



CITY OF PATTERSON

Water Rate Study 2022

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1. INTRODUCTION

1.1 Background

The City of Patterson (the City) is a general law City located in western Stanislaus County with a population of approximately 23,000. The City owns and operates its own water system. The water utility is accounted for as self-supporting enterprise fund; revenues are derived primarily from utility service charges and must be adequate to fund operating and capital needs.

The City retained Bartle Wells Associates to develop a long-term financial plan and 5-year rate recommendations for the water enterprise. The last water rate study was completed in 2017 and the City last increased the water rates in January 2022. The major objectives of this study include:

- Ensuring the continued financial health and stability of the City's water enterprise;
- Developing a projection of operating and capital revenue requirements for the water utility;
- Recommending rates which meet these revenue requirements;
- Phase in rate adjustments over time, to the extent possible, to minimize the annual impact on ratepayers.
- Calculate impacts on the City's customers.
- Maintaining equity among all users of the system and ensure compliance with all legal requirements such as Proposition 218.

1.2 Summary of Findings

Financial Overview - Overall, the City's water enterprise is in good financial condition. Water rates have increased 11% each year from 2018 to 2022. The combination of incremental rate increases and prudent fiscal management has allowed the City to cover expenditures and build fund reserves, which as of July 1, 2021, totaled approximately \$6.9 million.

Capital Needs - The 10-year water capital improvement program from 2022/23 through 2031/32 includes over \$147 MM in potential improvements. \$105 MM of capital projects are projected to be privately funded, while \$15 MM are projected to be funded by developer paid water capacity fees. The remaining \$27 MM are projected to be funded through a combination of debt issuances (state revolving fund loans or bonds) and cash.

Debt - The water enterprise has two outstanding bond issues: Water Revenue Bonds, Series 2019A and 2019B. Total existing annual bond debt service is approximately \$890,000 and the final maturity is June 1st, 2049 for Series 2019A, and June 1st, 2039 for the Series 2019B. The City is also in the process of obtaining a State Revolving Fund Loan for its water meter retrofit program (estimated annual debt service of \$228,000 per year.)

The financial plan contained in this report assumes that the City will issue new debt to fund a portion of future planned capital improvements. New obligations will likely require the City to maintain a debt service coverage ratio of 125% of annual debt service.

Rate Adjustments - Rate increases are needed to keep rates in line with cost inflation and to provide sufficient revenues for the City's operating and capital programs while promoting overall conservation. Rate adjustments will take effect on January 1st, 2023, and January 1st of each following year through CY 2027.

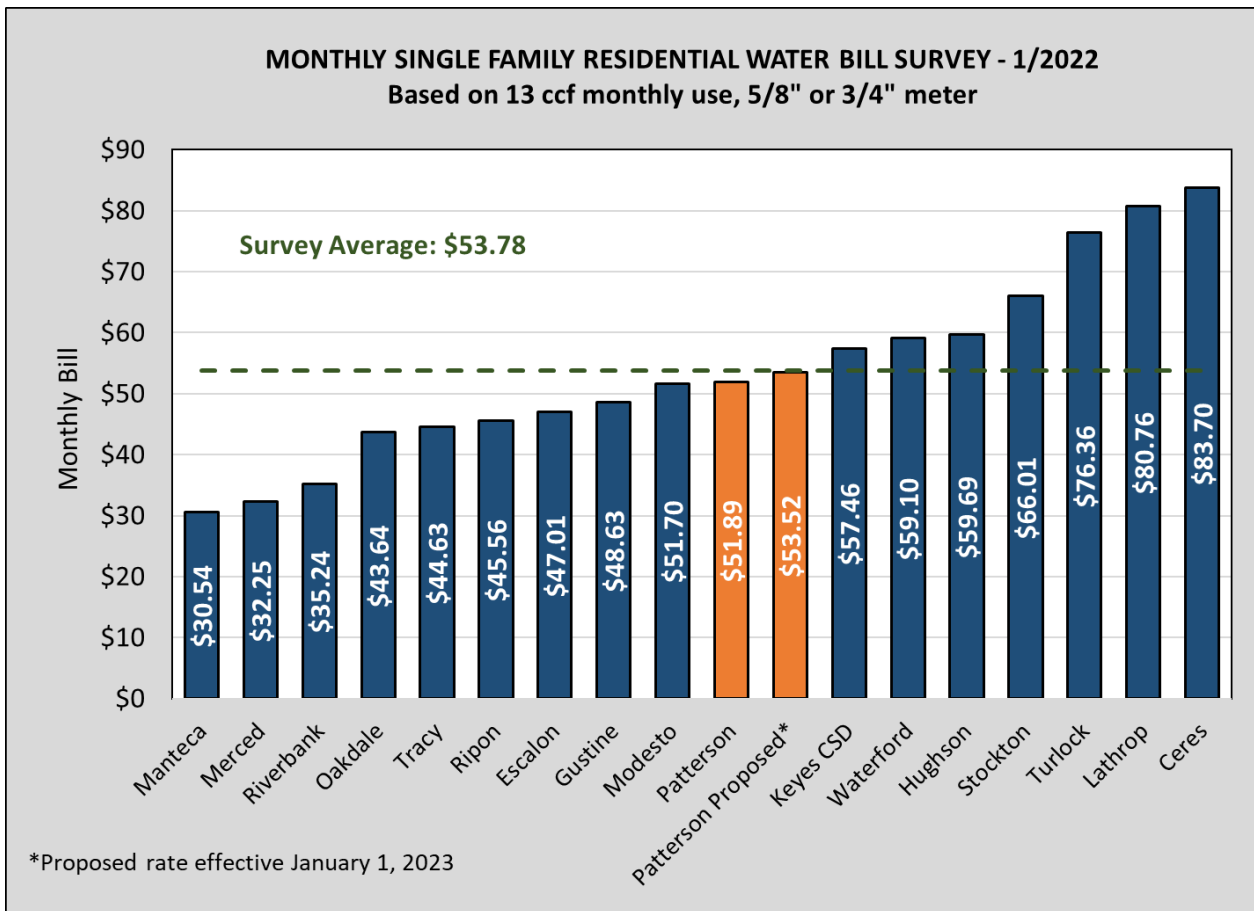
1.3 Proposed Rates

Table 1 provides the proposed rate schedule for the next five years. Rates are proposed to increase 2% per year over 5 years from CY 2023 to CY 2027.

The typical single family residential customer in the City of Patterson uses 13 hundred cubic feet (ccf, 1 ccf is 748 gallons) monthly and pays a water bill of \$51.83. Following the proposed January 1, 2023, rate increase, the typical residential bill will increase to \$53.56. For this rate study, a survey was conducted comparing the typical water bills of regional agencies. The City of Patterson's typical residential bill is currently in the middle range in the region and will remain in below the survey average of \$53.77 following the January 1st, 2023, increase.

Table 1: Executive Summary - 5 Year Proposed Rate Schedule & Survey

Proposed Rates - 2% Scenario						
Monthly Tiers	Current Rate	CY 2023	CY 2024	CY 2025	CY 2026	CY 2027
	(Recommended overall rate increases)					
		2.0%	2.0%	2.0%	2.0%	2.0%
Quantity Rates						
Use (\$/ccf)						
Tier 1 (0 to 13)	\$2.70	\$2.80	\$2.86	\$2.92	\$2.97	\$3.03
Tier 2 (>13)	\$3.86	\$3.89	\$3.97	\$4.05	\$4.13	\$4.21
Service Charges						
Meter Size		Monthly Rate				
5/8"	\$16.79	\$17.12	\$17.46	\$17.81	\$18.17	\$18.53
3/4"	\$16.79	\$17.12	\$17.46	\$17.81	\$18.17	\$18.53
1"	\$21.82	\$22.26	\$22.70	\$23.16	\$23.62	\$24.09
1 1/2"	\$26.86	\$27.39	\$27.94	\$28.50	\$29.07	\$29.65
2"	\$43.64	\$44.51	\$45.40	\$46.31	\$47.24	\$48.18
3"	\$167.85	\$171.21	\$174.63	\$178.13	\$181.69	\$185.32
4"	\$213.17	\$217.44	\$221.78	\$226.22	\$230.74	\$235.36
6"	\$320.60	\$327.01	\$333.55	\$340.22	\$347.03	\$353.97
8"	\$443.13	\$451.99	\$461.03	\$470.25	\$479.66	\$489.25



2. RATE SETTING LEGISLATION & PRINCIPLES

2.1 Constitutional Rate Requirements

The water rates developed in this Water Rate Study are designed to comply with Article 13D of the California Constitution. In accordance with the constitutional provisions, the proposed rates are designed to a) recover the City's cost of providing water service, and b) allocate costs in proportion to the cost for serving each customer class.

2.2 Article 13D, Section 6 (Proposition 218)

Proposition 218 was adopted by California voters in 1996 and added Articles 13C and 13D to the California Constitution. Article 13D, Section 6 governs property-related charges, which the California Supreme Court subsequently ruled includes ongoing utility service charges such as water, sewer, and garbage rates. Article 13D, Section 6 establishes a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D also requires voter approval for new or increased property-related charges but exempts from this voting requirement rates for water, sewer, and garbage service.

The City must follow the procedural requirements of Proposition 218 for all water rate increases. These requirements include:

1. *Noticing Requirement* - The City must mail a notice of the proposed rate increases to all affected property owners. The notice must specify the amount of the fee, the basis upon which it was calculated, the reason for the fee, and the date/time/location of a public rate hearing at which the proposed rates will be considered/adopted.
2. *Public Hearing* - The City must hold a public hearing prior to adopting the proposed rate increases. The public hearing must be held not less than 45 days after the required notices are mailed.
3. *Rate Increases Subject to Majority Protest* - At the public hearing, the proposed rate increases are subject to majority protest. If more than 50% of affected property owners submit written protests against the proposed rate increases, the increases cannot be adopted.

Proposition 218 also established a number of substantive requirements that apply to water rates and charges, including:

1. *Cost of Service* - Revenues derived from the fee or charge cannot exceed the funds required to provide the service. In essence, fees cannot exceed the "cost of service".
2. *Intended Purpose* - Revenues derived from the fee or charge can only be used for the purpose for which the fee was imposed.

3. *Proportional Cost Recovery* - The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
4. *Availability of Service* - No fee or charge may be imposed for a service unless that service is used by, or immediately available to, the owner of the property.
5. *General Government Services* - No fee or charge may be imposed for general governmental services, such as police or fire services, where the service is available to the public at large in substantially the same manner as it is to property owners.

A subsequent appellate court decision in 2011 further clarified that agencies must demonstrate, satisfactory to a court's independent judgment, that property-related fees and charges meet the substantive requirements of Section 6 (3b). This rate study provides that justification. The water rates derived in this report are based on a cost-of-service methodology that fairly apportions costs to all customers.

2.3 Use of Industry Standard Rate-Making Principles

The rates developed in this Water Rate Study use a straightforward methodology to establish an equitable system charges that recover the cost of providing service and fairly apportion costs to each rate component. In reviewing the City's water rates and finances, BWA used the following criteria in developing our recommendations:

1. *Revenue Sufficiency*: Rates should recover the annual cost of service and provide revenue stability.
2. *Rate Impact*: While rates are calculated to generate sufficient revenue to cover operating and capital costs, they should be designed to minimize, as much as possible, the impacts on ratepayers.
3. *Equitable*: Rates should be fairly allocated among all customer classes based on their estimated demand characteristics. Each user class only pays its proportionate share.
4. *Practical*: Rates should be simple in form and, therefore, adaptable to changing conditions, easy to administer and easy to understand.
5. *Provide Incentive*: Rates provide price signals which serve as indicators to use water efficiently.

3. WATER UTILITY OVERVIEW

3.1 Overview of Water System

Groundwater wells are the City's sole source of water supply. The City operates nine wells with pumps ranging in horsepower (HP) from 60 to 150 HP. Water is treated via chlorine injection at the wellhead. Water storage facilities include one tank in each of the City's three pressure zones. The total storage capacity is 3.2 million gallons. Water system assets also include transmission and distribution pipelines, meters, hydrants, and vehicles. The City invested in expanding its water infrastructure in the 2000s to meet the demands of rapid population growth.

3.2 Current Water Rates

Table 2 shows a schedule of historical and current monthly water service charges. Customers pay a fixed meter service charge based on the size of the water meter and volume rates billed to each hundred cubic feet of water use. One hundred cubic feet (ccf) is equal to 748 gallons. The City of Patterson utilizes an inclining tiered rate structure in which higher levels of use are billed at a higher rate. The benefit of this rate structure is that it provides a strong conservation price signal.

Table 2: Historical and Current Water Rates

		<u>Implemented Water Rates</u>				
Rate Effective		3/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022
	Monthly Tiers	<i>(Recommended increases)</i>				
		<i>11.0%</i>	<i>11.0%</i>	<i>11.0%</i>	<i>11.0%</i>	<i>11.0%</i>
<u>Quantity Rates</u>	Use (\$/ccf)					
	Tier 1 (0 to 13)	\$1.78	\$1.97	\$2.19	\$2.43	\$2.70
	Tier 2 (>13)	\$2.54	\$2.82	\$3.14	\$3.48	\$3.86
<u>Service Charges</u>						
Meter Size			<u>Monthly Rate</u>			
5/8"		\$11.06	\$12.27	\$13.62	\$15.12	\$16.79
3/4"		\$11.06	\$12.27	\$13.62	\$15.12	\$16.79
1"		\$14.37	\$15.96	\$17.71	\$19.66	\$21.82
1 1/2"		\$17.69	\$19.64	\$21.80	\$24.19	\$26.86
2"		\$28.75	\$31.91	\$35.42	\$39.32	\$43.64
3"		\$110.57	\$122.73	\$136.23	\$151.22	\$167.85
4"		\$140.42	\$155.87	\$173.02	\$192.05	\$213.17
6"		\$211.19	\$234.42	\$260.20	\$288.83	\$320.60
8"		\$291.90	\$324.01	\$359.65	\$399.22	\$443.13

3.3 Water Customers

The City currently provides water service to approximately 6,770 customers¹ as detailed on Table 3. The majority customers have 3/4" meters, accounting for over 73% of all customers.

Table 3: Water Customers

Meter Size	Total
5/8"	820
3/4"	4,913
1"	763
1 1/2"	27
2"	210
3"	29
4"	4
6"	1
8"	0
Other	3
Total	6,770
<i>% of Total</i>	<i>100.0%</i>

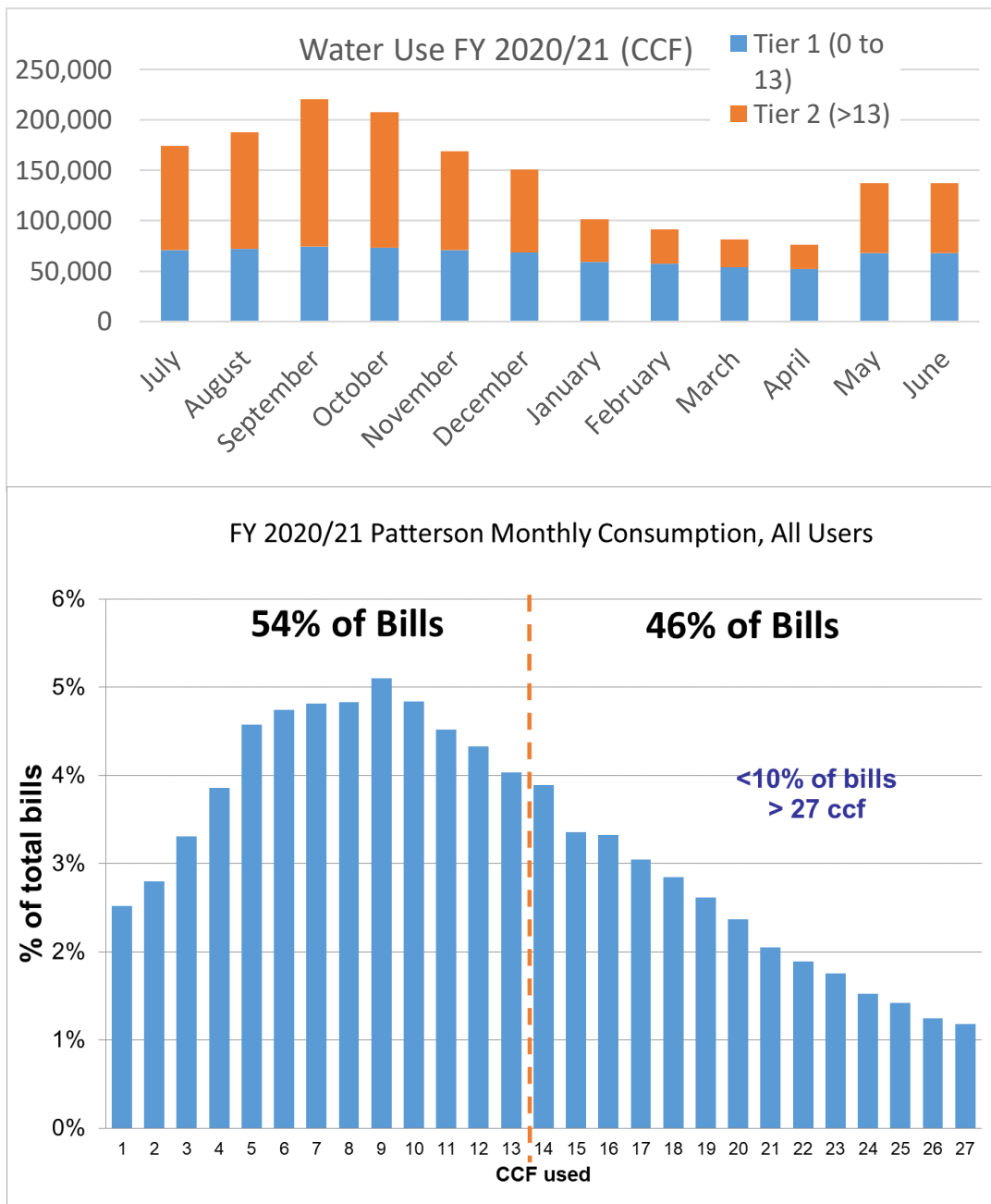
Source: data from June 2021

¹ In any given billing period, a number of customers will initiate or discontinue service.

3.4 Water Use and Tier Structure

Table 4 provides water usage data for the most recent fiscal year (FY 2020/21). Based on an analysis of the City’s water use data, BWA recommends maintaining the two tier rate structure. Approximately 46% of the City’s bills reach into tier 2 during the year, with the bulk of tier 2 use occurring in the non-winter months.

Table 4: Water Use



4. REVENUE REQUIREMENTS

4.1 Cash Flow Assumptions

BWA developed cash flow projections to determine annual revenue requirements and required rate adjustments. The first five years considered in this rate study are shown in Tables 5. Rate adjustments are designed to 1) ensure a balanced budget in which revenues cover expenses; 2) meet debt service coverage requirements; and 3) meet water fund targets in all years.

Future projections incorporate the latest information available as well as a number of reasonable and slightly conservative assumptions. The cash flows only include ratepayers' share of capital improvement projects. The City anticipates that growth will fully fund the expansion portion of capital needs. Key assumptions include:

- Rate increases are effective based on calendar year.
- The projections include growth of 1%.
- Interest on fund reserves is estimated to be 0.5% per year.
- The financial projections include roughly \$15.4 million of debt financing through 2021/22. Debt financing is needed to enable the City to fund existing ratepayers' share of capital projects on schedule as water rate increases are gradually being phased in. Debt proceeds shown in the cash flow projections are aligned with external capital funding needs. The City's actual debt issuances from year to year may vary based on actual financing needs and analysis at the time debt is issued.
- The financial projections assume a minimum water operating fund reserve target equal to 30% of annual operating and maintenance costs, not including transfers or ongoing capital plus \$500,000 for emergency capital reserves. Maintaining a prudent minimal level of fund reserves provides a financial cushion for dealing with unanticipated expenses, revenue shortfalls, and non-catastrophic emergency capital repairs. The fund reserve target will escalate over time as the City's expenses gradually increase. It is acceptable if reserves fall below the target on a temporary basis, provided action is taken to achieve the target over the longer run. The targets are met in all projected years.

Table 5: Cash Flow

Patterson - Water Cash Flow (Base Case Scenario)	Projected					
	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Beginning Fund Balance						
Operating Fund 610	\$6,322,542	\$8,236,876	\$9,986,358	\$10,916,452	\$9,351,698	\$10,277,487
Capital Fund 611	573,962	1,963,667	3,120,297	2,474,329	536,821	1,513,955
Total Fund Balance	6,896,504	10,200,543	13,106,655	13,390,781	9,888,519	11,791,442
% Rate Adjustment	11.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth - %		1.0%	1.0%	1.0%	1.0%	1.0%
REVENUES						
Operating Revenue						
Water Service	6,961,095	7,434,012	7,658,519	7,889,806	8,128,079	8,373,547
Interest (Est. 0.5%)	31,613	41,184	49,932	54,582	46,758	51,387
Other Revenues	0	0	0	0	0	0
Total Operating Revenues	6,992,708	7,475,196	7,708,451	7,944,389	8,174,837	8,424,934
Capital Revenues						
Projected SRF Loan Proceeds	900,000	3,100,000	0	0	0	0
Projected New Bond Proceeds	0	862,500	2,537,500	6,608,850	2,317,815	0
Existing Bond Proceeds	0	4,346,979	0	0	0	0
Developer Funded Facilities	0	11,452,000	8,401,000	7,137,000	5,147,000	4,750,000
Water Impact Fees	1,461,836	2,815,812	2,784,836	2,819,000	2,936,450	2,989,840
Transfer In From Operations	0	0	0	2,350,000	0	0
Interest (Est. 0.5%)	2,870	9,818	15,601	12,372	2,684	7,570
Total Water Capital Fund Revenue	2,364,705	22,587,109	13,738,937	18,927,222	10,403,949	7,747,410
TOTAL REVENUES	9,357,413	30,062,305	21,447,388	26,871,610	18,578,786	16,172,344
EXPENSES						
Operating Expenses						
Salary & Benefits	2,293,521	2,390,340	2,491,464	2,597,092	2,707,434	2,822,707
New Staff	0	50,983	136,900	230,421	270,700	359,969
Operations & Maintenance	1,216,759	1,257,262	1,294,860	1,333,786	1,373,883	1,415,188
Transfer to the General Fund	631,850	650,806	670,330	690,440	711,153	732,487
Transfer to the Capital Fund	0	0	0	2,350,000	0	0
Vehicles	45,000	8,000	343,000	463,500	346,174	350,000
Est. SRF Loan Debt Service (1.3%,20YR)	0	114,208	228,415	228,415	228,415	228,415
Est. Bond Debt Service (4%,30YR)	0	361,773	723,545	723,545	723,545	723,545
Water Revenue Bonds, 2019A	383,644	384,744	382,644	385,544	377,544	379,744
Water R Bond Refund, 2019B	507,600	507,600	507,200	506,400	510,200	508,400
Total Operating Expenses	5,078,374	5,725,714	6,778,357	9,509,143	7,249,048	7,520,455
Capital Expenses						
Capital Improvements	975,000	21,430,479	14,384,905	20,864,730	9,426,815	7,486,850
Total Capital Expenses	975,000	21,430,479	14,384,905	20,864,730	9,426,815	7,486,850
TOTAL EXPENSES	6,053,374	27,156,193	21,163,262	30,373,873	16,675,863	15,007,305
Net Revenues - Operating Fund	1,914,334	1,749,482	930,094	(1,564,754)	925,789	904,479
Net Revenues - Capital Fund	1,389,705	1,156,630	(645,968)	(1,937,508)	977,134	260,560
NET REVENUES	3,304,039	2,906,112	284,126	(3,502,262)	1,902,923	1,165,039
Debt Service Coverage	3.86	2.76	1.88	1.81	1.89	1.89
Ending Fund Balance						
Operating Fund 610	8,236,876	9,986,358	10,916,452	9,351,698	10,277,487	11,181,966
Capital Fund 611	1,963,667	3,120,297	2,474,329	536,821	1,513,955	1,774,515
Total Fund Balance	10,200,543	13,106,655	13,390,781	9,888,519	11,791,442	12,956,480
O&M Reserve Target - 30% of Operating Expense:	1,053,084	1,109,575	1,176,967	1,248,390	1,305,605	1,379,359
Target Met	yes	yes	yes	yes	yes	yes
Capital Fund Reserve Target - \$500,000	500,000	500,000	500,000	500,000	500,000	500,000
Target Met	yes	yes	yes	yes	yes	yes

5. COST ALLOCATION

Table 6 shows an allocation of water enterprise costs to the water rate components including fixed meter charges, base usage, and peak usage. BWA recommends recovering 21% of system costs from fixed meter charges and 79% from volumetric charges. Collecting greater than 70% of costs from volumetric charges is generally recommended to encourage conservation.

BWA further recommends recovering 22% of system costs from peak usage, as peak use requires the water enterprise to incur significant capital costs to oversize facilities as well as additional operations and maintenance expenses.

Table 6: Cost Allocation

Expenses	2021/22	% Attributed	\$ Attributed		
Expenses Recovered by Service Charges	Total Expenses	% Fixed	\$ Fixed		
Salary & Benefits	\$2,293,521	34%	\$776,208		
Transfer to the General Fund	631,850	80%	\$505,480		
Operations & Maintenance	866,759	0%	\$0		
Utilities - Wells	350,000	0%	\$0		
Capital (Equip & Vehicles)	45,000	0%	\$0		
Debt Service	891,244	0%	\$0		
Capital Projects	<u>975,000</u>	0%	<u>\$0</u>		
Total	\$6,053,374		\$1,281,688		
				Variable Cost Allocation	
Expenses Recovered by Quantity Rates	Total Expenses	% Variable	\$ Variable	% Peaking	\$ Peaking
Salary & Benefits	\$2,293,521	66%	\$1,517,313	0%	\$0
Transfer to the General Fund	631,850	20%	\$126,370	0%	\$0
Operations & Maintenance	866,759	100%	\$866,759	25%	\$216,690
Utilities - Wells	350,000	100%	\$350,000	50%	\$175,000
Capital (Equip & Vehicles)	45,000	100%	\$45,000	25%	\$11,250
Debt Service	891,244	100%	\$891,244	50%	\$445,622
Capital Projects	<u>975,000</u>	100%	<u>\$975,000</u>	50%	<u>\$492,135</u>
Total	\$6,053,374		\$4,771,686		\$1,340,696
				% Peaking of	% Peaking of
		% Fixed	% Variable	Variable Costs	Total Costs
Total Costs		21%	79%	28%	22%
	\$ Rate Requirement	\$ for Meters	\$ for Use	\$ for Peak Use	\$ for Base Use
Rate Revenue Requirement	\$7,332,568	\$1,552,533	\$5,780,035	\$1,624,011	\$4,156,024

6. PROPOSED WATER SERVICE CHARGES

6.1 Fixed Meter Charges

Table 7 shows the derivation of the fixed meter charge. The meter revenue requirement from Table 6 of \$1,552,533 is divided by the water enterprise 7,708 equivalent ¾" & below meters to arrive at a charge of \$16.79 per month per ¾' and 5/8" meter. Larger meters are recommended to be charged more in proportion to each meter's size based on American Water Works Association (AWWA) standard ratios.

Table 7: Meter Charges

Water Service Charge Calculation (21% revenue recovery)	CY 2022
Fixed Rate Revenue Requirement	\$1,552,533
Meter Equivalent Units (¾ inch)	7,708
\$/Meter Equivalent (Annual)	\$201
Projected Monthly Service Charges	
5/8 inch	\$16.79
¾ inch	\$16.79
1 inch	\$21.82
1-1/2 inch	\$26.86
2 inch	\$43.64
3 inch	\$167.85
4 inch	\$213.17
6 inch	\$320.60
8 inch	\$443.13
Projected Service Charge Revenue	\$1,552,533

6.2 Quantity Rates

Table 8 shows an analysis of the City of Patterson’s use data to determine how many units of water can be considered peak usage in each tier. Average winter use (defined as February and March) in Tier 1 and Tier 2 was annualized to determine base use to be 668,820 ccf in Tier 1 and 369,858 in Tier 2. Subtracting the base use from total use in each tier yields total peak units of 119,875 in Tier 1 and 577,263 Tier 2. Based on this analysis, 17% of peak system costs are recommended to be recovered from Tier 1 use and 83% from Tier 2 use.

Table 8: Peak Units Calculation

FY 2020/21	Tier 1 (0 to 13)	Tier 2 (>13)	Total
July	71,143	103,229	174,372
August	72,024	115,825	187,849
September	74,374	146,253	220,627
October	73,434	134,215	207,649
November	71,122	98,078	169,200
December	68,443	82,436	150,879
January	59,073	42,184	101,257
February	57,392	34,119	91,511
March	54,078	27,524	81,602
April	51,820	24,161	75,981
May	68,117	69,350	137,467
June	<u>67,675</u>	<u>69,747</u>	<u>137,422</u>
	788,695	947,121	1,735,816
	Tier 1 (0 to 13)	Tier 2 (>13)	Total
Avg winter use (Feb/ March)	55,735	30,822	86,557
Annualized (Base use)	668,820	369,858	1,038,678
Peak Units	119,875	577,263	697,138
	17%	83%	100%

Table 9 shows the derivation of the quantity rates. Each unit of use pays for base costs totaling \$4,156,024 from Table 6, resulting in a charge of \$2.39 per unit. Peak costs of \$1,624,011 from Table 6 are divided by total peak units of 697,138 from Table 8, resulting in an additional charge of \$2.33 per peak unit.

The unit costs are multiplied by their respective units in each tier to determine a revenue requirement of \$2.2 MM in Tier 1 and \$3.6 MM in Tier 2. The revenue requirements are divided by projected use in each tier to determine a cost of \$2.75 per ccf in Tier 1 and \$3.81 per ccf in Tier 2.

Table 9: Quantity Rate Calculation

Water Quantity Rate Calculation (79% revenue recovery)	CY 2022
Quantity Rates	
Total Base Costs	\$4,156,024
Projected Use (ccf)	1,735,816
Quantity Rate, All Use	\$2.39
Total Peak Costs	\$1,624,011
Projected Peak Use (ccf)	697,138
Quantity Rate, Peak Units	\$2.33
<hr/>	
Tier 1 Cost	\$2,167,608
Tier 2 Cost	<u>\$3,612,427</u>
	\$5,780,035
Tier 1 Rate	\$2.75
Tier 2 Rate	\$3.81

6.3 Proposed Rate Schedule

Table 10 provides the five-year schedule of proposed rates. The CY 2022 Cost of Service (COS) rates are based on the cost allocations provided in Section 5 and revenue neutral compared to the current rates. The rates for CY 2023 through CY 2027 are increased by the rate adjustment percentage developed in Tables 5.

BWA recommends adjusting the current low income senior discount to 25% of the regular rate. The current discount was based on mitigating the prior set of rate increases. The cost of the new discount would be the same as what is currently in place: \$9,000 to \$10,000 per year. This discount is recommended to be funded through non rate revenue such as late fees.

Table 10: Proposed Rate Schedule

Proposed Rates - 2% Scenario								
		Current Rate	CY 2022 COS	CY 2023	CY 2024	CY 2025	CY 2026	CY 2027
Monthly Tiers		(Recommended overall rate increases)						
		2.0% 2.0% 2.0% 2.0% 2.0%						
Quantity Rates	Use (\$/ccf)							
	Tier 1 (0 to 13)	\$2.70	\$2.75	\$2.80	\$2.86	\$2.92	\$2.97	\$3.03
	Tier 2 (>13)	\$3.86	\$3.81	\$3.89	\$3.97	\$4.05	\$4.13	\$4.21
Service Charges								
Meter Size		Monthly Rate						
	5/8"	\$16.79	\$16.79	\$17.12	\$17.46	\$17.81	\$18.17	\$18.53
	3/4"	\$16.79	\$16.79	\$17.12	\$17.46	\$17.81	\$18.17	\$18.53
	1"	\$21.82	\$21.82	\$22.26	\$22.70	\$23.16	\$23.62	\$24.09
	1 1/2"	\$26.86	\$26.86	\$27.39	\$27.94	\$28.50	\$29.07	\$29.65
	2"	\$43.64	\$43.64	\$44.51	\$45.40	\$46.31	\$47.24	\$48.18
	3"	\$167.85	\$167.85	\$171.21	\$174.63	\$178.13	\$181.69	\$185.32
	4"	\$213.17	\$213.17	\$217.44	\$221.78	\$226.22	\$230.74	\$235.36
	6"	\$320.60	\$320.60	\$327.01	\$333.55	\$340.22	\$347.03	\$353.97
	8"	\$443.13	\$443.13	\$451.99	\$461.03	\$470.25	\$479.66	\$489.25
Proposed Water Rates - With Low Income Senior Discount*								
		Current Rate	CY 2022 COS*	CY 2023	CY 2024	CY 2025	CY 2026	CY 2027
Monthly Tiers								
Quantity Rates	Use (\$/ccf)	Quantity Discount Rate						
	Tier 1 (0 to 13)	\$1.97	\$2.06	\$2.10	\$2.14	\$2.19	\$2.23	\$2.28
	Tier 2 (>13)	\$2.73	\$2.86	\$2.92	\$2.98	\$3.04	\$3.10	\$3.16
Service Charges		Monthly Discount Rate						
	1" and below meters	\$13.91	\$12.59	\$12.84	\$13.10	\$13.36	\$13.63	\$13.90
*Proposed 25% discount. Current discount is 27% on tier 1, 29% on tier 2, and 17% on meter charge.								
Cost of LI / Senior Discount**		\$9,140	\$9,336	\$9,522	\$9,713	\$9,907	\$10,105	\$10,307
**based on the 52 customers are currently enrolled								

6.4 Bill Impacts

Figure 1 provides a bill survey comparing the City of Patterson's typical bill with the typical water bills of other local agencies. Under current rates, the City's bill is in the middle range of surveyed agencies. Under the proposed rates, the City's bill would remain in the middle range.

Table 11 provides water bills for typical single family residential customers under the current and proposed rates. The rate impacts show a \$0.63 per month for a low user and a \$1.63 per month increase for the median user.

Figure 1

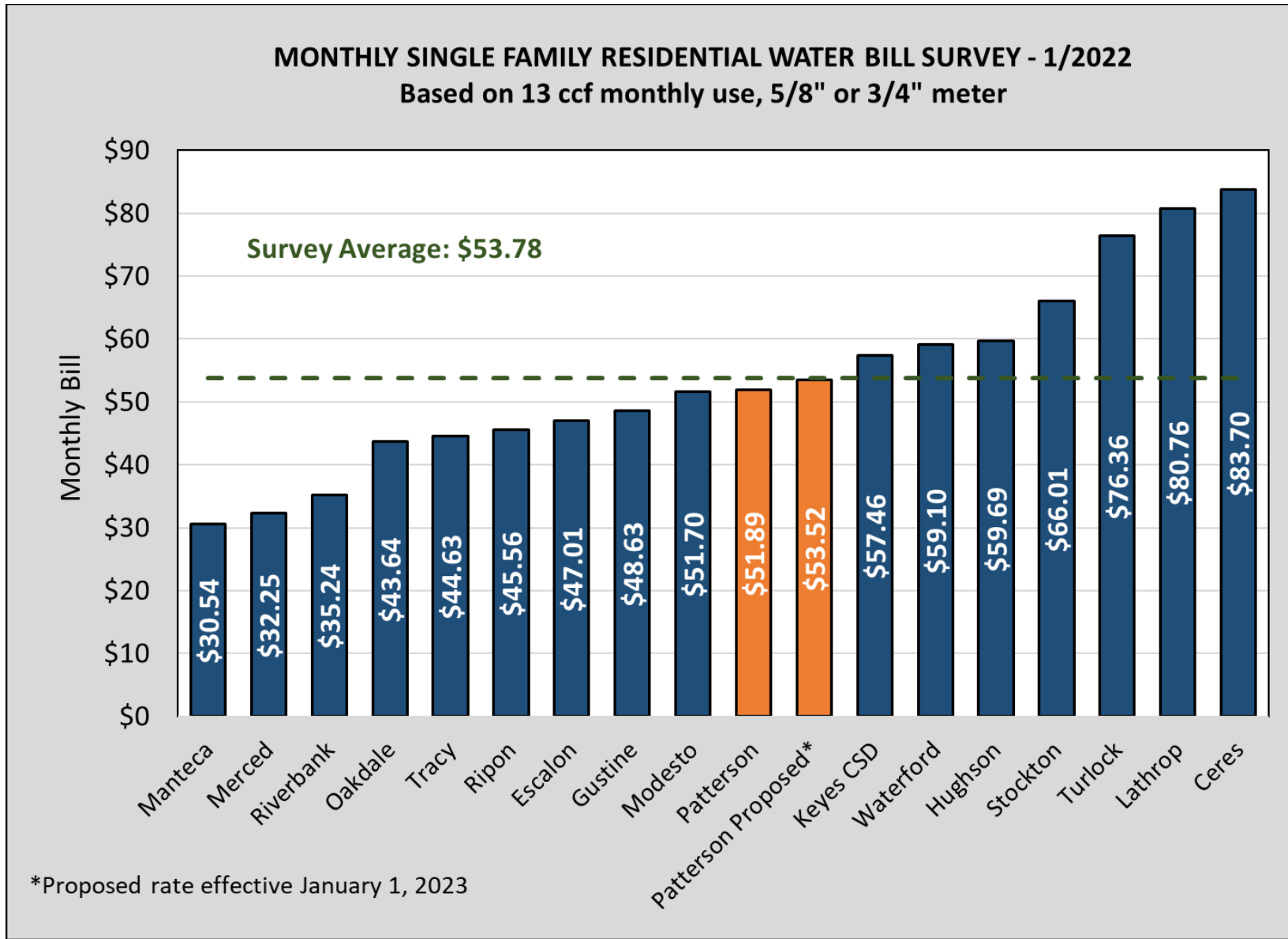


Table 11: Residential Bill Impacts

IMPACTS FOR SINGLE FAMILY RESIDENTIAL CUSTOMERS			
Customer	Monthly Use (ccf)	Current	Proposed (2% Scenario)
Single Family Residential - 5/8" or 3/4" meter			
<u>Low Use</u>			
Service Charge		\$16.79	\$17.12
<i>Increase \$</i>			<i>\$0.33</i>
<i>Increase %</i>			<i>2.0%</i>
Quantity Charge	3	\$8.10	\$8.40
<i>Increase \$</i>			<i>\$0.30</i>
<i>Increase %</i>			<i>3.7%</i>
Total Water Service Charge		\$24.89	\$25.52
<i>Increase \$</i>			<i>\$0.63</i>
<i>Increase %</i>			<i>2.5%</i>
<u>Median Use</u>			
Service Charge		\$16.79	\$17.12
<i>Increase \$</i>			<i>\$0.33</i>
<i>Increase %</i>			<i>2.0%</i>
Quantity Charge	13	\$35.10	\$36.40
<i>Increase \$</i>			<i>\$1.30</i>
<i>Increase %</i>			<i>3.7%</i>
Total Water Service Charge		\$51.89	\$53.52
<i>Increase \$</i>			<i>\$1.63</i>
<i>Increase %</i>			<i>3.1%</i>
<u>High Use</u>			
Service Charge		\$16.79	\$17.12
<i>Increase \$</i>			<i>\$0.33</i>
<i>Increase %</i>			<i>2.0%</i>
Quantity Charge	28	\$93.00	\$94.75
<i>Increase \$</i>			<i>\$1.75</i>
<i>Increase %</i>			<i>1.9%</i>
Total Water Service Charge		\$109.79	\$111.87
<i>Increase \$</i>			<i>\$2.08</i>
<i>Increase %</i>			<i>1.9%</i>
<u>Higher Use</u>			
Service Charge		\$16.79	\$17.12
<i>Increase \$</i>			<i>\$0.33</i>
<i>Increase %</i>			<i>2.0%</i>
Quantity Charge	60	\$216.52	\$219.23
<i>Increase \$</i>			<i>\$2.71</i>
<i>Increase %</i>			<i>1.3%</i>
Total Water Service Charge		\$233.31	\$236.35
<i>Increase \$</i>			<i>\$3.04</i>
<i>Increase %</i>			<i>1.3%</i>