	406.99
4-inch meter	613.30	625.57	638.08	650.84	663.86	677.14
6-inch meter	1,226.00	1,250.52	1,275.53	1,301.04	1,327.06	1,353.60
METERED INDUSTRIAL						
<i>Fixed monthly charge based on meter size</i>						
2-inch ultrasonic meter	\$552.36	\$563.41	\$574.68	\$586.17	\$597.89	\$609.85
10-inch ultrasonic meter	1,226.00	1,250.52	1,275.53	1,301.04	1,327.06	1,353.60
2-inch magnetic meter	368.63	376.00	383.52	391.19	399.01	406.99
3-inch magnetic meter	809.57	825.76	842.28	859.13	876.31	893.84
4-inch magnetic meter	1,287.24	1,312.98	1,339.24	1,366.02	1,393.34	1,421.21
6-inch magnetic meter	2,573.31	2,624.78	2,677.28	2,730.83	2,785.45	2,841.16
WASTEWATER COMMODITY CHARGES						
<i>Volumetric charges billed per hundred cubic feet (hcf) of estimated sewer discharge.</i>						
RESIDENTIAL						
<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	\$9.17	\$9.35	\$9.54	\$9.73	\$9.92
Multi-Unit Residential	8.99	9.17	9.35	9.54	9.73	9.92
COMMERCIAL						
<i>Billed based on metered water use</i>						
Low Strength	8.66	8.83	9.01	9.19	9.37	9.56
Medium Strength	11.78	12.02	12.26	12.51	12.76	13.02
High Strength	16.01	16.33	16.66	16.99	17.33	17.68
METERED INDUSTRIAL						
<i>Based on metered use & estimated wastewater loadings</i>						
Flow (\$/hcf)	7.44	7.59	7.74	7.89	8.05	8.21
BOD (\$/lb)	1.26	1.29	1.32	1.35	1.38	1.41
SS (\$/lb)	1.43	1.46	1.49	1.52	1.55	1.58

* The Proposed Base Rates will be adjusted each year to account for an annual pass-throughs for cost inflation. Each year, the Proposed Base Rates effective July 1 will be adjusted by the percentage change in the Consumer Price Index from the December 2022 index to the index for December immediately preceding the upcoming fiscal year.

PROJECTED WASTEWATER RATES WITH CPI INFLATION PASS-THROUGH						
Current Wastewater Rates	Proposed Base Rates Effective on or After					
	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027	
CITY SEWER RATE INCREASES	2.0%	2.0%	2.0%	2.0%	2.0%	
ESTIMATED CPI PASSTHROUGH ADJUSTMENTS						
Estimated Annual CPI Passthrough Adjustments	3.0%	2.5%	2.5%	2.5%	2.5%	
Compounded CPI Adjustments	3.0%	5.6%	8.2%	10.9%	13.7%	
FIXED MONTHLY CHARGES						
<i>Fixed monthly charges billed per residential dwelling unit or based on non-residential meter size.</i>						
RESIDENTIAL						
<i>Fixed monthly charge per dwelling unit</i>						
Single Family Residential \$37.93	\$39.85	\$41.66	\$43.56	\$45.54	\$47.61	
Multi-Unit Residential 32.24	33.88	35.41	37.02	38.71	40.47	
Unmetered Residential 100.88	105.99	110.81	115.85	121.12	126.63	
NON-RESIDENTIAL						
<i>Fixed monthly charge based on meter size</i>						
Up to 3/4-inch meter \$37.93	\$39.85	\$41.66	\$43.56	\$45.54	\$47.61	
1-inch meter 62.43	65.59	68.57	71.69	74.96	78.37	
1-1/2 inch meter 123.66	129.91	135.82	142.00	148.45	155.21	
2-inch meter 197.15	207.12	216.54	226.40	236.69	247.46	
3-inch meter 368.63	387.28	404.90	423.32	442.58	462.72	
4-inch meter 613.30	644.34	673.65	704.30	736.35	769.86	
6-inch meter 1,226.00	1,288.04	1,346.64	1,407.91	1,471.97	1,538.94	
METERED INDUSTRIAL						
<i>Fixed monthly charge based on meter size</i>						
2-inch ultrasonic meter \$552.36	\$580.31	\$606.72	\$634.32	\$663.18	\$693.36	
10-inch ultrasonic meter 1,226.00	1,288.04	1,346.64	1,407.91	1,471.97	1,538.94	
2-inch magnetic meter 368.63	387.28	404.90	423.32	442.58	462.72	
3-inch magnetic meter 809.57	850.53	889.24	929.70	972.00	1,016.23	
4-inch magnetic meter 1,287.24	1,352.37	1,413.90	1,478.23	1,545.49	1,615.81	
6-inch magnetic meter 2,573.31	2,703.52	2,826.54	2,955.15	3,089.61	3,230.19	
WASTEWATER COMMODITY CHARGES						
<i>Volumetric charges billed per hundred cubic feet (hcf) of estimated sewer discharge.</i>						
RESIDENTIAL						
<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	\$9.87	\$10.32	\$10.79	\$11.28	
Multi-Unit Residential 8.99	9.45	9.87	10.32	10.79	11.28	
COMMERCIAL						
<i>Billed based on metered water use</i>						
Low Strength 8.66	9.09	9.51	9.94	10.39	10.87	
Medium Strength 11.78	12.38	12.94	13.54	14.15	14.80	
High Strength 16.01	16.82	17.59	18.39	19.22	20.10	
METERED INDUSTRIAL						
<i>Based on metered use & estimated wastewater loadings</i>						
Flow (\$/hcf) 7.44	7.82	8.17	8.54	8.93	9.33	
BOD (\$/lb) 1.26	1.33	1.39	1.46	1.53	1.60	
SS (\$/lb) 1.43	1.50	1.57	1.64	1.72	1.80	

Water Shortage Emergency Rates

BWA also recommends adoption of new Water Shortage Emergency Rate Adjustments designed to support the financial stability of the City's water and wastewater enterprises during periods of drought and water shortage emergencies. The goal is to enable the City to obtain authorization for the adjustments via the Proposition 218 rate increase process to give the City flexibility to phase in the adjustments as needed (up to the maximum levels adopted) in future years in response to escalating water shortages or droughts. Adjustments are developed to correspond with the Water Shortage Contingency Plan Levels from the City's 2020 Urban Water Management Plan.

Water Shortage Emergency Rate Adjustments are proposed for both water rates and wastewater rates as both enterprises would be financially impacted by a decline in billed usage. The maximum authorized level of the adjustments are shown below and would be adjusted each year to account for future annual pass-through rate adjustments.

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

Note: 1 unit = one hundred cubic feet (hcf), or approximately 748 gallons.

* Each year, the Maximum Water Rate Adjustment will be adjusted on July 1 based on a) the Maximum Rate Adjustment % corresponding each Water Shortage Level multiplied by b) the Water Consumption Charge implemented for All Other Customers resulting in c) a Maximum Water Rate Adjustment per hcf that would be applied to all Water Consumption Charges.

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

Note: 1 unit = one hundred cubic feet (hcf), or approximately 748 gallons.

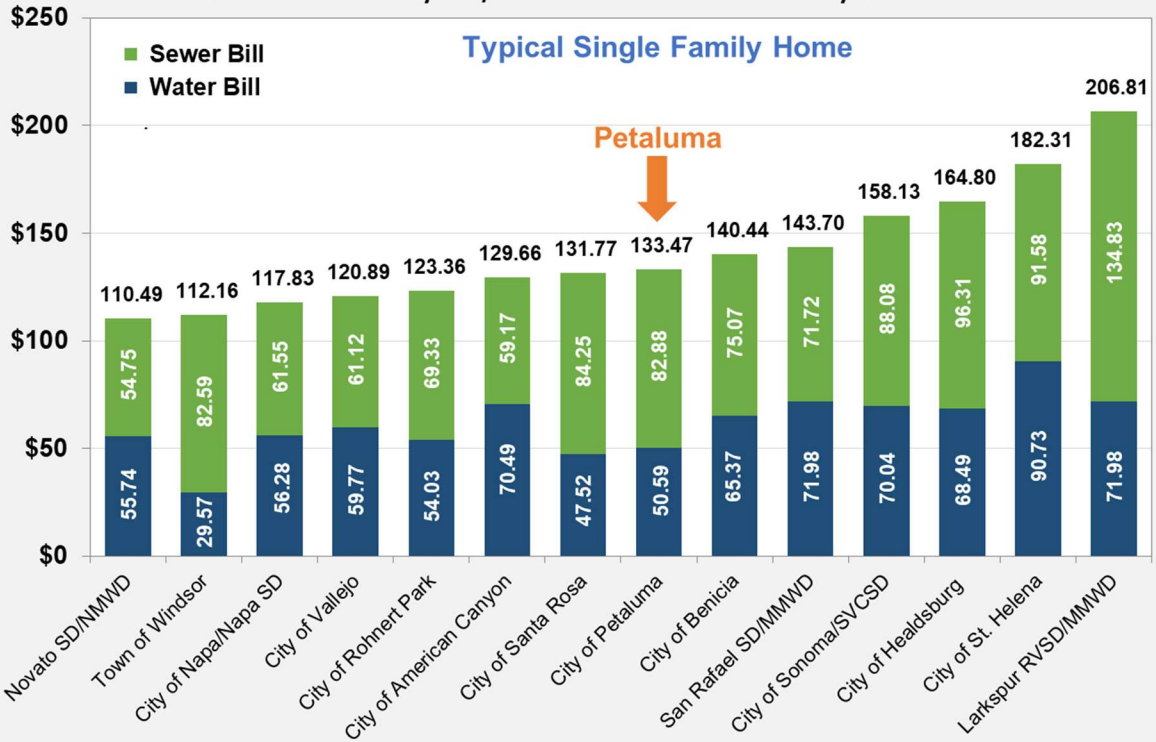
* Each year, the Maximum Wastewater Rate Adjustment will be adjusted on July 1 based on a) the Maximum Rate Adjustment % corresponding each Water Shortage Level multiplied by b) the Residential Wastewater Commodity Charge resulting in c) a Maximum Wastewater Rate Adjustment per hcf that would be applied to all Wastewater Commodity Charges.

Water & Wastewater Rate Surveys

The charts on the following page show surveys of combined water and wastewater bills for a typical single family home and for a low use residential customer.

Single Family Residential Monthly Water & Wastewater Rate Survey

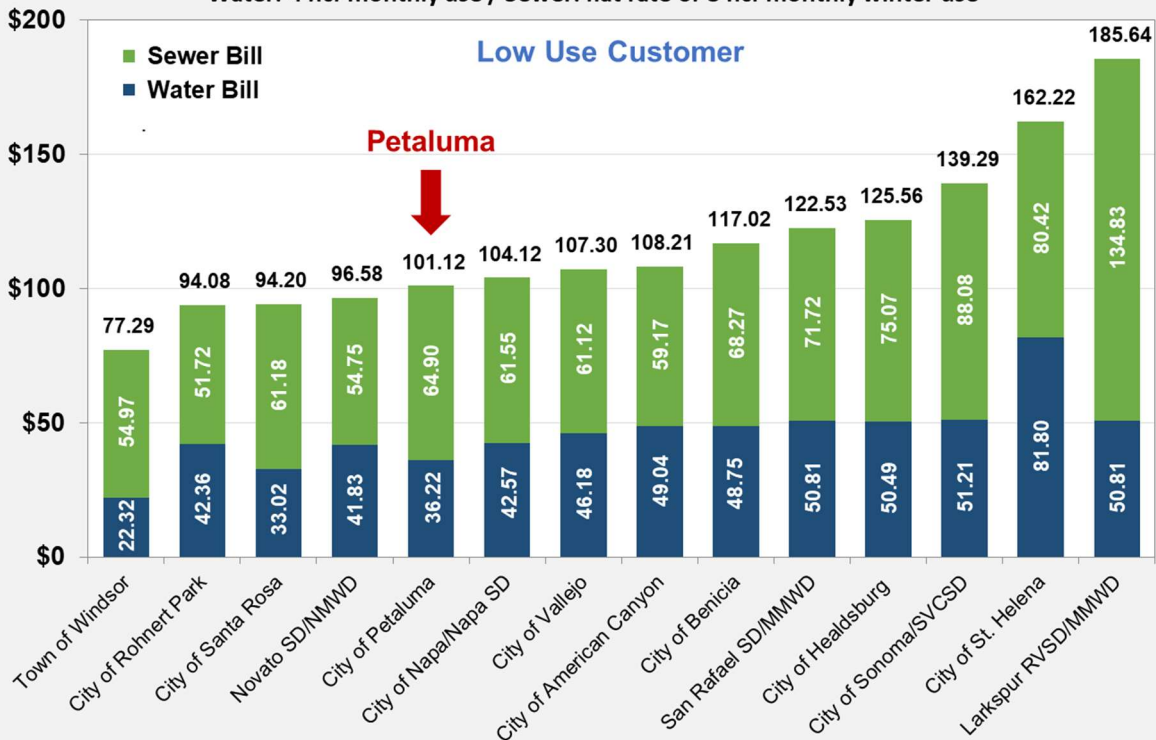
Water: 7 hcf monthly use / Sewer: flat rate or 5 hcf monthly winter use



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

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Water Utility Rate Study

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Wastewater Utility Rate Study

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 - Figure 1 - Wastewater Projected Revenues & Expenses
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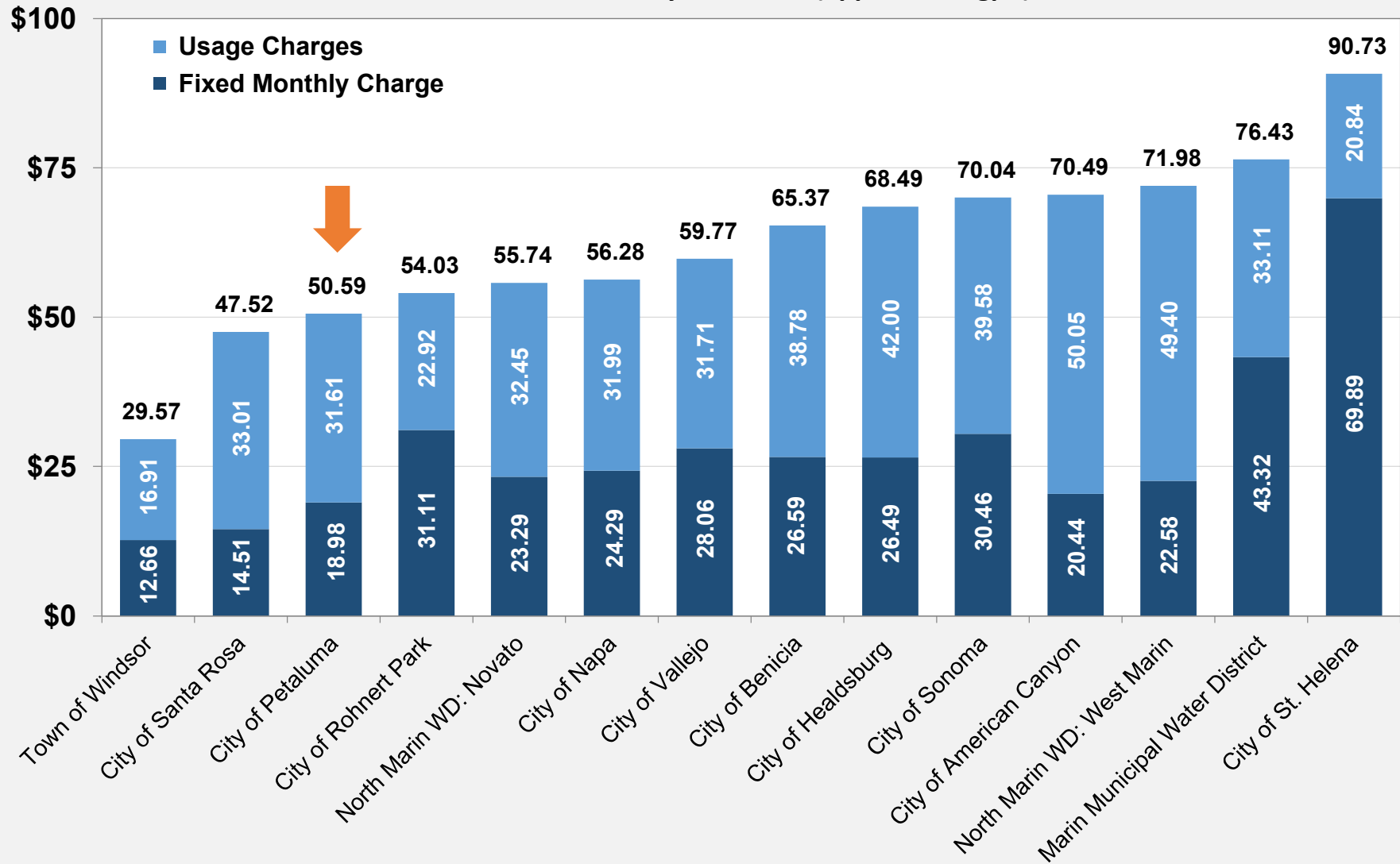
Water Shortage Emergency Rate Adjustments

- Table 1 - Derivation of Water Shortage Emergency Rate Adjustments
 - Table 2 - Water Shortage Emergency Rate Adjustments
 - Table 3 - Derivation of Wastewater Rate Adjustments for Water Shortage Emergencies
 - Table 4 - Wastewater Rate Adjustments for Water Shortage Emergencies
-

RATE SURVEYS

Single Family Residential Monthly Water Rate Survey

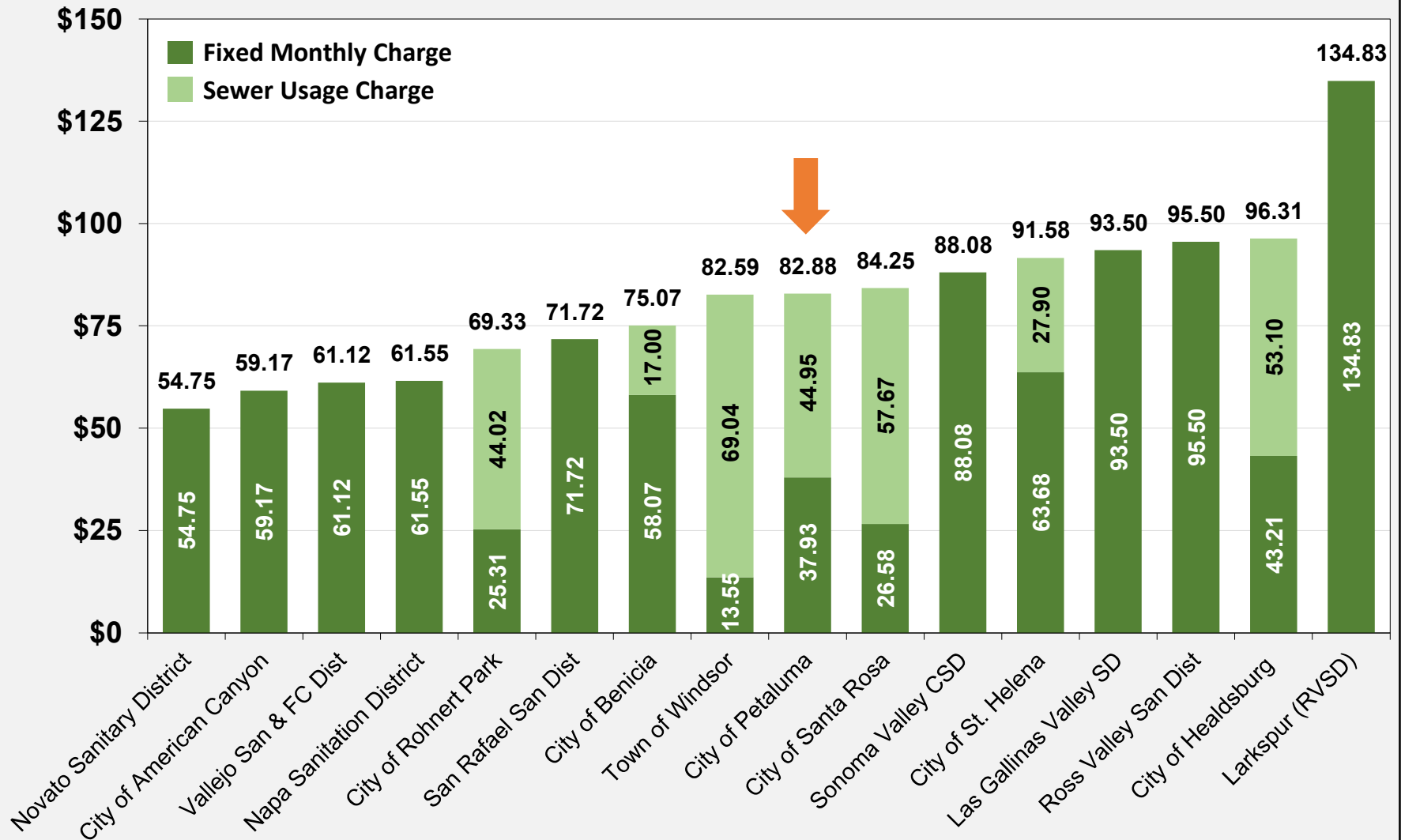
Based on 7 hcf monthly water use (approx. 172 gpd)



Rates Effective January 2023

Single Family Residential Monthly Wastewater Rate Survey

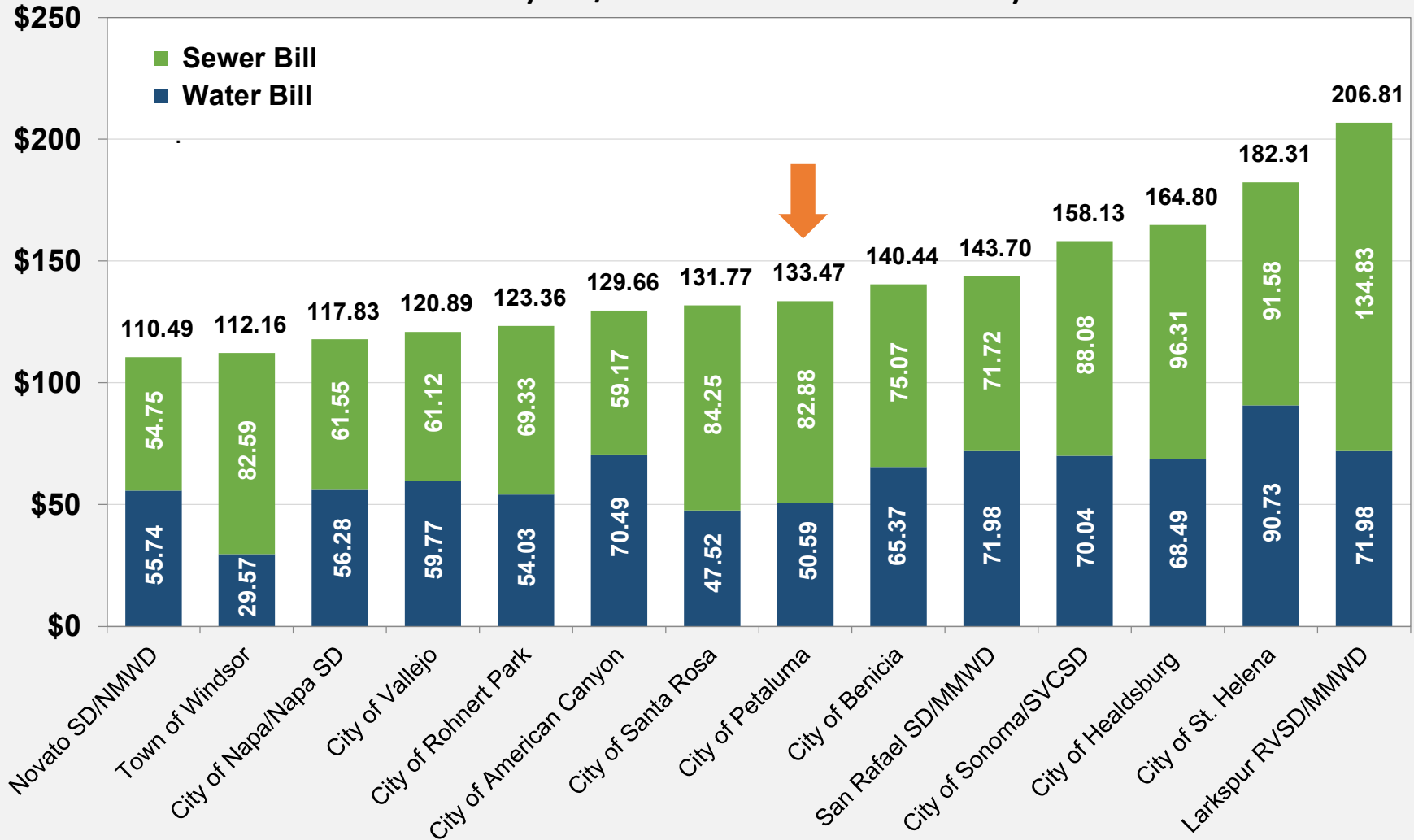
Based on flat rate or 5 hcf of monthly winter water use



Rates Effective January 2023

Single Family Residential Monthly Water & Wastewater Rate Survey

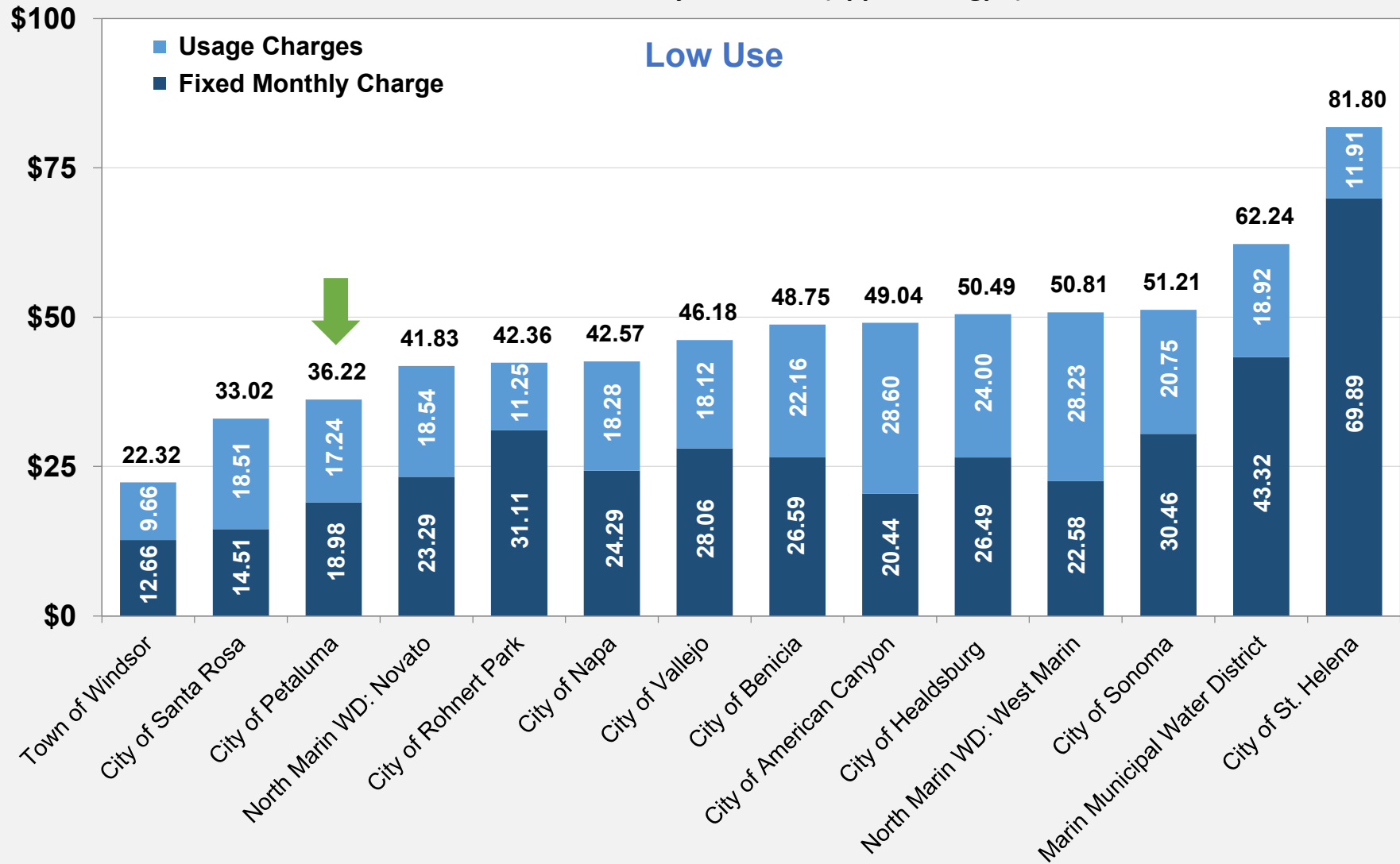
Water: 7 hcf monthly use / Sewer: flat rate or 5 hcf monthly winter use



Rates Effective January 2023

Single Family Residential Monthly Water Rate Survey

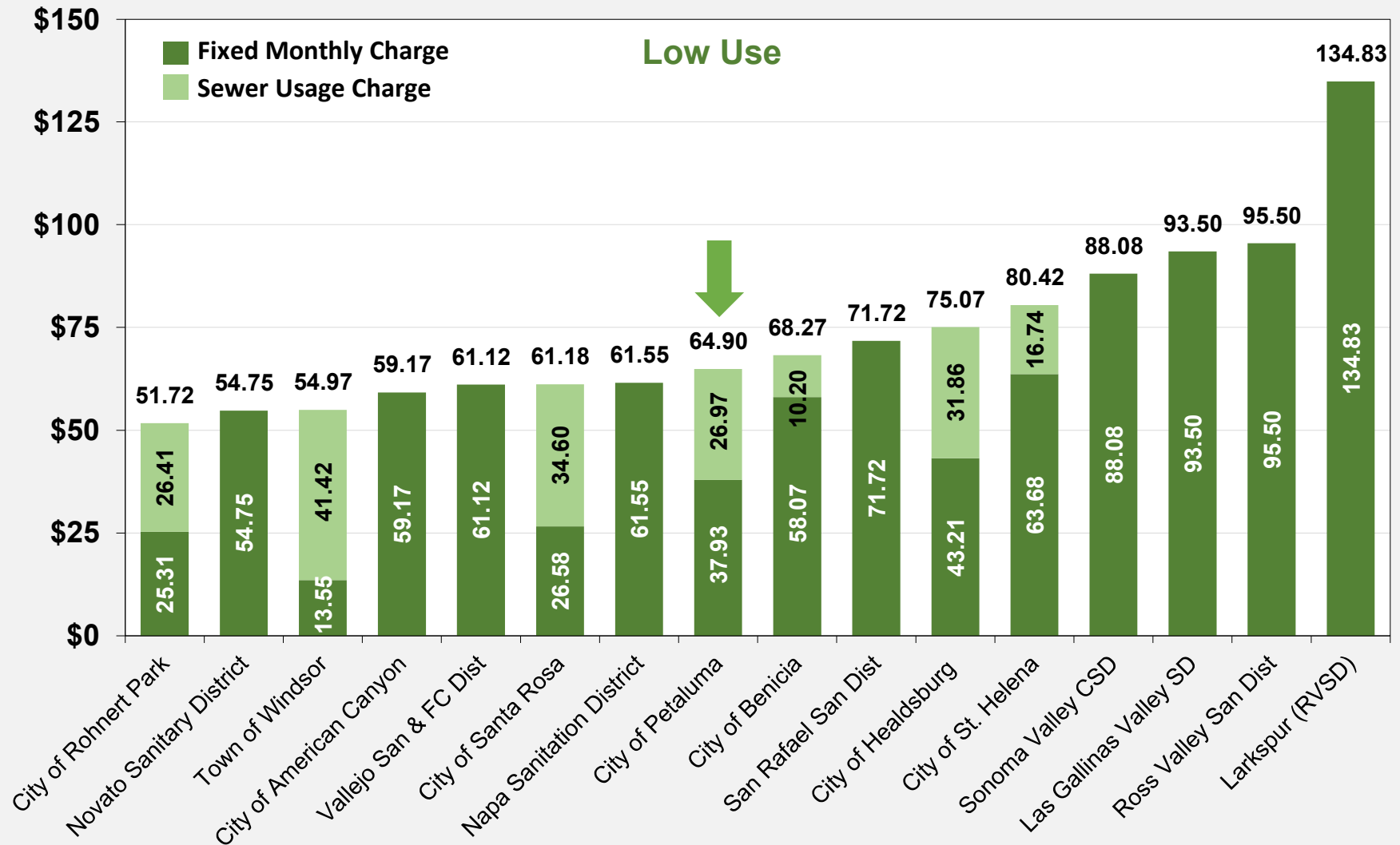
Based on 4 hcf monthly water use (approx. 98 gpd)



Rates Effective January 2023

Single Family Residential Monthly Wastewater Rate Survey

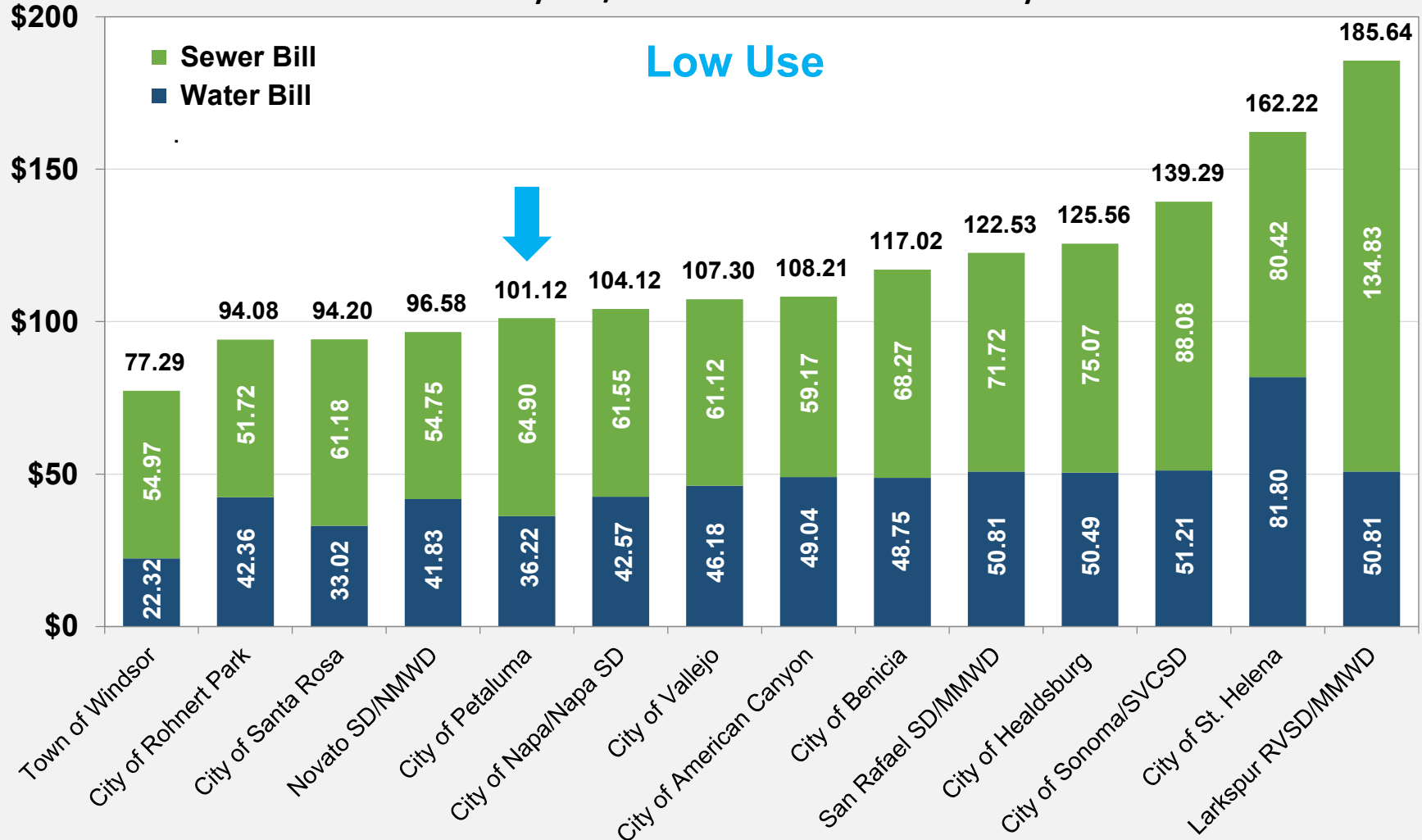
Based on flat rate or 3 hcf of monthly winter water use



Rates Effective January 2023

Single Family Residential Monthly Water & Sewer Rate Survey

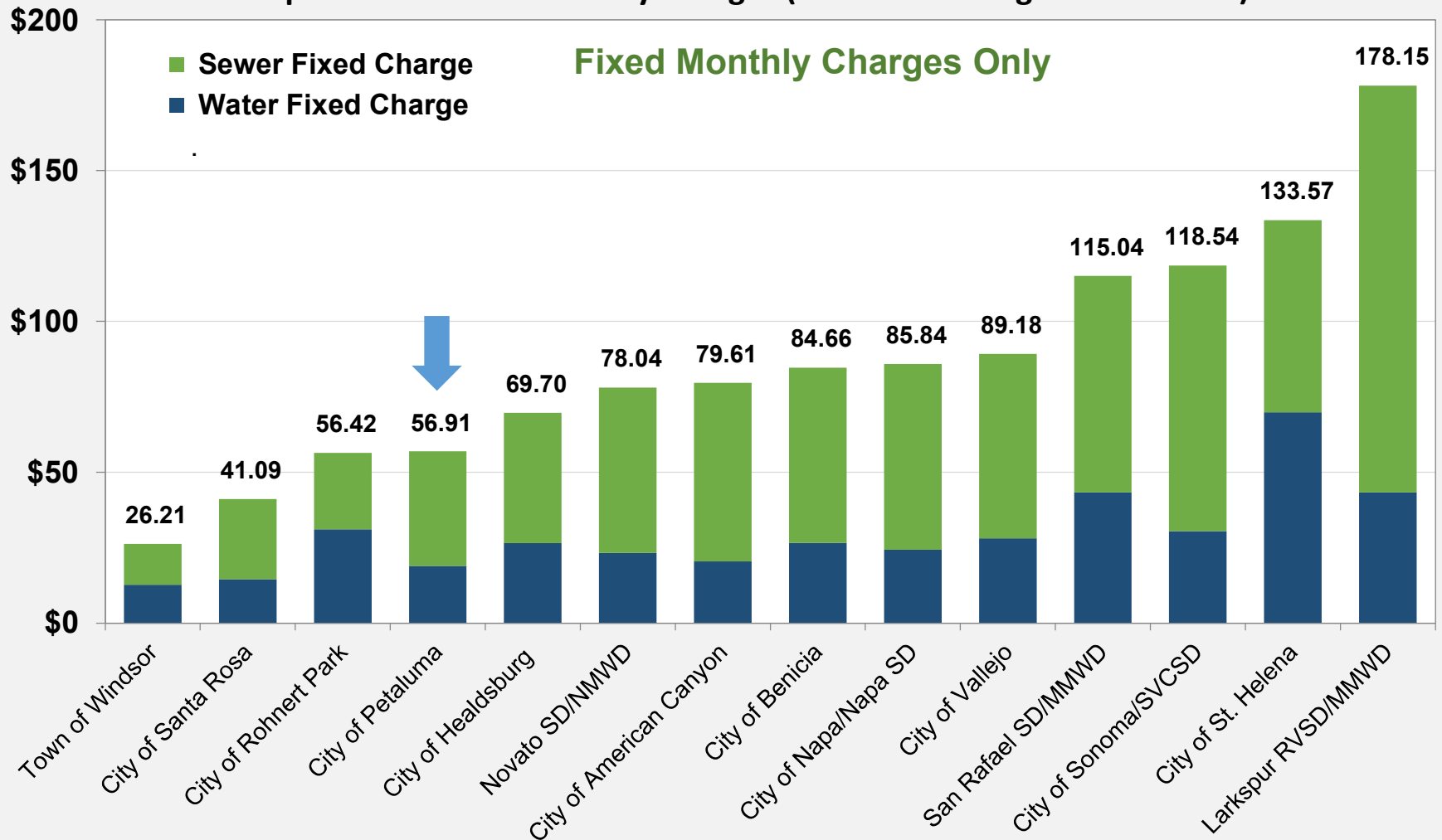
Water: 4 hcf monthly use / Sewer: flat rate or 3 hcf monthly winter use



Rates Effective January 2023

Single Family Residential Monthly Water & Wastewater Rate Survey

Comparison of Fixed Monthly Charges (Minimum Charge with No Use)



Rates Effective January 2023

WATER TABLES

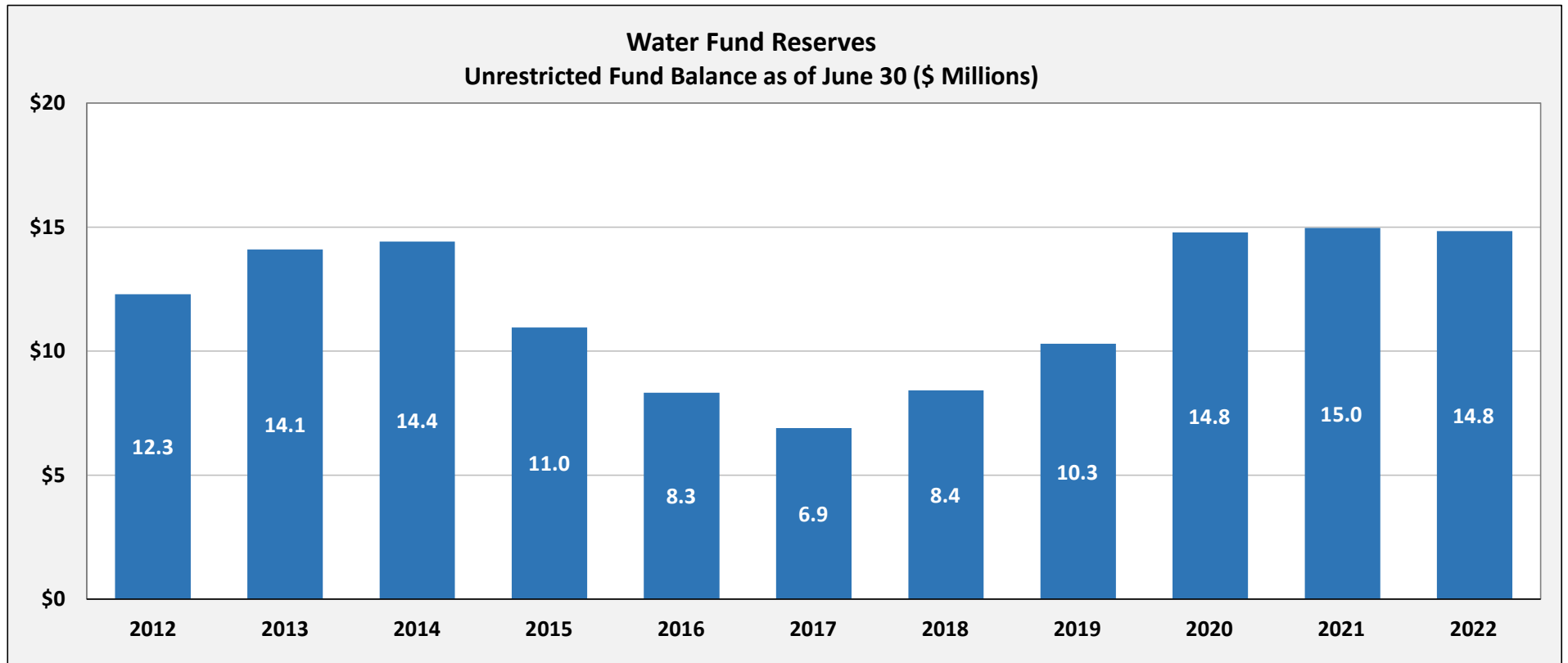
Table 1
City of Petaluma
Historical Water Rates

	2017	2018	2019	2020	2021	
	Jul-1	Jul-1	Jul-1	Jul-1	Aug-1	
FIXED MONTHLY CHARGES						
Fixed monthly charge billed per residential dwelling unit or based on non-residential meter size.						
RESIDENTIAL						
Fixed charge per residential dwelling unit.				no change		
Single Family: Up to 1" Meter	\$9.57	\$11.86	\$14.40	\$14.40	\$18.98	
Multi-Family: Per Dwelling Unit	5.74	7.11	8.64	8.64	11.39	
ALL OTHER CUSTOMERS						
Fixed charge based on water meter size.						
Up to 3/4-inch meter	\$9.57	\$11.86	\$14.40	\$14.40	\$18.98	
1-inch meter	14.40	18.22	22.44	22.44	30.13	
1-1/2 inch meter	26.46	34.13	42.56	42.56	58.02	
2-inch meter	40.98	53.25	66.73	66.73	91.47	
3-inch meter	74.83	97.84	123.10	123.10	169.56	
4-inch meter	123.20	161.55	203.63	203.63	281.10	
6-inch meter	244.06	320.78	404.92	404.92	559.96	
WATER CONSUMPTION CHARGES						
Volumetric charge billed per hundred cubic feet (hcf) of metered water use.						
SINGLE FAMILY RESIDENTIAL						
Rate Tier	Use in Tier			no change		
Tier 1	0 - 4 hcf	\$3.52	\$3.69	\$3.95	\$3.95	\$4.31
Tier 2	4.01 - 8 hcf	3.95	4.14	4.41	4.41	4.79
Tier 3	8.01 - 16 hcf	4.50	4.72	5.04	5.04	5.48
Tier 4	>16 hcf	5.35	5.60	5.96	5.96	6.42
ALL OTHER CUSTOMERS		\$3.95	\$4.14	\$4.41	\$4.41	\$4.79
RECYCLED WATER		\$3.95	\$2.07	\$2.21	\$2.21	\$2.40
TEMPORARY SERVICE & WATER HAULERS		\$6.07	\$6.32	\$6.69	\$6.69	\$7.18

Table 2
City of Petaluma
Water Reserve Funds

As of June 30	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Water Utility Fund Reserves	\$12,294,695	\$14,096,661	\$14,419,919	\$10,958,265	\$8,320,867	\$6,897,667	\$8,414,637	\$10,294,910	\$14,786,228	\$14,960,363	\$14,843,810

Source: Unrestricted Fund Balance from Comprehensive Annual Financial Reports.



Sonoma County Water Agency

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

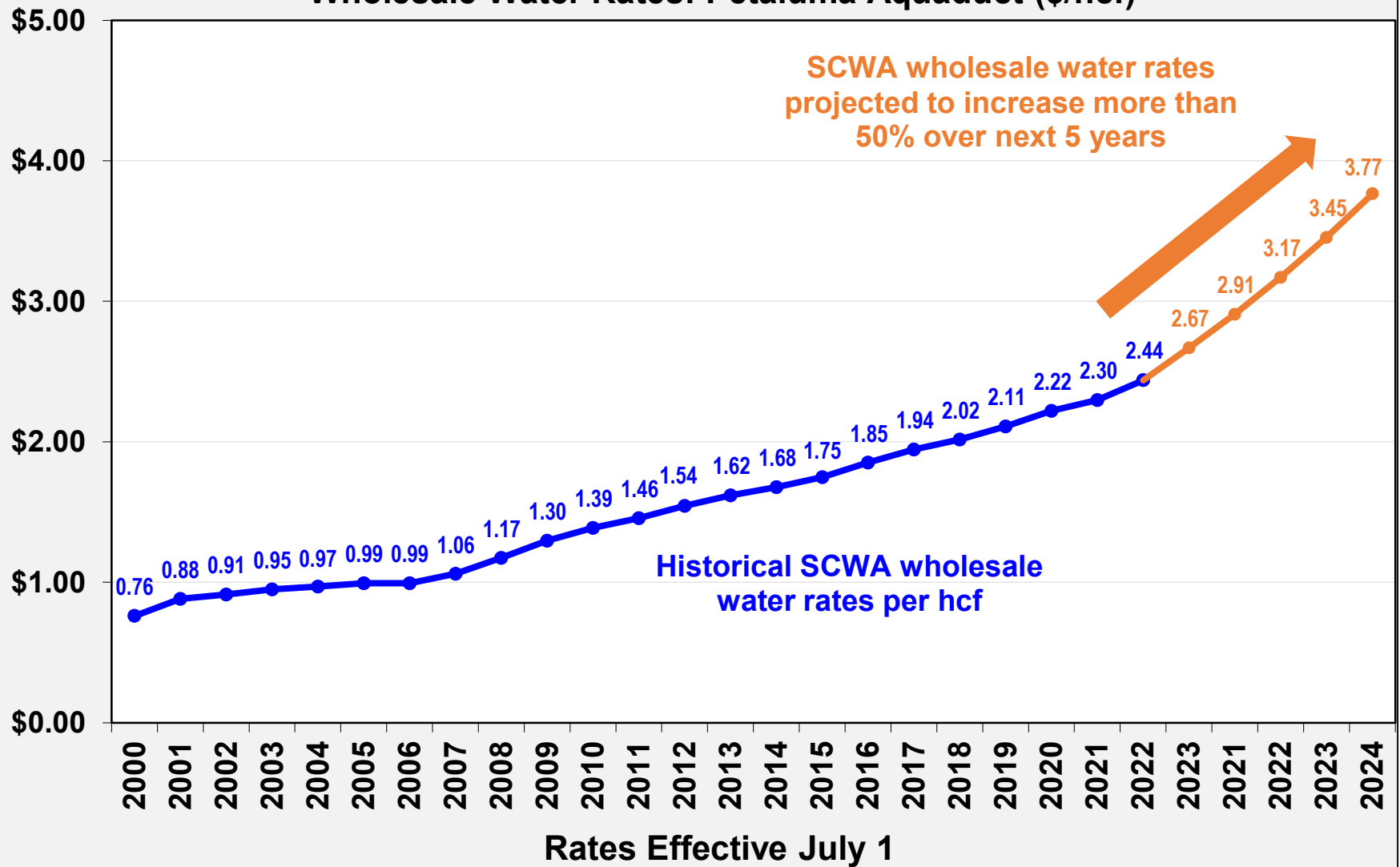


Table 3
City of Petaluma
Water Outstanding Debt Service

Year Ending June 30	2012 Water Refunding Loan
2013	\$153,508
2014	648,360
2015	644,267
2016	644,715
2017	648,540
2018	548,594
2019	546,042
2020	547,051
2021	547,545
2022	546,544
2023	545,066
2024	548,019
2025	549,330
2026	549,035
2027	549,134
2028	547,629
2029	549,462
2030	545,653
2031	447,056

Table 4
City of Petaluma
Water Capital Improvement Plan

Water CIP Revised 4/14/23

Water System Capital Improvement Plan													
	CIP Number	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	TOTAL
Construction Cost Escalation		1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	
REPLACEMENTS & UPGRADES													
Water Master Plan 10-YR Rehab & Replace Program	N/A					2,706,000	3,279,000	3,069,000	2,918,000	2,898,000	2,901,000	2,901,000	\$20,672,000
Water Main Replacement - Payran and Madison	C67502225	1,560,000											1,560,000
Water Main Replacement - Howard St	C67502326	833,000	792,000										1,625,000
Water Main Replacement - D St	New	55,000	1,250,000	1,000,000									2,305,000
Water Main Replacement - Washington at Highway 101	New					120,000	505,000						625,000
Water Main Replacement - Bodega and N Webster	C67502012			103,000	2,564,000								2,667,000
Water Main Replacement Program	Projected												0
Water Services Replacement - St Francis	New	350,000	1,550,000										1,900,000
Water Services Replacement - Daniel Dr	C67502327			150,000	750,000								900,000
Water Service Replacement Program	Projected					1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	13,300,000
Hardin Tank Recoating	C67502328	1,000,000	487,000										1,487,000
La Cresta Tank	C67402122	175,000		1,500,000	950,000								2,900,000
Oak Hill Tank Replacement	Projected	80,000	133,000	250,000	250,000	2,500,000	2,500,000						5,713,000
Water Booster PS Upgrades	New		125,000	500,000	750,000		1,180,000						2,555,000
SCADA Upgrades	C67502224	90,000	100,000	100,000	100,000	100,000	1,510,000	2,000,000					4,000,000
Pressure Reducing Valve Resiliency Program	New		50,000	515,000	350,000								915,000
Advanced Metering Infrastructure (AMI) could be ww too	E67502242	7,503,000	1,498,500										9,001,500
Bulk Potable/Recycled Water Fill Stations & Security Imp.	New	137,000	363,000				1,000,000						1,500,000
Washington Tanks Recoating							2,000,000	1,500,000					3,500,000
Mountain View Tank Recoating									2,000,000				2,000,000
Country Club Tank Recoating												1,000,000	1,000,000
Subtotal		11,783,000	6,623,500	4,118,000	5,714,000	7,326,000	13,874,000	8,469,000	6,818,000	4,798,000	4,801,000	5,801,000	80,125,500
CAPACITY PROJECTS													
Well Construction	C67501611	650,000	50,000	650,000	50,000		650,000	50,000	650,000	50,000	650,000	50,000	3,500,000
Aquifer Storage & Recov (ASR) Plan + Injection Well (future)	E67502243	339,000			500,000								839,000
Well Treatment	New	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000						12,000,000
Develop Alternative Source of Potable Water Supply [5]	Projected		750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	7,500,000
Water Truck Fill Stations (3 stations)	New	287,000	287,000	287,000									861,000
Subtotal		3,276,000	2,800,000	3,400,000	3,300,000	2,750,000	3,400,000	800,000	1,400,000	800,000	1,400,000	800,000	24,126,000
TOTAL WATER CIP		15,059,000	9,423,500	7,518,000	9,014,000	10,076,000	17,274,000	9,269,000	8,218,000	5,598,000	6,201,000	6,601,000	104,251,500
TOTAL WITH 3% COST ESCALATION		15,059,000	9,706,000	7,976,000	9,850,000	11,341,000	20,025,000	11,068,000	10,107,000	7,091,000	8,091,000	8,871,000	119,185,000
GRANTS FUNDING (ANTICIPATED)													
Grant for La Cresta Tank (pending)	Applied/Pending	175,000	1,800,000	285,000									2,260,000
DWR Grant for Advanced Metering Infrastructure (AMI)	Awarded	7,503,000											7,503,000
Wtr Ent & DWR Grant Aquifer Storage & Recov (ASR) Plan	Awarded	339,000			111,000								450,000
Grant for Well Construction (pending)	Applied/Pending	487,500											487,500
Grant for Well Treatment (pending)	Applied/Pending	2,000,000	2,000,000	2,000,000	2,000,000	1,000,000							9,000,000
IWMP	Applied/Pending		583,000										583,000
IWMP (recycled water planning)	Awarded		226,000										226,000
Grant for Water Truck Fill Stations (3 stations)	Applied/Pending	212,000	212,000	212,000									636,000
Subtotal		10,716,500	4,821,000	2,497,000	2,111,000	1,000,000	0	0	0	0	0	0	21,145,500
NET CITY WATER CIP FUNDING REQUIREMENT		4,342,500	4,885,000	5,479,000	7,739,000	10,341,000	20,025,000	11,068,000	10,107,000	7,091,000	8,091,000	8,871,000	98,039,250

Table 5
City of Petaluma
Historical Revenues & Expenses

For Internal Reference Only

	Actual 2017/18	Actual 2018/19	Actual 2019/20	Actual 2020/21	Actual 2021/22
REVENUES					
Water Rate Revenues					
Residential	9,180,808	9,549,457	11,313,689	11,744,919	10,892,073
Multi-Family Residential	1,889,371	2,007,088	2,291,287	2,394,237	2,543,899
Commercial	3,234,419	3,341,316	3,797,744	3,783,486	3,493,250
Industrial	1,129,245	929,358	828,630	862,359	973,513
Public	1,110,626	1,106,429	1,270,429	1,222,457	886,643
Other (Hydrant/Sprinkler)	131,327	132,442	135,205	135,596	139,435
<i>Subtotal</i>	16,675,796	17,066,090	19,636,985	20,143,054	18,928,813
Interest Earnings/Investments	147,673	271,530	341,067	156,678	101,209
Connection/Capacity Charges	137,274	846,949	730,608	482,768	81,847
Other/Miscellaneous	408,506	471,619	433,030	226,211	308,416
Grants/Contributions (in Fund 6700)	58,502	30,084	6,400	2,588	24,800
Transfer In for Unspent Capital Funds	136,575	12,375	31,335	0	7,308
American Rescue Plan Arrearages Program	0	0	0	0	225,336
Total	17,564,326	18,698,647	21,179,425	21,011,299	19,677,729
EXPENSES					
Operating & Maintenance					
Water Admin (Excl Depreciation & GASB 68)	1,895,970	1,830,341	1,918,167	2,328,946	2,435,050
Water Conservation	654,293	523,446	506,880	512,595	969,808
Water Customer Service	597,421	596,345	741,688	878,486	798,658
Water Leak Detect/Cross Connect	125,729	122,756	133,676	128,770	127,529
Water Pumping	412,968	276,521	278,757	313,824	368,150
Water Source of Supply	6,998,333	6,895,201	7,072,168	7,617,906	7,941,507
Water Transmission & Distribution	2,278,767	2,372,461	2,754,838	2,592,860	3,085,687
<i>Subtotal</i>	12,963,480	12,617,070	13,406,173	14,373,387	15,726,387
Debt Service					
2012 Water Refunding Loan	548,594	546,042	547,051	547,545	546,544
Net Transfer to CIP					
Annual Transfer to CIP	2,450,276	2,736,971	2,028,385	5,112,160	3,560,009
<i>Subtotal</i>	2,450,276	2,736,971	2,028,385	5,112,160	3,560,009
Total Expenses	15,962,350	15,900,083	15,981,608	20,033,092	19,832,940

Table 6 Water Cash Flow Projections											
	Current 2022/23	1 2023/24	2 2024/25	3 2025/26	4 2026/27	5 2027/28	6 2028/29	7 2029/30	8 2030/31	9 2031/32	10 2032/33
<u>Projected Rate Adjustments</u>		Sep 1	July 1	July 1	July 1	July 1	July 1	July 1	July 1	July 1	July 1
City Rate Increase %		2.5%	2.5%	2.5%	2.5%	2.5%	2.0%	2.0%	1.0%	0.0%	0.0%
CPI Rate Adjustment %		3.0%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.0%	2.0%
SCWA Rate Increase Pastthrough (\$/hcf)		\$0.23	\$0.24	\$0.26	\$0.29	\$0.31	\$0.23	\$0.24	\$0.25	\$0.27	\$0.29
<i>Total Net Rate Increase (City+CPI+SCWA)</i>		8.83%	8.23%	8.27%	8.29%	8.31%	6.73%	5.68%	4.67%	4.19%	4.23%
Growth (EDUs)		50	50	50	50	50	50	50	50	50	50
Growth in Accounts %		0.19%	0.19%	0.19%	0.19%	0.19%	0.19%	0.19%	0.19%	0.19%	0.19%
Change in Water Sales %		6.0%	4.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Sales (hcf)	2,540,000	2,692,000	2,800,000	2,856,000	2,856,000	2,856,000	2,856,000	2,856,000	2,856,000	2,856,000	2,856,000
Supply from Well Production	150,000	-	-	-	-	-	-	-	-	-	-
SCWA Water Supply (hcf) with 10% Syst Loss	2,644,000	2,961,000	3,080,000	3,142,000	3,142,000	3,142,000	3,142,000	3,142,000	3,142,000	3,142,000	3,142,000
SCWA Rate per hcf	\$2.44	\$2.67	\$2.91	\$3.17	\$3.45	\$3.77	\$3.99	\$4.23	\$4.49	\$4.75	\$5.04
Water Capacity Fee	\$4,794	\$4,890	\$4,988	\$5,088	\$5,190	\$5,294	\$5,400	\$5,508	\$5,618	\$5,730	\$5,845
Operating Cost Escalation	-	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Interest Earnings Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Beginning Fund Reserves	\$14,844,000	\$15,347,000	\$14,139,000	\$11,983,000	\$11,240,000	\$9,120,000	\$10,343,000	\$11,641,000	\$11,640,000	\$11,690,000	\$12,470,000
REVENUES											
Fixed Monthly Charges (est.)	6,046,000	6,395,000	6,731,000	7,085,000	7,458,000	7,850,000	8,223,000	8,529,000	8,759,000	8,951,000	9,147,000
Water Consumption Charges	12,200,000	14,271,000	16,265,000	18,178,000	19,913,000	21,809,000	23,447,000	24,958,000	26,307,000	27,602,000	28,969,000
<i>Subtotal</i>	18,246,000	20,666,000	22,996,000	25,263,000	27,371,000	29,659,000	31,670,000	33,487,000	35,066,000	36,553,000	38,116,000
Interest Earnings	297,000	307,000	283,000	240,000	225,000	182,000	207,000	233,000	233,000	234,000	249,000
Connection Fees/Capacity Charges	200,000	245,000	249,000	254,000	260,000	265,000	270,000	275,000	281,000	287,000	292,000
Other/Miscellaneous	400,000	408,000	416,000	424,000	432,000	441,000	450,000	459,000	468,000	477,000	487,000
Total Revenues	19,143,000	21,626,000	23,944,000	26,181,000	28,288,000	30,547,000	32,597,000	34,454,000	36,048,000	37,551,000	39,144,000
Anticipated Grants		10,716,500	4,821,000	2,497,000	2,111,000	1,000,000					
Projected Debt Proceeds (30-Yr, 4.5% Bonds)						5,000,000	15,000,000	4,000,000	3,000,000		
EXPENSES											
<u>Operating & Maintenance</u>	<u>Budget</u>	<u>Adj w City Input</u>									
Administration (Excl Capital Transfer & Debt)	3,505,000	2,978,000	3,082,000	3,190,000	3,302,000	3,418,000	3,538,000	3,662,000	3,790,000	3,923,000	4,060,000
Water Conservation	1,364,000	774,000	801,000	829,000	858,000	888,000	919,000	951,000	984,000	1,018,000	1,054,000
Water Customer Service	822,000	851,000	881,000	912,000	944,000	977,000	1,011,000	1,046,000	1,083,000	1,121,000	1,160,000
New AMI Cell Service (50% Water)	0	80,000	83,000	86,000	89,000	92,000	95,000	98,000	101,000	105,000	109,000
Water Leak Detect/Cross Connect	133,000	138,000	143,000	148,000	153,000	158,000	164,000	170,000	176,000	182,000	188,000
Water Pumping	657,000	680,000	704,000	729,000	755,000	781,000	808,000	836,000	865,000	895,000	926,000
Water Source of Supply (SCWA)	6,446,000	7,899,000	8,956,000	9,959,000	10,855,000	11,832,000	12,542,000	13,295,000	14,092,000	14,938,000	15,834,000
Water Transmission & Distribution	4,168,000	3,875,000	4,011,000	4,151,000	4,296,000	4,446,000	4,602,000	4,763,000	4,930,000	5,103,000	5,282,000
<i>Subtotal</i>	17,095,000	17,275,000	18,661,000	20,004,000	21,252,000	22,592,000	23,679,000	24,821,000	26,021,000	27,285,000	28,613,000
<u>Debt Service</u>											
2012 Water Refunding Loan	545,000	548,000	549,000	549,000	549,000	548,000	549,000	546,000	447,000	0	0
2028 Bonds, Projected (30-Yr, 4.5% Bonds)	0	0	0	0	0	0	1,228,000	1,228,000	1,228,000	1,228,000	1,228,000
2030 Bonds, Projected (30-Yr, 4.5% Bonds)									430,000	430,000	430,000
<i>Subtotal</i>	545,000	548,000	549,000	549,000	549,000	548,000	1,777,000	1,774,000	2,105,000	1,658,000	1,658,000
<u>Capital & Other Non-Operating</u>											
Water CIP: Cash Funded	1,000,000	4,342,500	4,885,000	5,479,000	7,739,000	5,341,000	5,025,000	7,068,000	7,107,000	7,091,000	8,091,000
Water CIP: Grant & Debt Funded	0	10,716,500	4,821,000	2,497,000	2,111,000	6,000,000	15,000,000	4,000,000	3,000,000	0	0
Water Share of Recycled Water CIP (Net)	0	669,000	2,005,000	892,000	868,000	843,000	818,000	792,000	765,000	737,000	709,000
<i>Subtotal</i>	1,000,000	15,728,000	11,711,000	8,868,000	10,718,000	12,184,000	20,843,000	11,860,000	10,872,000	7,828,000	8,800,000
Total Expenses	18,640,000	33,551,000	30,921,000	29,421,000	32,519,000	35,324,000	46,299,000	38,455,000	38,998,000	36,771,000	39,071,000
Revenues Less Expenses & Transfers	503,000	(1,208,500)	(2,156,000)	(743,000)	(2,120,000)	1,223,000	1,298,000	(1,000)	50,000	780,000	73,000
Ending Fund Reserves	15,347,000	14,138,500	11,983,000	11,240,000	9,120,000	10,343,000	11,641,000	11,640,000	11,690,000	12,470,000	12,543,000
Min Fund Rsrv Target: 25% O&M + \$4M CIP	8,270,000	8,320,000	8,670,000	9,000,000	9,310,000	9,650,000	9,920,000	10,210,000	10,510,000	10,820,000	11,150,000
Debt Service Coverage	3.76	7.94	9.62	11.25	12.82	14.52	5.02	5.43	4.76	6.19	6.35
<i>Pay-Go Funding Generated for CIP</i>	1,503,000	3,803,000	4,734,000	5,628,000	6,487,000	7,407,000	7,141,000	7,859,000	7,922,000	8,608,000	8,873,000

City of Petaluma Water Projected Revenues & Expenses

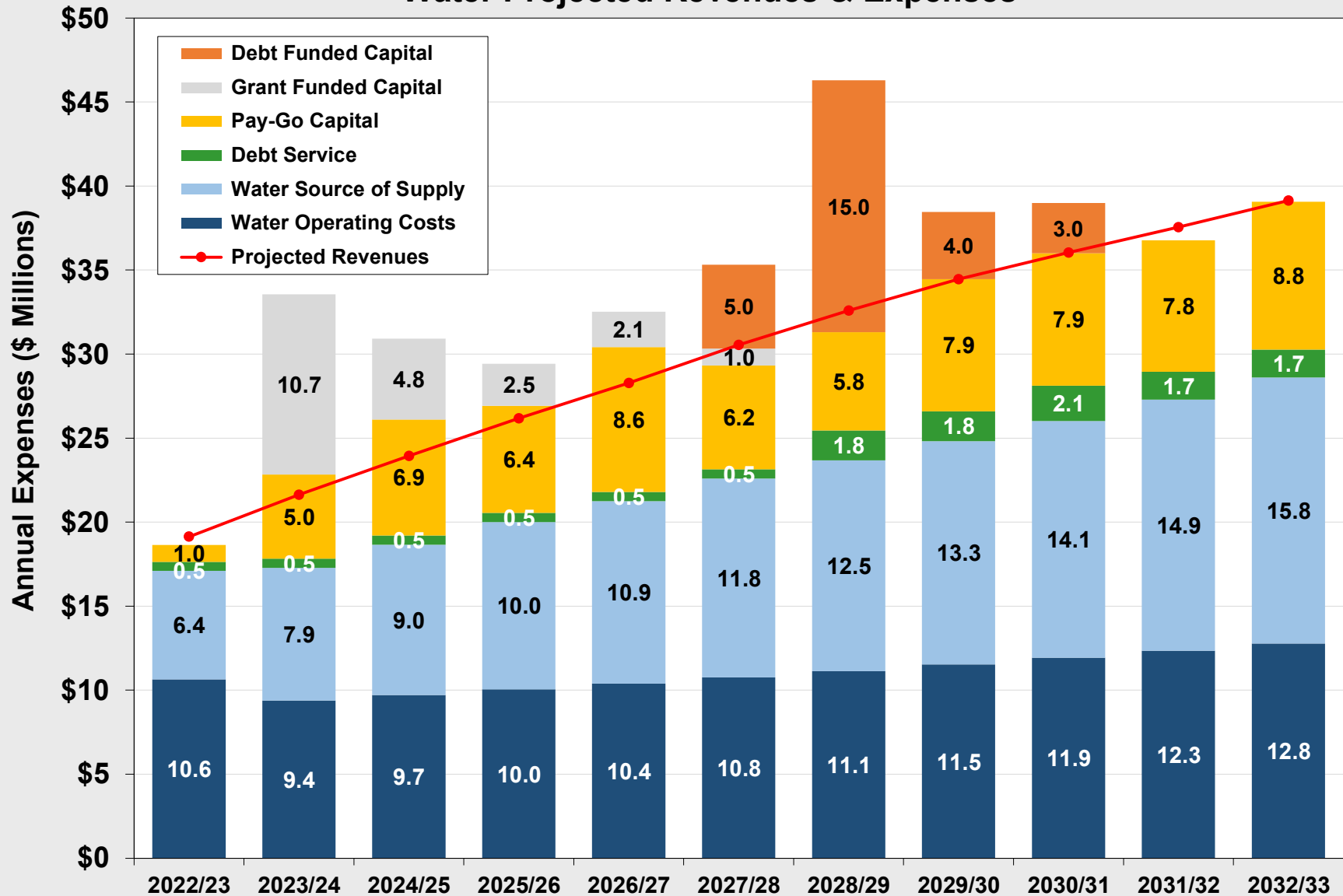


Table 7

City of Petaluma

Proposed Base Water Rates

Proposed Base Rates

With City Rate Increases Only

Excludes Annual Pass Throughs for CPI Inflation & SCWA Wholesale Rates

Base Rates to be Adjusted by 1) Compounded Inflation % and then 2) Adding Total Wholesale Rate Increase

Note: Rates for July 1, 2023 in Prop 218 Notice should include base City rates plus CPI + SCWA

PROPOSED BASE WATER RATES						
	Current Water Rates	Proposed Base Rates Effective on or After				
		Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
CITY WATER RATE INCREASES		2.5%	2.5%	2.5%	2.5%	2.5%
FIXED MONTHLY CHARGES						
<i>Fixed monthly charge billed based meter size or per multi-family dwelling unit.</i>						
Residential						
Single Family: Up to 1-inch meter	\$18.98	\$19.45	\$19.94	\$20.44	\$20.95	\$21.47
Multi-Family: Per Dwelling Unit	11.39	11.67	11.96	12.26	12.57	12.88
All Other Customers						
5/8 & 3/4-inch meter	\$18.98	\$19.45	\$19.94	\$20.44	\$20.95	\$21.47
1-inch meter	30.13	30.88	31.65	32.44	33.25	34.08
1-1/2-inch meter	58.02	59.47	60.96	62.48	64.04	65.64
2-inch meter	91.47	93.76	96.10	98.50	100.96	103.48
3-inch meter	169.56	173.80	178.15	182.60	187.17	191.85
4-inch meter	281.10	288.13	295.33	302.71	310.28	318.04
6-inch meter	559.96	573.96	588.31	603.02	618.10	633.55
WATER CONSUMPTION CHARGES						
<i>Volumetric charges billed per hundred cubic feet (hcf) of metered water use.</i>						
Single Family Residential						
Tier 1 0 - 4 hcf	\$4.31	\$4.42	\$4.53	\$4.64	\$4.76	\$4.88
Tier 2 4.01 - 8 hcf	4.79	4.91	5.03	5.16	5.29	5.42
Tier 3 8.01 - 16 hcf	5.48	5.62	5.76	5.90	6.05	6.20
Tier 4 >16 hcf	6.42	6.58	6.74	6.91	7.08	7.26
All Other Water Use	4.79	4.91	5.03	5.16	5.29	5.42
Temporary Service & Water Haulers	7.18	7.36	7.54	7.73	7.92	8.12

Note: Proposed Base Rates will be adjusted each year to account for annual pass-throughs for CPI inflation and SCWA wholesale water rate increases.

Annual CPI inflation pass-throughs will be based on the percentage change in the Consumer Price Index from the index for December 2022 to the index for December immediately preceding the upcoming fiscal year.

Annual pass-throughs for wholesale water rate increases will be based on SCWA water rate increases for the Petaluma Aqueduct rounded to the nearest one cent per hcf.

Table 8
City of Petaluma
Projected Water Rates with Pass-Throughs

Projected Rates with Annual Pass-Throughs

With Base Increases & Est. Pass-Throughs for CPI & SCWA Wholesale Rates

PROJECTED WATER RATES WITH ANNUAL PASSTHROUGHS						
	Current Water Rates	Projected Rates Effective				
		Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
CITY WATER RATE INCREASES		2.5%	2.5%	2.5%	2.5%	2.5%
ESTIMATED CPI PASSTHROUGH ADJUSTMENTS		3.0%	2.5%	2.5%	2.5%	2.5%
Compounded CPI Adjustments		3.00%	5.58%	8.21%	10.92%	13.69%
PROJECTED SCWA WHOLESALE RATE INCREASES						
SCWA Wholesale Rate Projection	\$2.44	\$2.67	\$2.91	\$3.17	\$3.45	\$3.77
Annual Increase		<u>0.23</u>	<u>0.24</u>	<u>0.26</u>	<u>0.29</u>	<u>0.31</u>
Wholesale Rate Increase from Base Year Rates		0.23	0.47	0.73	1.02	1.33
FIXED MONTHLY CHARGES						
<i>Fixed monthly charge billed based meter size or per multi-family dwelling unit.</i>						
Residential						
Single Family: Up to 1-inch meter	\$18.98	\$20.03	\$21.05	\$22.12	\$23.24	\$24.41
Multi-Family: Per Dwelling Unit	11.39	12.02	12.63	13.27	13.94	14.64
All Other Customers						
5/8 & 3/4-inch meter	\$18.98	\$20.03	\$21.05	\$22.12	\$23.24	\$24.41
1-inch meter	30.13	31.81	33.41	35.10	36.88	38.75
1-1/2-inch meter	58.02	61.25	64.36	67.61	71.03	74.63
2-inch meter	91.47	96.57	101.46	106.59	111.98	117.65
3-inch meter	169.56	179.01	188.08	197.60	207.61	218.12
4-inch meter	281.10	296.77	311.79	327.58	344.16	361.59
6-inch meter	559.96	591.18	621.11	652.55	685.59	720.30
WATER CONSUMPTION CHARGES						
<i>Volumetric charges billed per hundred cubic feet (hcf) of metered water use.</i>						
Single Family Residential						
Tier 1 0 - 4 hcf	\$4.31	\$4.78	\$5.25	\$5.75	\$6.30	\$6.88
Tier 2 4.01 - 8 hcf	4.79	5.29	5.78	6.32	6.88	7.49
Tier 3 8.01 - 16 hcf	5.48	6.02	6.55	7.12	7.73	8.38
Tier 4 >16 hcf	6.42	7.01	7.59	8.21	8.87	9.58
All Other Customers	4.79	5.29	5.78	6.32	6.88	7.49
Temporary Service & Water Haulers	7.18	7.81	8.43	9.10	9.80	10.56

Note: Proposed Base Rates will be adjusted each year to account for annual pass-throughs for CPI inflation and SCWA wholesale water rate increases.

Annual CPI inflation pass-throughs will be based on the percentage change in the Consumer Price Index from the index for December 2022 to the index for December immediately preceding the upcoming fiscal year.

Annual pass-throughs for wholesale water rate increases will be based on SCWA water rate increases for the Petaluma Aqueduct rounded to the nearest one cent per hcf.

Table 9
City of Petaluma
Single Family Residential Bill Impacts

With Projected SCWA Wholesale Rate & CPI Inflation Adjustments

Monthly Use (hcf)	Current Monthly Bill	Projected Monthly Bills					5-Year Increase per Bill
		Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027	
0	\$18.98	\$20.03	\$21.05	\$22.12	\$23.24	\$24.41	\$5.43
1	23.29	24.81	26.30	27.87	29.54	31.29	8.00
2	27.60	29.59	31.55	33.62	35.84	38.17	10.57
3 Lowest	31.91	34.37	36.80	39.37	42.14	45.05	13.14
4	36.22	39.15	42.05	45.12	48.44	51.93	15.71
5	41.01	44.44	47.83	51.44	55.32	59.42	18.41
6 Median	45.80	49.73	53.61	57.76	62.20	66.91	21.11
7 Average	50.59	55.02	59.39	64.08	69.08	74.40	23.81
8	55.38	60.31	65.17	70.40	75.96	81.89	26.51
9	60.86	66.33	71.72	77.52	83.69	90.27	29.41
10	66.34	72.35	78.27	84.64	91.42	98.65	32.31
11	71.82	78.37	84.82	91.76	99.15	107.03	35.21
12	77.30	84.39	91.37	98.88	106.88	115.41	38.11
13	82.78	90.41	97.92	106.00	114.61	123.79	41.01
14 Top 10%	88.26	96.43	104.47	113.12	122.34	132.17	43.91
15	93.74	102.45	111.02	120.24	130.07	140.55	46.81
16	99.22	108.47	117.57	127.36	137.80	148.93	49.71
17	105.64	115.48	125.16	135.57	146.67	158.51	52.87
18	112.06	122.49	132.75	143.78	155.54	168.09	56.03
19	118.48	129.50	140.34	151.99	164.41	177.67	59.19
20	124.90	136.51	147.93	160.20	173.28	187.25	62.35

Table 10

City of Petaluma

Water Rate Impacts

With Projected SCWA Wholesale Rate & CPI Inflation Adjustments

Customer Class	Meter Size	Monthly Water Use (hcf)	Current Monthly Bill	Projected Monthly Bills				
				Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
SINGLE FAMILY RESIDENCE								
Low	5/8" or 3/4"	4	36.22	39.15	42.05	45.12	48.44	51.93
Monthly Increase				2.93	2.90	3.07	3.32	3.49
Average	5/8" or 3/4"	7	50.59	55.02	59.39	64.08	69.08	74.40
Monthly Increase				4.43	4.37	4.69	5.00	5.32
Mod/High	5/8" or 3/4"	10	66.34	72.35	78.27	84.64	91.42	98.65
Monthly Increase				6.01	5.92	6.37	6.78	7.23
High	5/8" or 3/4"	14	88.26	96.43	104.47	113.12	122.34	132.17
Monthly Increase				8.17	8.04	8.65	9.22	9.83
MULTI-FAMILY APARTMENT BUILDING								
20 Unit Apartment	2"	80	611.00	663.60	715.00	771.00	829.20	892.00
Per Dwelling Unit		4	30.55	33.18	35.75	38.55	41.46	44.60
Monthly Increase per Unit				2.63	2.57	2.80	2.91	3.14
COMMERCIAL								
Small Business	5/8" or 3/4"	10	66.88	72.93	78.85	85.32	92.04	99.31
Monthly Increase				6.05	5.92	6.47	6.72	7.27
Medium Business	1"	25	149.88	164.06	177.91	193.10	208.88	226.00
Monthly Increase				14.18	13.85	15.19	15.78	17.12
INDUSTRIAL								
Moderate Industrial	3"	2,000	9,749.56	10,759.01	11,748.08	12,837.60	13,967.61	15,198.12
Monthly Increase				1,009.45	989.07	1,089.52	1,130.01	1,230.51

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
FY 2022/23										Estimated	Estimated	Estimated	Estimated
sf-000 Single Family	169,035	137,056	141,608	162,664	119,232	97,057	109,619	77,589	78,000	90,000	110,000	140,000	1,431,861
mf-000 Multifamily	34,347	28,325	28,847	33,560	27,022	24,800	30,945	23,428	22,471	25,000	27,000	30,000	335,745
cm-000 Commercial	41,275	33,226	34,732	40,096	31,030	24,632	27,044	20,582	19,286	25,000	27,000	30,000	353,901
is-000 Institutional	6,652	4,704	6,637	7,717	6,034	4,849	5,806	3,877	4,367	5,000	5,000	6,000	66,642
id-000 Industrial	16,412	13,262	13,069	16,246	11,923	10,886	13,666	11,273	11,664	12,000	13,000	14,000	157,400
sf-irr Single Family Irrigation	38	44	43	68	97	16	5	0	0	0	50	80	440
cm-irr Commercial Irrigation	19,543	16,511	16,779	19,734	15,355	6,420	3,447	1,604	2,070	4,000	10,000	15,000	130,464
is-irr Institutional Irrigation	8,261	8,341	9,038	10,362	6,392	2,116	1,241	619	670	1,000	3,000	8,000	59,040
sc-000 SCWA Metered	119	109	89	114	100	103	61	44	59	60	80	100	1,039
Total	295,681	241,578	250,840	290,561	217,185	170,879	191,836	139,018	138,586	162,060	195,130	243,180	2,536,532
FY 2021/22													
sf-000 Single Family	164,317	191,884	149,253	172,821	105,031	79,075	107,747	82,484	95,158	123,316	102,341	124,190	1,497,617
mf-000 Multifamily	32,216	37,692	29,286	35,291	26,300	23,675	31,980	24,767	26,259	31,404	25,235	29,238	353,343
cm-000 Commercial	42,560	50,350	38,836	45,231	28,530	22,117	27,639	20,357	23,996	31,125	26,397	31,198	388,335
is-000 Institutional	9,707	10,855	6,848	6,146	4,718	3,502	4,038	4,027	4,531	5,335	4,434	5,370	69,512
id-000 Industrial	17,769	21,612	16,204	19,808	16,392	15,161	17,974	13,646	14,548	18,590	14,398	13,320	199,420
sf-irr Single Family Irrigation	108	116	120	116	52	16	29	25	31	81	69	82	846
cm-irr Commercial Irrigation	25,838	29,012	21,642	25,214	10,707	8,019	2,024	1,916	4,286	10,653	9,389	13,764	162,465
is-irr Institutional Irrigation	14,165	11,031	6,383	4,616	2,005	608	965	2,866	1,605	2,609	2,546	5,259	54,657
sc-000 SCWA Metered	74	206	154	136	100	117	72	95	83	89	123	67	1,314
Total	306,755	352,758	268,726	309,380	193,834	152,290	192,468	150,182	170,497	223,200	184,933	222,487	2,727,509
FY 2020/21													
sf-000 Single Family	188,677	242,925	196,885	182,039	204,016	128,965	132,391	95,413	95,607	108,025	176,759	158,518	1,910,222
mf-000 Multifamily	32,362	43,900	34,579	33,039	38,809	28,941	33,635	26,140	26,374	27,051	37,043	31,805	393,679
cm-000 Commercial	36,859	50,937	41,616	38,677	45,155	29,972	27,154	22,015	24,134	25,815	44,133	37,785	424,251
is-irr Institutional	16,242	24,258	15,736	14,718	13,257	4,925	2,858	1,178	1,068	2,467	11,112	11,948	119,767
id-000 Industrial	13,536	17,231	14,094	14,215	16,241	13,962	16,655	15,492	15,527	16,786	19,889	17,682	191,310
sf-irr Single Family Irrigation	229	160	106	91	87	65	40	11	43	30	71	85	1,016
cm-irr Commercial Irrigation	30,107	43,753	34,554	35,866	35,284	15,766	11,366	4,198	4,251	6,348	24,774	26,283	272,549
is-000 Institutional Irrigation	9,594	13,154	9,795	11,237	12,809	7,986	6,070	5,107	5,409	4,623	8,053	9,060	102,896
sc-000 SCWA Metered	123	110	83	173	101	303	364	82	87	68	91	115	1,700
Total	327,729	436,429	347,447	330,055	365,759	230,884	230,531	169,636	172,501	191,212	321,924	293,282	3,417,391
FY 2019/20													
sf-000 Single Family	169,510	183,185	234,634	173,586	191,411	122,473	95,462	109,847	102,713	105,901	166,145	169,851	1,824,717
mf-000 Multifamily	29,595	31,760	40,873	31,095	37,211	26,969	26,416	30,216	25,692	26,477	35,923	32,811	375,038
cm-000 Commercial	39,696	45,686	55,482	41,299	46,518	31,496	24,809	29,739	34,355	24,212	28,773	30,477	432,542
is-000 Institutional	9,920	11,957	16,493	11,859	12,266	7,660	5,017	8,522	4,498	5,711	6,739	7,506	108,147
id-000 Industrial	14,728	14,160	18,744	16,900	19,586	13,281	13,305	14,795	13,675	12,768	17,248	14,473	183,662
sf-irr Single Family Irrigation	115	113	139	137	187	121	15	6	33	38	27	124	1,056
cm-irr Commercial Irrigation	28,999	35,070	45,912	32,977	37,159	19,454	4,317	3,203	7,107	12,049	18,118	24,923	269,289
is-irr Institutional Irrigation	13,936	16,620	22,233	14,481	13,431	7,046	1,099	917	2,261	2,719	5,554	12,128	112,425
sc-000 SCWA Metered	77	76	119	106	99	125	91	85	47	56	90	110	1,080
Total	306,576	338,627	434,630	322,439	357,866	228,624	170,532	197,331	190,380	189,930	278,617	292,404	3,307,957
FY 2018/19													
sf-000 Single Family	168,265	184,403	222,759	164,247	140,347	147,622	91,441	105,703	82,633	84,015	114,025	171,093	1,676,552
mf-000 Multifamily	28,906	31,584	39,339	30,710	27,924	33,942	24,704	30,113	23,822	24,359	27,065	34,991	357,458
cm-000 Commercial	46,017	48,656	56,386	41,377	36,333	38,061	24,916	29,643	24,044	24,574	29,368	43,826	443,202
is-000 Institutional	10,263	11,223	15,256	11,042	8,882	9,315	5,232	5,582	5,739	4,934	6,673	10,103	104,244
id-000 Industrial	20,384	19,713	23,983	18,848	18,260	23,408	14,337	17,490	14,592	14,639	15,113	20,135	220,903
sf-irr Single Family Irrigation	61	126	175	173	58	63	11	18	15	5	25	137	865
cm-irr Commercial Irrigation	28,595	35,361	41,330	30,702	23,243	18,105	3,507	2,864	1,993	2,094	7,791	25,735	221,320
is-irr Institutional Irrigation	16,277	19,906	20,875	12,582	8,827	6,457	899	757	516	501	3,268	12,296	103,160
sc-000 SCWA Metered	81	103	151	168	120	134	105	87	71	30	39	55	1,145
Total	318,848	351,074	420,253	309,848	263,993	277,108	165,153	192,256	153,426	155,152	203,367	318,371	3,128,843

Table 12
City of Petaluma
Water Use by Class (hcf)

Use Code	Customer Class	Actual 2018/19	Actual 2019/20	Actual 2020/21	Actual 2021/22	Estimated 2022/23	Projected Normal Yr
sf-000	Single Family	1,676,552	1,824,717	1,910,222	1,497,617	1,431,861	1,620,000
mf-000	Multifamily	357,458	375,038	393,679	353,343	335,745	355,000
cm-000	Commercial	443,202	432,542	424,251	388,335	353,901	410,000
is-000	Institutional	104,244	108,147	102,896	69,512	66,642	90,000
id-000	Industrial	220,903	183,662	191,310	199,420	157,400	180,000
sf-irr	Single Family Irrigation	865	1,056	1,016	846	440	1,000
cm-irr	Commercial Irrigation	221,320	269,289	272,549	162,465	130,464	180,000
is-irr	Institutional Irrigation	103,160	112,425	119,767	54,657	59,040	80,000
sc-000	SCWA Metered	1,145	1,080	1,700	1,314	1,039	1,000
Total		3,128,849	3,307,957	3,417,391	2,727,509	2,536,532	2,917,000
Annual % Change			5.7%	3.3%	-20.2%	-7.0%	15.0%

Table 13
City of Petaluma
Single Family Residential Water Use by Tier

		2018/19	2019/20	2020/21	2021/22	2022/23	Est Normal Yr
Single Family Residential Use by Tier						estimated	estimated
Tier 1	0 - 4 hcf	750,807	764,712	772,214	737,109	730,000	750,000
Tier 2	4.01 - 8 hcf	429,714	472,099	492,085	385,708	370,000	420,000
Tier 3	8.01 - 16 hcf	321,240	378,682	411,741	257,107	235,000	300,000
Tier 4	>16 hcf	185,915	210,485	235,385	118,697	100,000	150,000
Total		1,687,676	1,825,978	1,911,425	1,498,621	1,435,000	1,620,000
Annual Change %			8.2%	4.7%	-21.6%	-4.2%	12.9%
% of Water Use in Tier							
Tier 1	0 - 4 hcf	44.5%	41.9%	40.4%	49.2%	50.9%	46.3%
Tier 2	4.01 - 8 hcf	25.5%	25.9%	25.7%	25.7%	25.8%	25.9%
Tier 3	8.01 - 16 hcf	19.0%	20.7%	21.5%	17.2%	16.4%	18.5%
Tier 4	>16 hcf	11.0%	11.5%	12.3%	7.9%	7.0%	9.3%

Table 14
City of Petaluma
Single Family Residential Consumption Block Analysis FY22

Median Monthly Use: 5.4 hcf
Average Monthly Use: 7.0 hcf

Monthly Use (hcf)	Number of Bills				Water Use (hcf)				Use Through Break	
	In Block	% of Total	Cumulative	Cumulative %	In Block	% of Ttl	Cumulative	Cumulative %	Use (hcf)	% of Ttl
0	4,885	2.3%	4,885	2.3%	0	0.0%	0	0.0%	0	0.0%
1	11,659	5.4%	16,544	7.7%	11,659	0.8%	11,659	0.8%	209,537	14.0%
2	20,421	9.5%	36,965	17.2%	40,842	2.7%	52,501	3.5%	407,415	27.2%
3	25,220	11.8%	62,185	29.0%	75,660	5.0%	128,161	8.6%	584,872	39.0%
4	25,223	11.8%	87,408	40.8%	100,892	6.7%	229,053	15.3%	737,109	49.2%
5	22,681	10.6%	110,089	51.3%	113,405	7.6%	342,458	22.9%	864,123	57.7%
6	19,245	9.0%	129,334	60.3%	115,470	7.7%	457,928	30.6%	968,456	64.6%
7	15,815	7.4%	145,149	67.7%	110,705	7.4%	568,633	37.9%	1,053,544	70.3%
8	12,504	5.8%	157,653	73.5%	100,032	6.7%	668,665	44.6%	1,122,817	74.9%
9	10,125	4.7%	167,778	78.2%	91,125	6.1%	759,790	50.7%	1,179,586	78.7%
10	8,237	3.8%	176,015	82.1%	82,370	5.5%	842,160	56.2%	1,226,230	81.8%
11	6,508	3.0%	182,523	85.1%	71,588	4.8%	913,748	61.0%	1,264,637	84.4%
12	5,379	2.5%	187,902	87.6%	64,548	4.3%	978,296	65.3%	1,296,536	86.5%
13	4,319	2.0%	192,221	89.6%	56,147	3.7%	1,034,443	69.0%	1,323,056	88.3%
14	3,426	1.6%	195,647	91.2%	47,964	3.2%	1,082,407	72.2%	1,345,257	89.8%
15	2,883	1.3%	198,530	92.6%	43,245	2.9%	1,125,652	75.1%	1,364,032	91.0%
16	2,460	1.1%	200,990	93.7%	39,360	2.6%	1,165,012	77.7%	1,379,924	92.1%
17	1,953	0.9%	202,943	94.6%	33,201	2.2%	1,198,213	80.0%	1,393,356	93.0%
18	1,626	0.8%	204,569	95.4%	29,268	2.0%	1,227,481	81.9%	1,404,835	93.7%
19	1,379	0.6%	205,948	96.0%	26,201	1.7%	1,253,682	83.7%	1,414,688	94.4%
20	1,208	0.6%	207,156	96.6%	24,160	1.6%	1,277,842	85.3%	1,423,162	95.0%
21	982	0.5%	208,138	97.1%	20,622	1.4%	1,298,464	86.6%	1,430,428	95.4%
22	828	0.4%	208,966	97.5%	18,216	1.2%	1,316,680	87.9%	1,436,712	95.9%
23	691	0.3%	209,657	97.8%	15,893	1.1%	1,332,573	88.9%	1,442,168	96.2%
24	551	0.3%	210,208	98.0%	13,224	0.9%	1,345,797	89.8%	1,446,933	96.6%
25	500	0.2%	210,708	98.3%	12,500	0.8%	1,358,297	90.6%	1,451,147	96.8%
26	452	0.2%	211,160	98.5%	11,752	0.8%	1,370,049	91.4%	1,454,861	97.1%
27	389	0.2%	211,549	98.7%	10,503	0.7%	1,380,552	92.1%	1,458,123	97.3%
28	315	0.1%	211,864	98.8%	8,820	0.6%	1,389,372	92.7%	1,460,996	97.5%
29	269	0.1%	212,133	98.9%	7,801	0.5%	1,397,173	93.2%	1,463,554	97.7%
30	246	0.1%	212,379	99.0%	7,380	0.5%	1,404,553	93.7%	1,465,843	97.8%
31	198	0.1%	212,577	99.1%	6,138	0.4%	1,410,691	94.1%	1,467,886	97.9%
32	192	0.1%	212,769	99.2%	6,144	0.4%	1,416,835	94.5%	1,469,731	98.1%
33	165	0.1%	212,934	99.3%	5,445	0.4%	1,422,280	94.9%	1,471,384	98.2%
34	153	0.1%	213,087	99.4%	5,202	0.3%	1,427,482	95.3%	1,472,872	98.3%
35	110	0.1%	213,197	99.4%	3,850	0.3%	1,431,332	95.5%	1,474,207	98.4%
36	94	0.0%	213,291	99.5%	3,384	0.2%	1,434,716	95.7%	1,475,432	98.5%
37	102	0.0%	213,393	99.5%	3,774	0.3%	1,438,490	96.0%	1,476,563	98.5%
38	82	0.0%	213,475	99.6%	3,116	0.2%	1,441,606	96.2%	1,477,592	98.6%
39	81	0.0%	213,556	99.6%	3,159	0.2%	1,444,765	96.4%	1,478,539	98.7%
40	68	0.0%	213,624	99.6%	2,720	0.2%	1,447,485	96.6%	1,479,405	98.7%
41	68	0.0%	213,692	99.7%	2,788	0.2%	1,450,273	96.8%	1,480,203	98.8%
42	62	0.0%	213,754	99.7%	2,604	0.2%	1,452,877	96.9%	1,480,933	98.8%
43	51	0.0%	213,805	99.7%	2,193	0.1%	1,455,070	97.1%	1,481,601	98.9%
44	37	0.0%	213,842	99.7%	1,628	0.1%	1,456,698	97.2%	1,482,218	98.9%
45	30	0.0%	213,872	99.7%	1,350	0.1%	1,458,048	97.3%	1,482,798	98.9%
46	34	0.0%	213,906	99.8%	1,564	0.1%	1,459,612	97.4%	1,483,348	99.0%
47	34	0.0%	213,940	99.8%	1,598	0.1%	1,461,210	97.5%	1,483,864	99.0%
48	22	0.0%	213,962	99.8%	1,056	0.1%	1,462,266	97.6%	1,484,346	99.0%
49	37	0.0%	213,999	99.8%	1,813	0.1%	1,464,079	97.7%	1,484,806	99.1%
50	19	0.0%	214,018	99.8%	950	0.1%	1,465,029	97.8%	1,485,229	99.1%
51-100	339	0.2%	214,357	100.0%	22,341	1.5%	1,487,370	99.2%	1,492,245	99.6%
101-200	53	0.0%	214,410	100.0%	6,704	0.4%	1,494,074	99.7%	1,495,274	99.8%
>200	12	0.0%	214,422	100.0%	4,547	0.3%	1,498,621	100.0%	1,498,621	100.0%
Total	214,422	100.0%			1,498,621	100.0%				

City of Petaluma

Single Family Residential Water Bill Distribution FY22

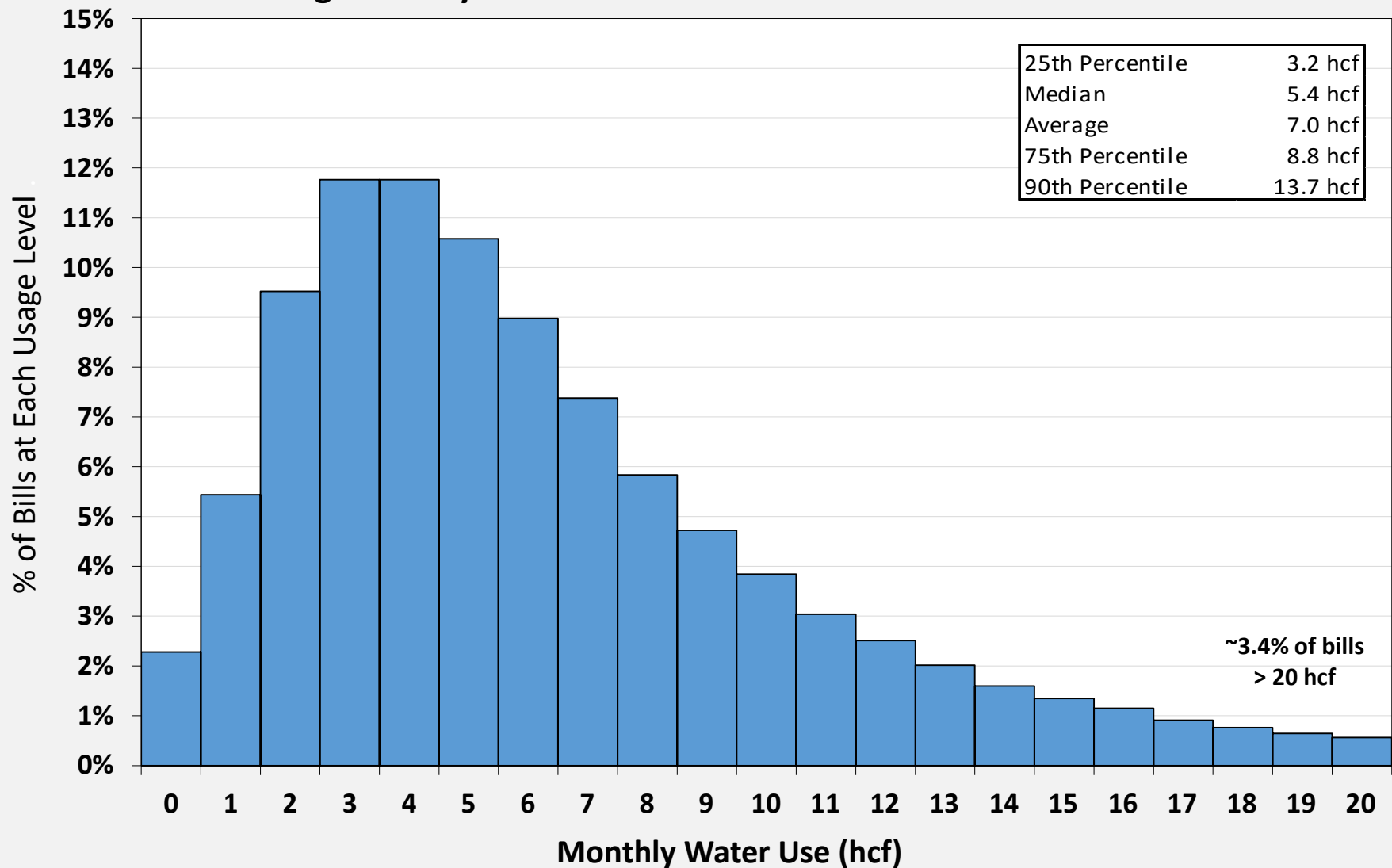


Table 15
City of Petaluma
Single Family Residential Consumption Block Analysis FY21

Median Monthly Use: 6.9 hcf
Average Monthly Use: 9.0 hcf

Monthly Use (hcf)	Number of Bills				Water Use (hcf)				Use Through Break	
	In Block	% of Total	Cumulative	Cumulative %	In Block	% of Ttl	Cumulative	Cumulative %	Use (hcf)	% of Ttl
0	3,675	1.7%	3,675	1.7%	0	0.0%	0	0.0%	0	0.0%
1	7,076	3.3%	10,751	5.0%	7,076	0.4%	7,076	0.4%	209,432	11.0%
2	13,181	6.2%	23,932	11.2%	26,362	1.4%	33,438	1.7%	411,788	21.5%
3	17,924	8.4%	41,856	19.6%	53,772	2.8%	87,210	4.6%	600,963	31.4%
4	20,051	9.4%	61,907	29.0%	80,204	4.2%	167,414	8.8%	772,214	40.4%
5	19,999	9.4%	81,906	38.4%	99,995	5.2%	267,409	14.0%	923,414	48.3%
6	18,220	8.5%	100,126	47.0%	109,320	5.7%	376,729	19.7%	1,054,615	55.2%
7	16,278	7.6%	116,404	54.6%	113,946	6.0%	490,675	25.7%	1,167,596	61.1%
8	13,821	6.5%	130,225	61.1%	110,568	5.8%	601,243	31.5%	1,264,299	66.1%
9	12,047	5.7%	142,272	66.8%	108,423	5.7%	709,666	37.1%	1,347,181	70.5%
10	10,137	4.8%	152,409	71.5%	101,370	5.3%	811,036	42.4%	1,418,016	74.2%
11	8,590	4.0%	160,999	75.5%	94,490	4.9%	905,526	47.4%	1,478,714	77.4%
12	7,433	3.5%	168,432	79.0%	89,196	4.7%	994,722	52.0%	1,530,822	80.1%
13	6,180	2.9%	174,612	81.9%	80,340	4.2%	1,075,062	56.2%	1,575,497	82.4%
14	5,256	2.5%	179,868	84.4%	73,584	3.8%	1,148,646	60.1%	1,613,992	84.4%
15	4,430	2.1%	184,298	86.5%	66,450	3.5%	1,215,096	63.6%	1,647,231	86.2%
16	3,809	1.8%	188,107	88.3%	60,944	3.2%	1,276,040	66.8%	1,676,040	87.7%
17	3,268	1.5%	191,375	89.8%	55,556	2.9%	1,331,596	69.7%	1,701,040	89.0%
18	2,827	1.3%	194,202	91.1%	50,886	2.7%	1,382,482	72.3%	1,722,772	90.1%
19	2,418	1.1%	196,620	92.3%	45,942	2.4%	1,428,424	74.7%	1,741,677	91.1%
20	2,074	1.0%	198,694	93.2%	41,480	2.2%	1,469,904	76.9%	1,758,164	92.0%
21	1,824	0.9%	200,518	94.1%	38,304	2.0%	1,508,208	78.9%	1,772,577	92.7%
22	1,537	0.7%	202,055	94.8%	33,814	1.8%	1,542,022	80.7%	1,785,166	93.4%
23	1,328	0.6%	203,383	95.4%	30,544	1.6%	1,572,566	82.3%	1,796,218	94.0%
24	1,173	0.6%	204,556	96.0%	28,152	1.5%	1,600,718	83.7%	1,805,942	94.5%
25	984	0.5%	205,540	96.4%	24,600	1.3%	1,625,318	85.0%	1,814,493	94.9%
26	872	0.4%	206,412	96.9%	22,672	1.2%	1,647,990	86.2%	1,822,060	95.3%
27	678	0.3%	207,090	97.2%	18,306	1.0%	1,666,296	87.2%	1,828,755	95.7%
28	634	0.3%	207,724	97.5%	17,752	0.9%	1,684,048	88.1%	1,834,772	96.0%
29	529	0.2%	208,253	97.7%	15,341	0.8%	1,699,389	88.9%	1,840,155	96.3%
30	510	0.2%	208,763	98.0%	15,300	0.8%	1,714,689	89.7%	1,845,009	96.5%
31	437	0.2%	209,200	98.2%	13,547	0.7%	1,728,236	90.4%	1,849,353	96.8%
32	359	0.2%	209,559	98.3%	11,488	0.6%	1,739,724	91.0%	1,853,260	97.0%
33	337	0.2%	209,896	98.5%	11,121	0.6%	1,750,845	91.6%	1,856,808	97.1%
34	277	0.1%	210,173	98.6%	9,418	0.5%	1,760,263	92.1%	1,860,019	97.3%
35	271	0.1%	210,444	98.8%	9,485	0.5%	1,769,748	92.6%	1,862,953	97.5%
36	210	0.1%	210,654	98.8%	7,560	0.4%	1,777,308	93.0%	1,865,616	97.6%
37	187	0.1%	210,841	98.9%	6,919	0.4%	1,784,227	93.3%	1,868,069	97.7%
38	203	0.1%	211,044	99.0%	7,714	0.4%	1,791,941	93.7%	1,870,335	97.9%
39	164	0.1%	211,208	99.1%	6,396	0.3%	1,798,337	94.1%	1,872,398	98.0%
40	157	0.1%	211,365	99.2%	6,280	0.3%	1,804,617	94.4%	1,874,297	98.1%
41	131	0.1%	211,496	99.2%	5,371	0.3%	1,809,988	94.7%	1,876,039	98.1%
42	115	0.1%	211,611	99.3%	4,830	0.3%	1,814,818	94.9%	1,877,650	98.2%
43	103	0.0%	211,714	99.3%	4,429	0.2%	1,819,247	95.2%	1,879,146	98.3%
44	103	0.0%	211,817	99.4%	4,532	0.2%	1,823,779	95.4%	1,880,539	98.4%
45	88	0.0%	211,905	99.4%	3,960	0.2%	1,827,739	95.6%	1,881,829	98.5%
46	83	0.0%	211,988	99.5%	3,818	0.2%	1,831,557	95.8%	1,883,031	98.5%
47	76	0.0%	212,064	99.5%	3,572	0.2%	1,835,129	96.0%	1,884,150	98.6%
48	81	0.0%	212,145	99.5%	3,888	0.2%	1,839,017	96.2%	1,885,193	98.6%
49	60	0.0%	212,205	99.6%	2,940	0.2%	1,841,957	96.4%	1,886,155	98.7%
50	64	0.0%	212,269	99.6%	3,200	0.2%	1,845,157	96.5%	1,887,057	98.7%
51-100	731	0.3%	213,000	99.9%	46,824	2.4%	1,891,981	99.0%	1,900,006	99.4%
101-200	88	0.0%	213,088	100.0%	11,265	0.6%	1,903,246	99.6%	1,905,146	99.7%
>200	19	0.0%	213,107	100.0%	8,179	0.4%	1,911,425	100.0%	1,911,425	100.0%
Total	213,107	100.0%			1,911,425	100.0%				

City of Petaluma

Single Family Residential Water Bill Distribution FY21

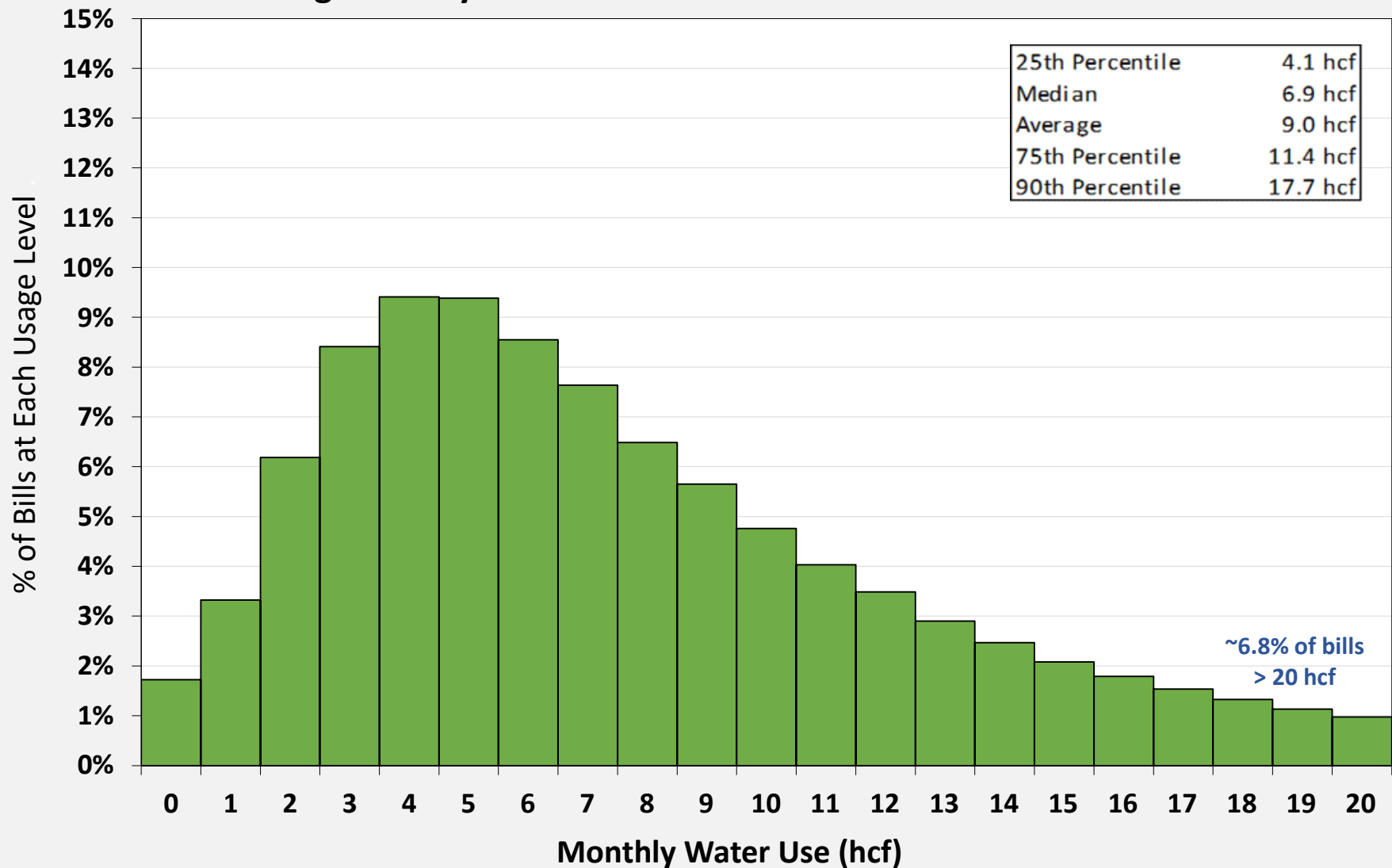


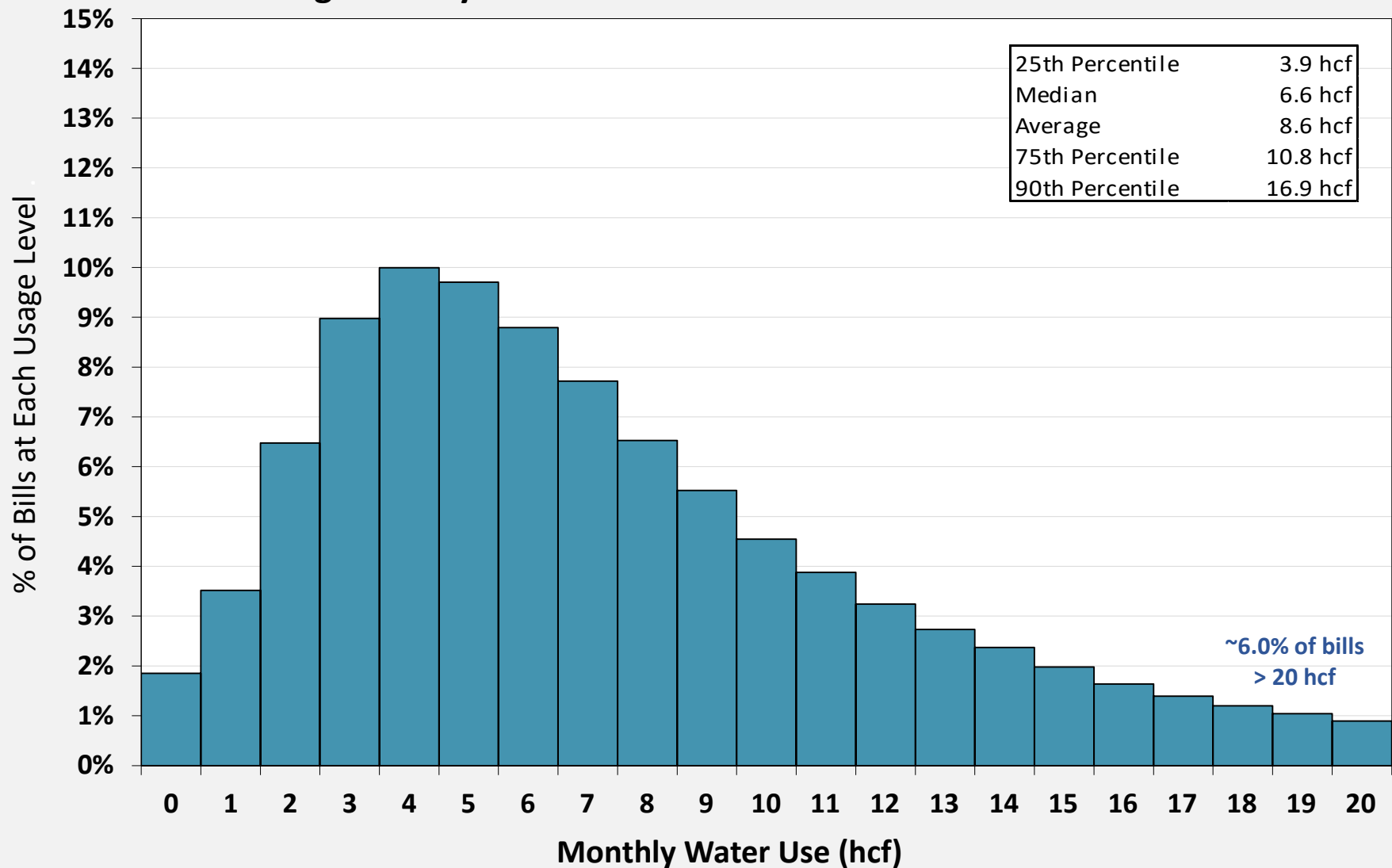
Table 16
City of Petaluma
Single Family Residential Consumption Block Analysis FY20

Median Monthly Use: 6.9 hcf
Average Monthly Use: 8.6 hcf

Monthly Use (hcf)	Number of Bills				Water Use (hcf)				Use Through Break	
	In Block	% of Total	Cumulative	Cumulative %	In Block	% of Ttl	Cumulative	Cumulative %	Use (hcf)	% of Ttl
0	3,933	1.9%	3,933	1.9%	0	0.0%	0	0.0%	0	0.0%
1	7,467	3.5%	11,400	5.4%	7,467	0.4%	7,467	0.4%	208,420	11.4%
2	13,755	6.5%	25,155	11.8%	27,510	1.5%	34,977	1.9%	409,373	22.4%
3	19,057	9.0%	44,212	20.8%	57,171	3.1%	92,148	5.0%	596,571	32.7%
4	21,221	10.0%	65,433	30.8%	84,884	4.6%	177,032	9.7%	764,712	41.9%
5	20,614	9.7%	86,047	40.5%	103,070	5.6%	280,102	15.3%	911,632	49.9%
6	18,673	8.8%	104,720	49.3%	112,038	6.1%	392,140	21.5%	1,037,938	56.8%
7	16,393	7.7%	121,113	57.0%	114,751	6.3%	506,891	27.8%	1,145,571	62.7%
8	13,855	6.5%	134,968	63.6%	110,840	6.1%	617,731	33.8%	1,236,811	67.7%
9	11,725	5.5%	146,693	69.1%	105,525	5.8%	723,256	39.6%	1,314,196	72.0%
10	9,657	4.5%	156,350	73.6%	96,570	5.3%	819,826	44.9%	1,379,856	75.6%
11	8,234	3.9%	164,584	77.5%	90,574	5.0%	910,400	49.9%	1,435,859	78.6%
12	6,887	3.2%	171,471	80.7%	82,644	4.5%	993,044	54.4%	1,483,628	81.3%
13	5,796	2.7%	177,267	83.5%	75,348	4.1%	1,068,392	58.5%	1,524,510	83.5%
14	5,038	2.4%	182,305	85.8%	70,532	3.9%	1,138,924	62.4%	1,559,596	85.4%
15	4,199	2.0%	186,504	87.8%	62,985	3.4%	1,201,909	65.8%	1,589,644	87.1%
16	3,474	1.6%	189,978	89.5%	55,584	3.0%	1,257,493	68.9%	1,615,493	88.5%
17	2,961	1.4%	192,939	90.9%	50,337	2.8%	1,307,830	71.6%	1,637,868	89.7%
18	2,548	1.2%	195,487	92.1%	45,864	2.5%	1,353,694	74.1%	1,657,282	90.8%
19	2,213	1.0%	197,700	93.1%	42,047	2.3%	1,395,741	76.4%	1,674,148	91.7%
20	1,896	0.9%	199,596	94.0%	37,920	2.1%	1,433,661	78.5%	1,688,801	92.5%
21	1,591	0.7%	201,187	94.7%	33,411	1.8%	1,467,072	80.3%	1,701,558	93.2%
22	1,361	0.6%	202,548	95.4%	29,942	1.6%	1,497,014	82.0%	1,712,724	93.8%
23	1,205	0.6%	203,753	96.0%	27,715	1.5%	1,524,729	83.5%	1,722,529	94.3%
24	1,003	0.5%	204,756	96.4%	24,072	1.3%	1,548,801	84.8%	1,731,129	94.8%
25	887	0.4%	205,643	96.8%	22,175	1.2%	1,570,976	86.0%	1,738,726	95.2%
26	741	0.3%	206,384	97.2%	19,266	1.1%	1,590,242	87.1%	1,745,436	95.6%
27	639	0.3%	207,023	97.5%	17,253	0.9%	1,607,495	88.0%	1,751,405	95.9%
28	558	0.3%	207,581	97.8%	15,624	0.9%	1,623,119	88.9%	1,756,735	96.2%
29	482	0.2%	208,063	98.0%	13,978	0.8%	1,637,097	89.7%	1,761,507	96.5%
30	414	0.2%	208,477	98.2%	12,420	0.7%	1,649,517	90.3%	1,765,797	96.7%
31	395	0.2%	208,872	98.4%	12,245	0.7%	1,661,762	91.0%	1,769,673	96.9%
32	384	0.2%	209,256	98.5%	12,288	0.7%	1,674,050	91.7%	1,773,154	97.1%
33	294	0.1%	209,550	98.7%	9,702	0.5%	1,683,752	92.2%	1,776,251	97.3%
34	264	0.1%	209,814	98.8%	8,976	0.5%	1,692,728	92.7%	1,779,054	97.4%
35	234	0.1%	210,048	98.9%	8,190	0.4%	1,700,918	93.2%	1,781,593	97.6%
36	199	0.1%	210,247	99.0%	7,164	0.4%	1,708,082	93.5%	1,783,898	97.7%
37	198	0.1%	210,445	99.1%	7,326	0.4%	1,715,408	93.9%	1,786,004	97.8%
38	168	0.1%	210,613	99.2%	6,384	0.3%	1,721,792	94.3%	1,787,912	97.9%
39	159	0.1%	210,772	99.3%	6,201	0.3%	1,727,993	94.6%	1,789,652	98.0%
40	140	0.1%	210,912	99.3%	5,600	0.3%	1,733,593	94.9%	1,791,233	98.1%
41	124	0.1%	211,036	99.4%	5,084	0.3%	1,738,677	95.2%	1,792,674	98.2%
42	89	0.0%	211,125	99.4%	3,738	0.2%	1,742,415	95.4%	1,793,991	98.2%
43	88	0.0%	211,213	99.5%	3,784	0.2%	1,746,199	95.6%	1,795,219	98.3%
44	87	0.0%	211,300	99.5%	3,828	0.2%	1,750,027	95.8%	1,796,359	98.4%
45	74	0.0%	211,374	99.5%	3,330	0.2%	1,753,357	96.0%	1,797,412	98.4%
46	82	0.0%	211,456	99.6%	3,772	0.2%	1,757,129	96.2%	1,798,391	98.5%
47	76	0.0%	211,532	99.6%	3,572	0.2%	1,760,701	96.4%	1,799,288	98.5%
48	49	0.0%	211,581	99.6%	2,352	0.1%	1,763,053	96.6%	1,800,109	98.6%
49	58	0.0%	211,639	99.7%	2,842	0.2%	1,765,895	96.7%	1,800,881	98.6%
50	28	0.0%	211,667	99.7%	1,400	0.1%	1,767,295	96.8%	1,801,595	98.7%
51-100	574	0.3%	212,241	99.9%	36,312	2.0%	1,803,607	98.8%	1,812,007	99.2%
101-200	83	0.0%	212,324	100.0%	11,094	0.6%	1,814,701	99.4%	1,817,601	99.5%
>200	29	0.0%	212,353	100.0%	11,277	0.6%	1,825,978	100.0%	1,825,978	100.0%
Total	212,353	100.0%			1,825,978	100.0%				

City of Petaluma

Single Family Residential Water Bill Distribution FY20



Water Shortage Emergency Rate Adjustments

Table 1
City of Petaluma
Derivation of Water Shortage Emergency Rate Adjustments

Water

Derivation of Water Shortage Emergency Rate Adjustments					
	Water Shortage Levels				
	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%
Water Demand Reduction Target %	15%	25%	35%	45%	55%
Estimated Water Sales (hcf) 2023/24	2,692,000	2,692,000	2,692,000	2,692,000	2,692,000
Water Reduction Target (hcf) 2023/24	403,800	673,000	942,200	1,211,400	1,480,600
Net Use with Reduction (hcf) 2023/24	2,288,200	2,019,000	1,749,800	1,480,600	1,211,400
Uniform Water Rate (All Other Customers) 2023/24	5.29	\$5.29	\$5.29	\$5.29	\$5.29
Revenue Loss by Year 2023/24	\$2,136,102	\$3,560,170	\$4,984,238	\$6,408,306	\$7,832,374
Est. Reduced Expenses due to Lower Use					
Variable Cost per Unit (\$/hcf) ¹ 2023/24	\$2.77	\$2.77	\$2.77	\$2.77	\$2.77
Reduced Variable Costs 2023/24	\$1,117,634	\$1,862,724	\$2,607,813	\$3,352,903	\$4,097,992
Add'l Conservation & Compliance Costs²	\$50,000	\$100,000	\$150,000	\$200,000	\$300,000
Net Financial Impact					
Revenue Loss - Reduced Exps + Add'l Costs 2023/24	\$1,068,468	\$1,797,446	\$2,526,425	\$3,255,403	\$4,034,382
Required Rate Adjustment (\$/hcf)					
Net Financial Impact / Net Remaining Use 2023/24	\$0.47	\$0.89	\$1.44	\$2.20	\$3.33
Rate Adjustment as % of Standard Water	8.83%	16.83%	27.29%	41.56%	62.96%
Rate Rounded Down	8%	16%	27%	41%	62%

1 Includes projected SCWA wholesale water rate plus \$0.10 per hcf for estimated average pumping costs.

2 Estimate of additional costs that would be incurred to achieve water reduction targets for each Water Shortage Level.

Table 2
City of Petaluma
Water Shortage Emergency Rate Adjustments

Water

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

Note: 1 unit = one hundred cubic feet (hcf), or approximately 748 gallons.

* Each year, the Maximum Water Rate Adjustment will be adjusted on July 1 based on a) the Maximum Rate Adjustment % corresponding to each Water Shortage Level multiplied by b) the Water Consumption Charge implemented for All Other Customers resulting in c) a Maximum Water Rate Adjustment per hcf that would be applied to all Water Consumption Charges.

Table 3

City of Petaluma

Wastewater

Derivation of Wastewater Rate Adjustments for Water Shortage Emergencies

Derivation of Wastewater Rate Adjustments for Water Shortage Emergencies					
	Water Shortage Levels				
	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%
Est Reduction in Billed Wastewater Use¹	6%	9%	12%	15%	20%
Estimated Wastewater Billed Use (hcf)² 2023/24	1,585,800	1,585,800	1,585,800	1,585,800	1,585,800
Est Reduction in Billed Use (hcf)³ 2023/24	95,148	142,722	190,296	237,870	317,160
Net Use with Reduction (hcf) 2023/24	1,490,652	1,443,078	1,395,504	1,347,930	1,268,640
Residential Wastewater Commodity Charge 2023/24	\$9.45	\$9.45	\$9.45	\$9.45	\$9.45
Revenue Loss by Year 2023/24	\$898,682	\$1,348,024	\$1,797,365	\$2,246,706	\$2,995,608
Est. Reduced Expenses due to Lower Use					
Variable Cost per Unit (\$/hcf) ³ 2023/24	1.83	\$1.83	\$1.83	\$1.83	\$1.83
Reduced Variable Costs 2023/24	\$174,121	\$261,181	\$348,242	\$435,302	\$580,403
Net Financial Impact Revenue Loss - Reduced Expenses 2023/24	\$724,562	\$1,086,842	\$1,449,123	\$1,811,404	\$2,415,205
Required Rate Adjustment (\$/hcf) Net Financial Impact / Net Remaining Use 2023/24	\$0.49	\$0.75	\$1.04	\$1.34	\$1.90
Rate Adjustment as % of Residential Wastewater Commodity Charge	5.15%	7.97%	10.99%	14.23%	20.16%
Rounded Down	5%	7%	10%	14%	20%

1 Reduction in wastewater use will be substantially lower than reduction in water use as a) residential wastewater use is billed based on the lowest 2 winter months and accounts for roughly 64% of total billed usage, and b) irrigation meter use is excluded.

2 Includes projected residential, commercial and industrial billable usage and estimated Penngrove use.

3 Estimated based on costs of electricity, natural gas, and chemicals from Fiscal Year 2022/23 Budget with 3.5% escalation.

Table 4

City of Petaluma

Wastewater

Wastewater Rate Adjustments for Water Shortage Emergencies

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

Note: 1 unit = one hundred cubic feet (hcf), or approximately 748 gallons.

* Each year, the Maximum Wastewater Rate Adjustment will be adjusted on July 1 based on a) the Maximum Rate Adjustment % corresponding each Water Shortage Level multiplied by b) the Residential Wastewater Commodity Charge resulting in c) a Maximum Wastewater Rate Adjustment per hcf that would be applied to all Wastewater Commodity Charges.

SEWER TABLES

Table 1
City of Petaluma
Wastewater Rate History

	2017 Jul-1	2018 Jul-1	2019 Jul-1	2020 Jul-1	2021 Aug- 1	2022 Mar- 1
FIXED MONTHLY CHARGES						
<i>Fixed monthly charge billed per residential dwelling unit or based on non-residential meter size.</i>						
RESIDENTIAL						
<i>Fixed monthly charge per dwelling unit</i>						
Single Family Residential	\$23.41	\$26.94	\$30.99	<u>no change</u> \$30.99	<u>no change</u> \$30.99	\$37.93
Multi-Unit Residential	19.90	22.89	26.35	26.35	26.35	32.24
Unmetered Residential	86.69	89.99	94.92	94.92	94.92	100.88
NON-RESIDENTIAL						
<i>Fixed monthly charge based on meter size</i>						
Up to 3/4-inch meter	\$23.41	\$26.94	\$30.99	\$30.99	\$30.99	\$37.93
1-inch meter	36.33	42.67	49.87	49.87	49.87	62.43
1-1/2 inch meter	68.45	81.86	96.96	96.96	96.96	123.66
2-inch meter	107.09	128.95	153.50	153.50	153.50	197.15
3-inch meter	197.29	238.89	285.49	285.49	285.49	368.63
4-inch meter	326.13	395.93	474.05	474.05	474.05	613.30
6-inch meter	648.05	788.38	945.34	945.34	945.34	1,226.00
METERED INDUSTRIAL						
<i>Fixed monthly charge based on meter size</i>						
2-inch ultrasonic meter	\$293.89		\$426.90	\$426.90	\$426.90	\$552.36
10-inch ultrasonic meter	648.08		945.35	945.35	945.35	1,226.00
2-inch magnetic meter	197.29		285.49	285.49	285.49	368.63
3-inch magnetic meter	425.04		622.72	622.72	622.72	809.57
4-inch magnetic meter	681.47		993.08	993.08	993.08	1,287.24
6-inch magnetic meter	1,519.78		2,066.67	2,066.67	2,066.67	2,573.31
WASTEWATER COMMODITY CHARGES						
<i>Volumetric charge billed per hundred cubic feet (hcf) of estimated wastewater discharge.</i>						
RESIDENTIAL						
<i>Based on estimated wastewater discharge from low-use wet weather months.</i>						
Single Family Residential	\$9.04	\$9.01	\$9.13	<u>no change</u> \$9.13	<u>no change</u> \$9.13	\$8.99
Multi-Unit Residential	9.04	9.01	9.13	9.13	9.13	8.99
COMMERCIAL						
<i>Billed based on metered water use</i>						
Low Strength	\$8.83	\$8.79	\$8.89	\$8.89	\$8.89	\$8.66
Medium Strength	11.04	11.21	11.56	11.56	11.56	11.78
High Strength	14.51	14.88	15.48	15.48	15.48	16.01
METERED INDUSTRIAL						
<i>Based on metered use & estimated wastewater loadings</i>						
Flow (\$/hcf)	\$7.13		\$7.39	\$7.39	\$7.39	\$7.44
BOD (\$/lb)	0.79		1.04	1.04	1.04	1.26
SS (\$/lb)	0.91		1.19	1.19	1.19	1.43

Table 2
City of Petaluma Wastewater Rate Study 2016
Wastewater Fund Reserves

As of June 30:	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Wastewater Fund Reserves											
Wastewater Fund Reserves	\$21,227,704	\$26,634,244	\$28,589,579	\$29,553,900	\$33,319,323	\$29,952,004	\$30,769,545	\$27,306,357	\$31,419,074	\$39,748,731	\$46,772,652

Source: Unrestricted Fund Balances from Annual Comprehensive Financial Reports.
Note: Excludes approximately \$3.8 million in wastewater rate stabilization reserves.

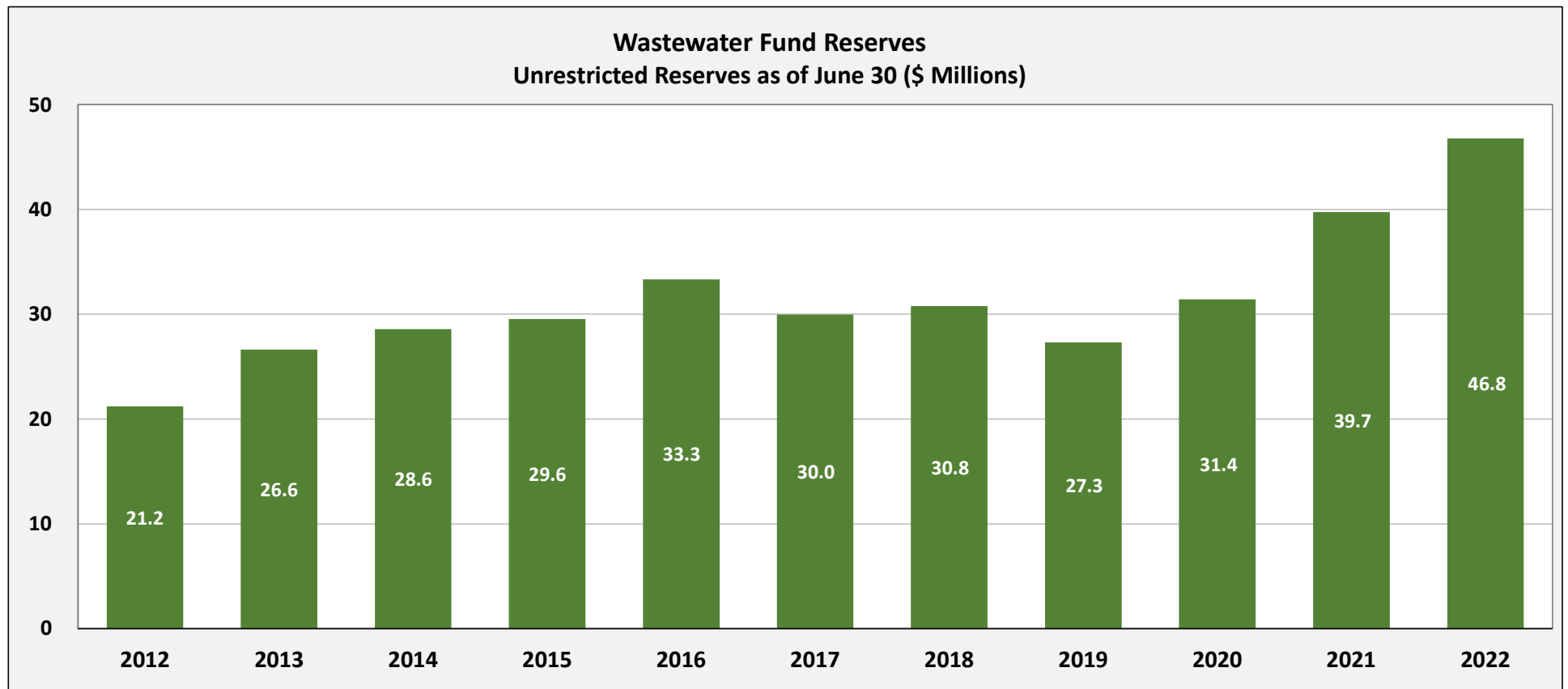


Table 3
City of Petaluma
Wastewater Debt Service

Year Ending June 30	2005 State Revolving Fund Loan	2017 Wastewater Refunding Bonds	2019 Wastewater Refunding Bonds	Total
2016	\$8,364,647	-	-	\$8,364,647
2017	8,364,647	-	-	8,364,647
2018	8,364,647	706,891	-	9,071,538
2019	8,364,647	805,319	-	9,169,966
2020	-	805,319	7,645,510	8,450,829
2021	-	805,319	7,756,500	8,561,819
2022	-	805,319	7,756,500	8,561,819
2023	-	805,319	7,759,000	8,564,319
2024	-	805,319	7,758,250	8,563,569
2025	-	805,319	7,753,750	8,559,069
2026	-	805,319	7,755,000	8,560,319
2027	-	805,319	7,756,000	8,561,319
2028	-	805,319	7,756,000	8,561,319
2029	-	805,319	7,754,250	8,559,569
2030	-	4,075,319	-	4,075,319
2031	-	4,079,519	-	4,079,519
2032	-	4,078,319	-	4,078,319
2033	-	4,076,719	-	4,076,719
2034	-	4,076,319	-	4,076,319
2035	-	4,077,619	-	4,077,619
2036	-	1,830,469	-	1,830,469
2037	-	-	-	-

Table 4
City of Petaluma
Wastewater Capital Improvement Plan

Wastewater CIP Revised 4/14/23
CIP Funding Needs First 3 Years \$58,156,000

Wastewater System Capital Improvement Plan													
	CIP Number	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	TOTAL
Construction Cost Escalation		1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	
REPLACEMENTS & UPGRADES													
Sewer Master Plan 10-YR Rehab & Replace Program				1,253,000	1,253,000	1,253,000	1,253,000	1,253,000	1,253,000	1,253,000	1,253,000	1,253,000	\$11,277,000
Manhole Rehabilitation	C66501003	350,000		356,000		356,000		356,000		356,000		356,000	2,130,000
Sewer Main Replacement - Payran and Madison	C66402245	3,000,000											3,000,000
Sewer Main Replacement - Howard St	C66402348	1,580,000	1,463,000										3,043,000
Sewer Main Replacement - D St	New	628,000	2,466,000										3,094,000
Sewer Main Replacement Program	Projected			2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	22,500,000
Oakmead, Redwood, and Outlet Mall LS Upgrades					960,000	1,880,000							2,840,000
PIPS Force main Replacement	C66502032	3,478,000	10,257,000	4,150,000									17,885,000
Replace PIPS High Capacity Pumps	C66501930	370,000	2,499,000										2,869,000
C Street PS and Collection System Upgrades	C66502042	115,000	1,100,000	2,905,000									4,120,000
Sewer Force Main Replacement Program	C66402246	30,000	82,000	450,000	313,000								875,000
Corp Yard Master Plan	C66402144	180,000	125,000										305,000
Advanced Metering Infrastructure (AMI)	E67502242		1,499,000										1,499,000
ECWRF: Outfall Replacement	C66501838	1,790,000											1,790,000
ECWRF: Chemical System Upgrade	C66501840	3,088,000	4,527,000										7,615,000
ECWRF: Treatment Process System Energy Plan	New	485,000	560,000	500,000									1,545,000
B2B: CNG Fueling Station	C66501518	305,000											305,000
B2B: High Strength Waste Facilities	C66401728	220,000											220,000
Subtotal		15,619,000	24,578,000	12,114,000	5,026,000	5,989,000	3,753,000	4,109,000	3,753,000	4,109,000	3,753,000	4,109,000	86,912,000
CAPACITY PROJECTS													
ECWRF: Oxidation Pond Flow Structure Rehab	C66402349	329,000	3,923,000										4,252,000
Subtotal		329,000	3,923,000	0	0	0	0	0	0	0	0	0	4,252,000
SUBTOTAL WASTEWATER CIP (Excluding ECWRF Rehab/Upgrade)		15,948,000	28,501,000	12,114,000	5,026,000	5,989,000	3,753,000	4,109,000	3,753,000	4,109,000	3,753,000	4,109,000	91,164,000
SUBTOTAL WITH 3% COST ESCALATION		15,948,000	29,356,000	12,852,000	5,492,000	6,741,000	4,351,000	4,906,000	4,616,000	5,205,000	4,897,000	5,522,000	99,886,000
ECWRF Treatment Process Rehab & Upgrade <i>With 3% Cost Escalation</i>	Future Est						10,000,000 11,593,000	20,000,000 23,881,000	30,000,000 36,896,000	30,000,000 38,003,000	30,000,000 39,143,000	40,000,000 53,757,000	160,000,000 203,273,000
TOTAL WASTEWATER CIP WITH 3% COST ESCALATION													
WASTEWATER CIP		15,948,000	29,356,000	12,852,000	5,492,000	6,741,000	4,351,000	4,906,000	4,616,000	5,205,000	4,897,000	5,522,000	99,886,000
ECWRF REHAB & UPGRADE		0	0	0	0	0	11,593,000	23,881,000	36,896,000	38,003,000	39,143,000	53,757,000	203,273,000
TOTAL		15,948,000	29,356,000	12,852,000	5,492,000	6,741,000	15,944,000	28,787,000	41,512,000	43,208,000	44,040,000	59,279,000	303,159,000

Table 5
City of Petaluma
Recycled Water Capital Improvement Plan

Recycled Water CIP Revised 4/14/23

Recycled Water Capital Improvement Plan														
	CIP Number	Allocation	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	TOTAL
Construction Cost Escalation			1.00	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.27	1.30	1.34	
REPLACEMENTS & UPGRADES														
Turnout and Meter Replacements (Ag)	C66401302	50% RW / 50% Wtr	62,000	686,000									1,500,000	2,248,000
IWMP Integrated Water Master Plan			400,000	400,000										800,000
Subtotal			462,000	1,086,000	0	0	0	0	0	0	0	0	1,500,000	3,048,000
CAPACITY PROJECTS														
ECWRF Tertiary Upgrades	C66401416	25% RW / 75% Wtr	8,494,000	7,039,000										15,533,000
Ag Recycled Water Pipeline Expansions			515,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	18,515,000
Urban Recycled Water Pipeline Expansions	Future		2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	18,000,000
Maria Recyled Water Pipeine Expn (urban)	C66501834	25% RW / 75% Wtr	455,000	2,960,000										3,415,000
Park Irrigation Conversions	New	25% RW / 75% Wtr	170,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,670,000
Adobe Road Pipeline Expasion (Ag)	C66501936		3,770,000	1,597,000										5,367,000
Recycled Water Truck Fill Station			287,000	287,000										574,000
Regional Recycled Water Storage	Future									2,000,000	2,000,000	2,000,000	2,000,000	8,000,000
Subtotal			13,176,000	12,648,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	64,074,000
TOTAL RECYCLED WATER CIP			13,638,000	13,734,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	4,250,000	5,750,000	67,122,000
TOTAL WITH 3% COST ESCALATION			13,638,000	14,146,000	4,509,000	4,644,000	4,783,000	4,927,000	5,075,000	5,227,000	5,384,000	5,545,000	7,728,000	75,606,000
GRANTS & SUPPLEMENTAL FUNDING SOURCES														
DWR & Title XVI Grants for ECWRF Tertiary	Awarded	25% RW / 75% Wtr	3,600,000	4,716,000										8,316,000
Title XVI Grant for Maria RW Pipline Exp	Awarded		804,000											804,000
DWR & Title XVI Grants Adobe Rd Pipeline	Awarded		2,903,000	1,402,000										4,305,000
Grant for Recycled Water Truck Fill Station	Applied/Pending		215,000	215,000										430,000
Grants for Urban Recycled Wtr Expansions	Estimated 50%	25% RW / 75% Wtr		0	1,061,000	1,093,000	1,126,000	1,159,000	1,194,000	1,230,000	1,267,000	1,305,000	1,344,000	10,779,000
Grants for Ag Recycled Wtr Expansions	Estimated 25%			0	530,000	546,000	563,000	580,000	597,000	615,000	633,000	652,000	672,000	5,388,000
New Ag Customer Contributions	tbd													0
Subtotal			6,718,000	7,137,000	1,591,000	1,639,000	1,689,000	1,739,000	1,791,000	1,845,000	1,900,000	1,957,000	2,016,000	30,022,000
NET CITY RECYCLED WATER CIP FUNDING REQUIREMENT			6,920,000	7,009,000	2,918,000	3,005,000	3,094,000	3,188,000	3,284,000	3,382,000	3,484,000	3,588,000	5,712,000	45,584,000
NET FUNDING ALLOCATION														
RECYCLED WATER (WASTEWATER)		78.5%	6,251,000	5,004,000	2,026,000	2,137,000	2,251,000	2,370,000	2,492,000	2,617,000	2,747,000	2,879,000	5,032,000	35,806,000
WATER		21.5%	669,000	2,005,000	892,000	868,000	843,000	818,000	792,000	765,000	737,000	709,000	680,000	9,778,000

Table 6

City of Petaluma

Wastewater Historical Revenues & Expenses

For Internal Reference Only

	Actual 2017/18	Actual 2018/19	Actual 2019/20	Actual 2020/21	Actual 2021/22
REVENUES					
Wastewater Rate Revenues					
Single Family Residential	12,882,447	13,995,321	14,655,047	15,445,354	15,219,723
Multi-Family Residential	4,085,232	4,332,029	4,537,784	4,694,829	4,799,409
Commercial	4,117,233	4,106,105	4,067,478	3,724,618	3,847,393
Industrial	3,185,165	3,378,593	3,179,875	3,378,724	3,181,518
Public	294,731	308,709	332,970	296,179	301,201
<i>Subtotal</i>	<u>24,564,809</u>	<u>26,120,757</u>	<u>26,773,154</u>	<u>27,539,703</u>	<u>27,349,245</u>
Penngrove	551,128	939,598	561,446	504,500	580,464
Reclaimed Water	361,706	427,601	491,186	729,874	829,874
Interest Earnings/Investments	421,505	717,509	663,270	321,515	266,765
Interest Earnings/Gains (Excludes GASB 31)	34,539	99,289	79,177	(4,325)	0
Connection Fees/Capacity Charges	1,496,871	15,196	1,485,108	792,726	2,010,346
Other/Miscellaneous	20,448	22,708	8,220	955	288,360
Permits (Film/Taxi/Fire) & Other 48010?	0	0	0	0	269,985
Grants/Contributions (in Fund 6600 only)	0	0	0	0	41,200
Transfer In for Unspent Capital Funds	110,336	180,065	455,294	271,836	243,820
Total Revenues	27,451,005	28,342,658	30,061,562	29,884,947	31,325,053
EXPENSES					
Operating & Maintenance Expenses					
Wastewater Administration	1,761,417	1,273,442	1,138,584	2,104,567	3,949,522
Wastewater Collection System	956,288	857,359	813,849	718,701	892,986
Wastewater Sewage Pump Stations	426,379	469,145	532,957	551,300	679,588
Wastewater Customer Service	88,162	93,207	260,381	405,211	37,886
Wastewater Industrial	464,274	486,716	554,626	480,125	565,415
Wastewater Reclamation	674,251	845,969	703,296	727,409	901,415
Wastewater Storm Drain	156,701	161,526	145,544	122,039	133,908
Wastewater Ellis Creek Operations	3,385,816	3,815,311	4,686,848	4,667,464	5,373,447
WWTP Electricity/Natural Gas	1,372,059	1,373,967	1,441,666	1,549,123	1,869,468
<i>Subtotal</i>	<u>9,285,347</u>	<u>9,376,642</u>	<u>10,277,751</u>	<u>11,325,939</u>	<u>14,403,634</u>
Debt Service (From Debt Schedules)					
2017 Wastewater Bonds	706,891	805,319	805,319	805,319	805,319
2019 Wastewater Bonds	-	-	7,645,510	7,756,500	7,756,500
2005 SRF Loan	8,364,647	8,364,647	711,347	0	0
<i>Subtotal</i>	<u>9,071,538</u>	<u>9,169,966</u>	<u>9,162,176</u>	<u>8,561,819</u>	<u>8,561,819</u>
Net Wastewater CIP					
Annual CIP Transfer	10,111,412	10,322,210	6,776,060	1,623,000	4,089,138
<i>Subtotal</i>	<u>10,111,412</u>	<u>10,322,210</u>	<u>6,776,060</u>	<u>1,623,000</u>	<u>4,089,138</u>
Total Expenses	28,468,296	28,868,817	26,215,987	21,510,758	27,054,591
Transfers/Adjustments					
GASB 68 Annual Adjustment	(56,724)	569,838	1,122,271	0	(1,373,292)
<i>Subtotal</i>	<u>(56,724)</u>	<u>569,838</u>	<u>1,122,271</u>	<u>0</u>	<u>(1,373,292)</u>
Total Expenses & Transfers/Adjustments	28,411,572	29,438,655	27,338,258	21,510,758	25,681,299

Table 7
City of Petaluma
Billed Sewer Use (hcf)

Excludes Industrial Use

Note: Residential partially based on prior year winter water use

	Jul 7	Aug 8	Sep 9	Oct 10	Nov 11	Dec 12	Jan 1	Feb 2	Mar 3	Apr 4	May 5	Jun 6	Total
2022/23										estimated	estimated	estimated	estimated
c210 Single Family Residential	82,171	79,898	80,088	81,515	78,504	76,415	79,309	72,020	72,000	72,000	80,000	88,000	941,919
c205 Multifamily Residential	3,602	3,516	3,467	3,581	3,447	3,329	3,671	3,419	3,444	3,450	3,450	3,500	41,876
c215 Commercial Low	17,816	15,176	16,667	19,139	15,466	12,677	15,121	11,907	11,564	11,600	13,000	14,000	174,134
c220 Commercial Medium	1,697	1,428	1,386	1,734	1,375	1,554	1,543	1,412	1,364	1,350	1,400	1,400	17,642
c225 Commercial High	11,313	9,347	9,802	11,793	10,075	9,630	10,889	8,699	8,868	8,800	9,000	10,000	118,216
Total	116,598	109,365	111,410	117,763	108,868	103,604	110,533	97,457	97,239	97,200	106,850	116,900	1,293,787
2021/22													
c210 Single Family Residential	95,412	97,074	92,921	95,653	86,159	77,529	90,110	81,413	84,149	90,063	84,121	86,941	1,061,544
c205 Multifamily Residential	3,348	3,392	3,299	3,354	3,327	3,240	3,389	3,224	3,252	3,448	3,400	3,481	40,153
c215 Commercial Low	17,110	21,891	17,915	20,192	14,971	12,699	15,559	12,464	13,588	16,715	13,280	14,706	191,090
c220 Commercial Medium	1,254	1,588	1,225	1,669	1,350	1,318	1,662	1,352	1,430	1,633	1,531	1,301	17,312
c225 Commercial High	8,831	10,998	8,477	10,966	8,393	7,450	10,367	7,022	8,380	10,749	8,721	8,966	109,319
Total	125,955	134,942	123,837	131,833	114,199	102,236	121,086	105,474	110,800	122,608	111,052	115,395	1,419,418
2020/21													
c210 Single Family Residential	76,302	98,643	96,648	95,702	97,503	92,446	94,614	86,720	87,138	89,005	95,888	92,798	1,103,408
c205 Multifamily Residential	2,926	3,160	3,125	3,095	3,153	3,050	3,128	2,960	3,071	3,101	3,145	3,136	37,049
c215 Commercial Low	9,549	21,457	16,864	16,968	20,508	14,529	15,133	12,251	13,492	13,699	18,511	16,244	189,205
c220 Commercial Medium	950	1,520	1,335	1,216	1,464	1,259	1,368	1,127	1,180	1,214	1,482	1,304	15,417
c225 Commercial High	4,355	9,592	7,235	7,752	9,735	7,547	7,758	6,393	7,380	8,098	10,431	8,815	95,090
Total	94,082	134,372	125,206	124,733	132,362	118,830	122,001	109,451	112,260	115,117	129,457	122,298	1,440,169
2019/20													
c210 Single Family Residential	87,840	88,131	90,146	87,754	89,361	84,803	82,722	86,502	83,274	83,706	88,757	88,057	1,041,053
c205 Multifamily Residential	1,958	2,017	2,034	2,027	2,596	2,659	2,650	2,753	2,734	2,743	2,783	2,768	29,723
c215 Commercial Low	18,280	18,449	24,444	15,886	22,947	16,356	14,088	17,022	20,748	13,458	13,227	13,665	208,570
c220 Commercial Medium	1,439	1,469	1,843	1,397	1,897	1,430	1,410	1,679	1,443	1,230	1,293	1,257	17,787
c225 Commercial High	10,308	11,020	14,185	11,041	13,105	9,995	10,132	11,631	9,550	7,452	6,198	5,864	120,482
Total	119,826	121,086	132,652	118,106	129,905	115,244	111,003	119,586	117,749	108,589	112,258	111,612	1,417,616
2018/19													
c210 Single Family Residential	90,974	92,877	94,958	92,216	90,238	92,916	83,671	88,648	80,536	81,128	87,692	93,008	1,068,861
c205 Multifamily Residential	2,102	2,296	2,371	2,337	2,331	2,376	2,305	2,371	2,284	2,304	2,289	2,447	27,813
c215 Commercial Low	19,114	20,281	24,765	19,092	18,659	19,698	14,246	16,789	14,413	14,282	15,626	22,318	219,282
c220 Commercial Medium	1,444	1,448	1,839	1,421	1,324	1,793	1,378	1,680	1,381	1,354	1,443	1,874	18,380
c225 Commercial High	9,874	10,367	13,090	10,013	9,804	11,942	9,368	11,441	9,510	9,438	9,617	12,450	126,912
Total	123,509	127,268	137,022	125,078	122,356	128,725	110,967	120,929	108,123	108,506	116,667	132,097	1,461,248

Table 8
City of Petaluma
Industrial Sewer Flows, Loadings & Charges

	Clover Stornetta	Lace House Linen	Lagunitas Brewery	Petaluma Creamery	Petaluma Poultry	Miyoko's Kitchen	Marin Sun Farms	Revive	Alvarado St Bakery	Total
Meter	3" Magnetic	3" Magnetic	2x 3" Magnetic	10" Ultrasonic	6" Magnetic	2" Magnetic	2" Magnetic		2" Magnetic	
FLOW (hcf)										
2020/21	44,012	10,629	28,682	39,619	139,879	4,210	44,012	2,624	639	314,304
2021/22	37,184	9,955	36,968	15,302	143,735	3,280	37,184	2,360	433	286,403
2022/23 est	34,449	10,498	25,832	10,131	141,641	2,396	34,449	471	102	259,969
Projected: 95% of 3-Yr A	36,621	9,843	28,969	10,131	134,664	3,130	36,621	<i>closed</i>	400	260,379
BOD (lbs)										
2020/21	135,578	20,712	3,621	210,050	565,553	66,725	19,197	15,715	16,490	1,053,640
2021/22	153,278	24,042	2,091	19,056	486,428	31,650	11,915	10,661	12,850	751,973
2022/23 est	124,845	17,843	1,090	3,955	500,024	16,883	9,087	2,501	<i>no data</i>	676,227
Projected: 95% of 3-Yr A	131,005	19,822	2,154	3,955	491,468	36,498	12,730	<i>n/a</i>	4,991	702,624
TSS (lbs)										
2020/21	6,293	6,085	1,206	32,097	73,072	49,024	1,383	404	941	170,504
2021/22	7,110	2,190	6,729	4,965	103,623	20,235	1,168	210	746	146,975
2022/23 est	3,341	1,615	162	2,060	102,137	13,004	686	91	<i>no data</i>	123,095
Projected: 95% of 3-Yr A	5,302	3,132	2,564	2,060	88,296	26,050	1,025	<i>n/a</i>	499	128,929
BOD Strength (mg/l)										
2020/21	494	312	20	850	648	2,541	70	960	4,136	537
2021/22	661	387	9	200	542	1,546	51	724	4,752	421
2022/23 est	581	272	7	63	566	1,130	42	850	<i>no data</i>	417
Projected	573	323	12	63	585	1,869	56	<i>n/a</i>	2,000	433
TSS Strength (mg/l)										
2020/21	23	92	7	130	84	1,867	5	25	236	87
2021/22	31	35	29	52	116	989	5	14	276	82
2022/23 est	16	25	1	33	116	870	3	31	<i>no data</i>	76
Projected	23	51	14	33	105	1,334	4	<i>n/a</i>	200	79
Current Rates	3" Magnetic	3" Magnetic	2x 3" Magnetic	10" Ultrasonic	6" Magnetic	2" Magnetic	2" Magnetic		2" Magnetic	
Fixed Monthly Chg	809.57	809.57	1,619.14	1,226.00	2,573.31	368.63	368.63		368.63	
Flow (\$/hcf)	7.44	7.44	7.44	7.44	7.44	7.44	7.44		7.44	
BOD (\$/lb)	1.26	1.26	1.26	1.26	1.26	1.26	1.26		1.26	
SS (\$/lb)	1.43	1.43	1.43	1.43	1.43	1.43	1.43		1.43	
Est Annual Charges with Projected Loadings at Current Rates										
Fixed Charges	\$9,715	\$9,715	\$19,430	\$14,712	\$30,880	\$4,424	\$4,424		\$4,424	\$97,722
Flow	272,460	73,230	215,532	75,372	1,001,900	23,291	272,460		2,976	1,937,220
BOD	165,067	24,976	2,714	4,983	619,250	45,988	16,040		6,289	885,306
SS	7,582	4,479	3,667	2,946	126,264	37,251	1,466		714	184,368
Total	454,824	112,399	241,343	98,012	1,778,294	110,953	294,389		14,402	3,104,616

Projected flows and loadings generally based on 95% of 3-year prior average with estimates for 2022/23, with exception of Petaluma Creamery which is based on loadings from past 6-12 months.

Table 9
City of Petaluma
Recycled Water Sales (hcf)

	Jul 7	Aug 8	Sep 9	Oct 10	Nov 11	Dec 12	Jan 1	Feb 2	Mar 3	Apr 4	May 5	Jun 6	Total
Recycled Water Use (hcf)													
2022/23	112,162	104,623	100,687	86,059	67,956	21,145	19,427	10,154	12,122	20,000	20,000	75,000	649,335
2021/22	166,388	128,523	79,065	101,376	39,847	9,504	12,114	6,917	22,023	69,133	19,434	74,084	728,408
2020/21	104,437	125,893	143,843	108,084	78,793	19,575	7,135	7,551	44,244	22,256	106,710	127,316	895,837
2019/21	96,738	109,232	106,718	54,357	38,868	5,837	84	297	6,785	6,417	26,901	100,479	552,713
2018/19	101,936	114,949	133,740	110,520	25,036	18,474	182	308	258	297	9,352	38,723	553,774

	RW Use (hcf)	RW Revenues	Avg Rate per hcf
2021/22	728,408	\$829,874	\$1.14
2020/21	895,837	729,874	0.81
2019/21	552,713	491,186	0.89
2018/19	553,774	427,601	0.77

Table 10
City of Petaluma
Projected Recycled Water Sales & Revenues

	Current 2022/23	1 2023/24	2 2024/25	3 2025/26	4 2026/27	5 2027/28	6 2028/29	7 2029/30	8 2030/31	9 2031/32	10 2032/33
Projected Recycled Water Sales (hcf)											
Contract Sales (Low Rates) [1]	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Current Sales at RW Rates [1]	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
New Sales at RW Rates (Approx 90 AF)	-	-	40,000	80,000	120,000	160,000	200,000	240,000	280,000	320,000	360,000
Total	650,000	650,000	690,000	730,000	770,000	810,000	850,000	890,000	930,000	970,000	1,010,000
Projected Recycled Water Rates (\$ per hcf)											
Contract Sales Average Rate per hcf	\$0.195	\$0.195	\$0.195	\$0.195	\$0.195	\$0.195	\$0.195	\$0.195	\$0.195	\$0.195	\$0.195
Projected Potable Water Rate [2]	\$4.79	\$5.29	\$5.80	\$6.35	\$6.96	\$7.62	\$8.12	\$8.56	\$9.02	\$9.47	\$9.95
RW % of Potable Water Rate	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Projected Recycled Water Rate per hcf	\$2.40	\$2.65	\$2.90	\$3.18	\$3.48	\$3.81	\$4.06	\$4.28	\$4.51	\$4.74	\$4.98
Projected Recycled Water Sales Revenues											
Contract Sales (Low Rates)	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000
Current Sales at RW Rates	600,000	662,500	725,000	795,000	870,000	952,500	1,015,000	1,070,000	1,127,500	1,185,000	1,245,000
New Sales at RW Rates	-	-	116,000	254,400	417,600	609,600	812,000	1,027,200	1,262,800	1,516,800	1,792,800
Total	678,000	740,500	919,000	1,127,400	1,365,600	1,640,100	1,905,000	2,175,200	2,468,300	2,779,800	3,115,800
Annual Revenue Increase		62,500	178,500	208,400	238,200	274,500	264,900	270,200	293,100	311,500	336,000
Cumulative Revenue Increase		62,500	241,000	449,400	687,600	962,100	1,227,000	1,497,200	1,790,300	2,101,800	2,437,800

1 Estimated based on historical recycled water sales and revenues, and review of recycled water customers and demands.

2 Projected rates account for projections of City water rate increases, CPI inflation rate adjustments, and SCWA wholesale rate increase passthroughs.

Recycled Water Customers With Older Low Rate Contracts		RW Rate per hcf
Mendoza	Agricultural - Existing RW User	0.195
Silacci (Expired)	Agricultural - Existing RW User	0.195
Matteri	Agricultural - Existing RW User	0.195
Cardinaux	Agricultural - Existing RW User	0.195
Rooster Run GC	Agricultural - Existing RW User	0.034
Adobe Creek GC	Agricultural - Existing RW User	0.687

Table 11 Wastewater Cash Flow Projections											
	Current	1	2	3	4	5	6	7	8	9	10
	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33
<u>Rate Adjustment Effective</u>		Sept 1	July 1	July 1	July 1	July 1	July 1	July 1	July 1	July 1	July 1
City Rate Increase		2.0%	2.0%	2.0%	2.0%	2.0%	1.0%	1.0%	1.0%	1.0%	0.0%
CPI Adjustment		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Total Overall Rate Increase		5.06%	4.55%	4.55%	4.55%	4.55%	3.52%	3.53%	3.52%	3.53%	2.5%
Growth (EDUs)		50	50	50	50	50	50	50	50	50	50
Growth in Customer Base %		0.19%	0.19%	0.19%	0.19%	0.19%	0.19%	0.19%	0.19%	0.19%	0.19%
Change in Billed Wastewater Use (Res/Comm)		0.0%	4.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Est. Billed Use (Rse/Comm)	1,294,000	1,294,000	1,346,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000	1,400,000
Sewer Capacity Fee	\$9,846	\$10,043	\$10,244	\$10,449	\$10,658	\$10,871	\$11,088	\$11,310	\$11,536	\$11,767	\$12,002
Cost Escalation	-	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Interest Earnings Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Beginning Fund Reserves	\$46,773,000	\$46,973,000	\$31,625,000	\$12,926,000	\$12,508,000	\$14,423,000	\$16,207,000	\$16,580,000	\$16,939,000	\$17,495,000	\$18,121,000
REVENUES											
Wastewater Fixed Charges	11,800,000	12,421,000	13,011,000	13,629,000	14,276,000	14,954,000	15,511,000	16,088,000	16,687,000	17,308,000	17,774,000
Wastewater Usage Charges	12,400,000	13,027,000	14,165,000	15,402,000	16,103,000	16,836,000	17,429,000	18,043,000	18,679,000	19,337,000	19,820,000
Industrial Service Charges	3,100,000	3,257,000	3,405,000	3,560,000	3,722,000	3,891,000	4,028,000	4,170,000	4,317,000	4,469,000	4,581,000
Penngrove Service Charges	550,000	578,000	604,000	631,000	660,000	690,000	714,000	739,000	765,000	792,000	812,000
Reclaimed Water Charges	680,000	750,000	900,000	1,050,000	1,200,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000	2,400,000
Interest Earnings	935,000	939,000	633,000	259,000	250,000	288,000	324,000	332,000	339,000	350,000	362,000
Connection Fees/Capacity Charges	500,000	502,000	512,000	522,000	533,000	544,000	554,000	566,000	577,000	588,000	600,000
Biosolids to Biogas (B2B) Revenues	0	0	1,000,000	1,035,000	1,071,000	1,108,000	1,147,000	1,187,000	1,229,000	1,272,000	1,317,000
Interfund Loan Pymts (from Police/Fire)	398,000	398,000	0	0	0	0	0	0	0	0	0
Other/Miscellaneous	170,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Total Revenues	30,533,000	32,022,000	34,380,000	36,238,000	37,965,000	39,861,000	41,457,000	43,075,000	44,743,000	46,466,000	47,816,000
Recycled Water Grants (WW Allocation)		6,718,000	6,534,000	795,250	819,250	844,500	869,750	895,500	922,500	949,750	978,250
2024 WW Bonds			8,000,000	6,000,000							
ECWRF Energy Project Debt							7,000,000	16,000,000	30,000,000	33,000,000	92,900,000
EXPENSES											
<u>Operating & Maintenance</u>											
Admin & Customer Service	3,413,000	3,118,000	3,227,000	3,340,000	3,457,000	3,578,000	3,703,000	3,833,000	3,967,000	4,106,000	4,250,000
Collection System	1,493,000	1,390,000	1,439,000	1,489,000	1,541,000	1,595,000	1,651,000	1,709,000	1,769,000	1,831,000	1,895,000
Sewage Pump Stations	865,000	792,000	820,000	849,000	879,000	910,000	942,000	975,000	1,009,000	1,044,000	1,081,000
Industrial	870,000	828,000	857,000	887,000	918,000	950,000	983,000	1,017,000	1,053,000	1,090,000	1,128,000
Reclamation	1,937,000	1,570,000	1,156,000	1,196,000	1,238,000	1,281,000	1,326,000	1,372,000	1,420,000	1,470,000	1,521,000
Storm Drain	423,000	179,000	185,000	191,000	198,000	205,000	212,000	219,000	227,000	235,000	243,000
New AMI Cell Service (50% Sewer)	0	80,000	83,000	86,000	89,000	92,000	95,000	98,000	101,000	105,000	109,000
Ellis Creek WWTP Operations	6,533,000	6,700,000	6,935,000	7,178,000	7,429,000	7,689,000	7,958,000	8,237,000	8,525,000	8,823,000	9,132,000
WWTP Electricity/Natural Gas	1,885,000	1,951,000	2,019,000	2,090,000	2,163,000	2,239,000	2,317,000	2,398,000	2,482,000	2,569,000	2,659,000
Biosolids to Biogas (B2B) Expenses	0	0	1,000,000	1,035,000	1,071,000	1,108,000	1,147,000	1,187,000	1,229,000	1,272,000	1,317,000
Subtotal	17,419,000	16,608,000	17,721,000	18,341,000	18,983,000	19,647,000	20,334,000	21,045,000	21,782,000	22,545,000	23,335,000
<u>Debt Service</u>											
2017 WW Refunding Bonds	805,000	805,000	805,000	805,000	805,000	805,000	805,000	4,075,000	4,080,000	4,078,000	4,077,000
2019 WW Refunding Bonds	7,759,000	7,758,000	7,754,000	7,755,000	7,756,000	7,756,000	7,754,000	-	-	-	-
2024 Bonds, Projected (30-Yr, 4.5%)	-	-	439,000	877,000	877,000	877,000	877,000	877,000	877,000	877,000	877,000
ECWRF Upgrade Bonds, Projected (30-Yr, 4.5%)	-	-	-	-	-	-	>>>	1,440,000	3,319,000	5,385,000	11,202,000
Subtotal	8,564,000	8,563,000	8,998,000	9,437,000	9,438,000	9,438,000	9,436,000	6,392,000	8,276,000	10,340,000	16,156,000
<u>Capital Improvements</u>											
Wastewater CIP: Cash Funded	1,750,000	15,948,000	21,356,000	6,852,000	5,492,000	6,741,000	4,351,000	4,906,000	4,616,000	5,205,000	4,897,000
Recycled Water CIP: Cash Funded	2,600,000	6,251,000	5,004,000	2,026,000	2,137,000	2,251,000	2,370,000	2,492,000	2,617,000	2,747,000	2,879,000
CIP funded by Grants & Debt	0	6,718,000	14,534,000	6,795,250	819,250	844,500	869,750	895,500	922,500	949,750	978,250
ECWRF Rehab & Upgrade: Cash Funded	-	-	-	-	-	-	4,593,000	7,881,000	6,896,000	5,003,000	0
ECWRF Rehab & Upgrade: Debt Funded	-	-	-	-	-	-	7,000,000	16,000,000	30,000,000	33,000,000	92,900,000
Subtotal	4,350,000	28,917,000	40,894,000	15,673,250	8,448,250	9,836,500	19,183,750	32,174,500	45,051,500	46,904,750	101,654,250
Total Expenses	30,333,000	54,088,000	67,613,000	43,451,250	36,869,250	38,921,500	48,953,750	59,611,500	75,109,500	79,789,750	141,145,250
Revenues Less Expenses	200,000	(15,348,000)	(18,699,000)	(418,000)	1,915,000	1,784,000	373,000	359,000	556,000	626,000	549,000
Ending Fund Reserves	46,973,000	31,625,000	12,926,000	12,508,000	14,423,000	16,207,000	16,580,000	16,939,000	17,495,000	18,121,000	18,670,000
Min Rsrv Target: 25% O&M+\$8M CIP	12,350,000	15,650,000	15,930,000	16,090,000	16,250,000	16,410,000	16,580,000	16,760,000	16,950,000	17,140,000	17,330,000
Debt Service Coverage	1.53	1.80	1.85	1.90	2.01	2.14	2.24	3.45	2.77	2.31	1.52
Pay-Go Funding Generated for CIP	4,550,000	6,851,000	7,661,000	8,460,000	9,544,000	10,776,000	11,687,000	15,638,000	14,685,000	13,581,000	8,325,000

City of Petaluma Wastewater Projected Revenues & Expenses

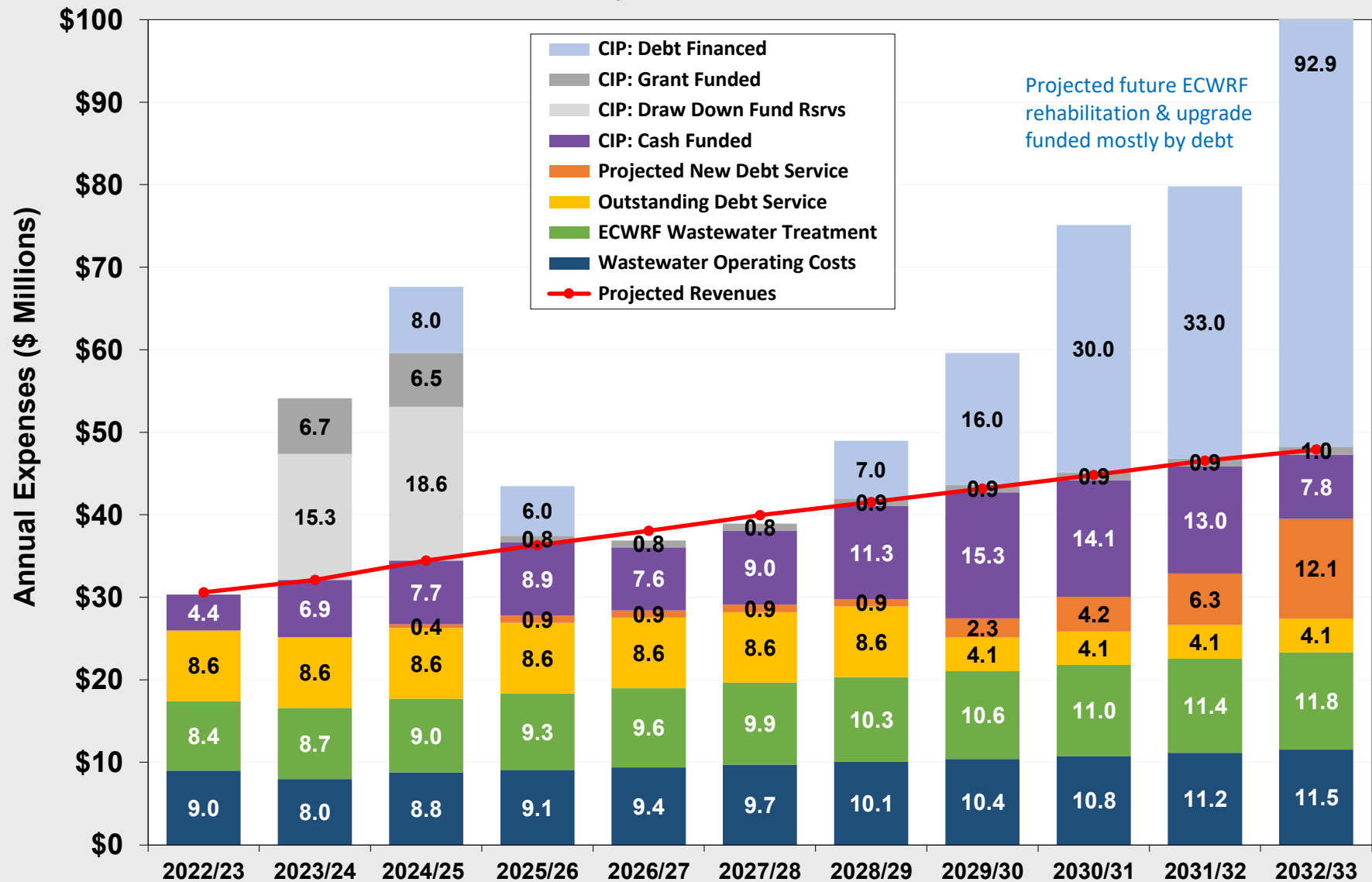


Table 12
City of Petaluma
Projected Base Wastewater Rates

Proposed Base Rates

Excludes Annual CPI Inflation Adjustment

Base Rates to be Adjusted Annually by Compounded Inflation %

PROPOSED BASE WASTEWATER RATES						
	Current Sewer Rates	Proposed Base Rates Effective on or After				
		Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
CITY SEWER RATE INCREASES		2.0%	2.0%	2.0%	2.0%	2.0%
FIXED MONTHLY CHARGES						
<i>Fixed monthly charges billed per residential dwelling unit or based on non-residential meter size.</i>						
RESIDENTIAL						
<i>Fixed monthly charge per dwelling unit</i>						
Single Family Residential	\$37.93	\$38.69	\$39.46	\$40.25	\$41.06	\$41.88
Multi-Unit Residential	32.24	32.89	33.54	34.21	34.90	35.60
Unmetered Residential	100.88	102.90	104.96	107.06	109.20	111.38
NON-RESIDENTIAL						
<i>Fixed monthly charge based on meter size</i>						
Up to 3/4-inch meter	\$37.93	\$38.69	\$39.46	\$40.25	\$41.06	\$41.88
1-inch meter	62.43	63.68	64.95	66.25	67.58	68.93
1-1/2 inch meter	123.66	126.13	128.65	131.22	133.84	136.52
2-inch meter	197.15	201.09	205.11	209.21	213.39	217.66
SEWER COMMODITY CHARGES						
<i>Volumetric charges billed per hundred cubic feet (hcf) of estimated sewer discharge.</i>						
RESIDENTIAL						
<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	\$9.17	\$9.35	\$9.54	\$9.73	\$9.92
Multi-Unit Residential	8.99	9.17	9.35	9.54	9.73	9.92
COMMERCIAL						
<i>Billed based on metered water use</i>						
Low Strength	8.66	8.83	9.01	9.19	9.37	9.56
Medium Strength	11.78	12.02	12.26	12.51	12.76	13.02
High Strength	16.01	16.33	16.66	16.99	17.33	17.68
METERED INDUSTRIAL						
<i>Based on metered use & estimated wastewater loadings</i>						
Flow (\$/hcf)	7.44	7.59	7.74	7.89	8.05	8.21
BOD (\$/lb)	1.26	1.29	1.32	1.35	1.38	1.41
SS (\$/lb)	1.43	1.46	1.49	1.52	1.55	1.58

* The Proposed Base Rates will be adjusted each year to account for an annual pass-throughs for cost inflation. Each year, the Proposed Base Rates effective July 1 will be adjusted by the percentage change in the Consumer Price Index from the December 2022 index to the index for December immediately preceding the upcoming fiscal year.

Table 13
City of Petaluma
Projected Wastewater Rates with CPI Pass-Through

Proposed Base Rates + Estimated CPI Inflation Pass-Through

PROJECTED WASTEWATER RATES WITH CPI INFLATION PASSTHROUGH						
	Current Sewer Rates	Proposed Base Rates Effective on or After				
		Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
CITY SEWER RATE INCREASES		2.0%	2.0%	2.0%	2.0%	2.0%
ESTIMATED CPI PASSTHROUGH ADJUSTMENTS						
Estimated Annual CPI Passthrough Adjustments		3.0%	2.5%	2.5%	2.5%	2.5%
Compounded CPI Adjustments		3.0%	5.6%	8.2%	10.9%	13.7%
FIXED MONTHLY CHARGES						
<i>Fixed monthly charges billed per residential dwelling unit or based on non-residential meter size.</i>						
RESIDENTIAL						
<i>Fixed monthly charge per dwelling unit</i>						
Single Family Residential	\$37.93	\$39.85	\$41.66	\$43.56	\$45.54	\$47.61
Multi-Unit Residential	32.24	33.88	35.41	37.02	38.71	40.47
Unmetered Residential	100.88	105.99	110.81	115.85	121.12	126.63
NON-RESIDENTIAL						
<i>Fixed monthly charge based on meter size</i>						
Up to 3/4-inch meter	\$37.93	\$39.85	\$41.66	\$43.56	\$45.54	\$47.61
1-inch meter	62.43	65.59	68.57	71.69	74.96	78.37
1-1/2 inch meter	123.66	129.91	135.82	142.00	148.45	155.21
2-inch meter	197.15	207.12	216.54	226.40	236.69	247.46
3-inch meter	368.63	387.28	404.90	423.32	442.58	462.72
4-inch meter	613.30	644.34	673.65	704.30	736.35	769.86
6-inch meter	1,226.00	1,288.04	1,346.64	1,407.91	1,471.97	1,538.94
METERED INDUSTRIAL						
<i>Fixed monthly charge based on meter size</i>						
2-inch ultrasonic meter	\$552.36	\$580.31	\$606.72	\$634.32	\$663.18	\$693.36
10-inch ultrasonic meter	1,226.00	1,288.04	1,346.64	1,407.91	1,471.97	1,538.94
2-inch magnetic meter	368.63	387.28	404.90	423.32	442.58	462.72
3-inch magnetic meter	809.57	850.53	889.24	929.70	972.00	1,016.23
4-inch magnetic meter	1,287.24	1,352.37	1,413.90	1,478.23	1,545.49	1,615.81
6-inch magnetic meter	2,573.31	2,703.52	2,826.54	2,955.15	3,089.61	3,230.19
SEWER COMMODITY CHARGES						
<i>Volumetric charges billed per hundred cubic feet (hcf) of estimated sewer discharge.</i>						
RESIDENTIAL						
<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	\$9.87	\$10.32	\$10.79	\$11.28
Multi-Unit Residential	8.99	9.45	9.87	10.32	10.79	11.28
COMMERCIAL						
<i>Billed based on metered water use</i>						
Low Strength	8.66	9.09	9.51	9.94	10.39	10.87
Medium Strength	11.78	12.38	12.94	13.54	14.15	14.80
High Strength	16.01	16.82	17.59	18.39	19.22	20.10
METERED INDUSTRIAL						
<i>Based on metered use & estimated wastewater loadings</i>						
Flow (\$/hcf)	7.44	7.82	8.17	8.54	8.93	9.33
BOD (\$/lb)	1.26	1.33	1.39	1.46	1.53	1.60
SS (\$/lb)	1.43	1.50	1.57	1.64	1.72	1.80

* The Proposed Base Rates will be adjusted each year to account for an annual pass-throughs for cost inflation. Each year, the Proposed Base Rates effective July 1 will be adjusted by the percentage change in the Consumer Price Index from the December 2022 index to the index for December immediately preceding the upcoming fiscal year.

Table 14
City of Petaluma
Wastewater Rate Impacts

With CPI Inflation Adjustments

Customer Class			Billed Sewer Use (hcf)	Current Monthly Bill	Projected Monthly Bills				
					Sept 1 2017	July 1 2018	July 1 2019	July 1 2020	July 1 2021
SINGLE FAMILY RESIDENCE									
Low		3		64.90	68.19	71.27	74.53	77.92	81.45
Monthly Increase					3.29	3.09	3.25	3.39	3.53
Average		5		82.88	87.08	91.02	95.17	99.51	104.01
Monthly Increase					4.20	3.94	4.16	4.33	4.50
Mod/High		8		109.85	115.41	120.63	126.15	131.88	137.84
Monthly Increase					5.56	5.22	5.52	5.74	5.96
MULTI-FAMILY APARTMENT BUILDING									
20 Unit Apartment		60		1,184.20	1,244.24	1,300.47	1,359.82	1,421.77	1,486.19
Per Dwelling Unit		3		59.21	62.21	65.02	67.99	71.09	74.31
Monthly Increase per Unit					3.00	2.81	2.97	3.10	3.22
COMMERCIAL									
Small Business, Low Strength		5/8" or 3/4"	10	124.53	130.80	136.78	143.01	149.48	156.30
Monthly Increase					6.27	5.98	6.22	6.47	6.83
Restaurant, High Strength		1"	25	462.68	486.09	508.29	531.33	555.52	580.89
Monthly Increase					23.41	22.20	23.04	24.19	25.37
INDUSTRIAL									
Moderate Industrial BOD / SS		3" Magnetic 500 / 500	2,000	32,472	34,157	35,740	37,382	39,106	40,893
Monthly Increase					1,685	1,583	1,641	1,724	1,787