HANSFORD
ECONOMIC CONSULTING LLC

City of Newman Water Rates Study

September 12, 2024

HEC No. 230430

The following report was prepared by Hansford Economic Consulting LLC.

The analyses and findings contained within this report are based on primary data provided by the City of Newman, as well as additional secondary sources of data available as of the date of this report. Updates to information used in this report could change or invalidate the findings contained herein. While it is believed that the primary and secondary sources of information are accurate, this is not guaranteed.

Every reasonable effort has been made in order that the data contained in this study reflect the most accurate and timely information possible. No responsibility is assumed for inaccuracies in reporting by the client, its consultants and representatives, or any other data source used in the preparation of this study. No warranty or representation is made that any of the projected values or results contained in this study will actually be achieved. There will usually be differences between forecasted or projected results and actual results due to changes in events and circumstances.

Changes in economic and social conditions due to events including, but not limited to, major recessions, droughts, major environmental problems or disasters that would negatively affect operations, expenses and revenues may affect the result of the findings in this study. In addition, other factors not considered in the study may influence actual revenues achieved. Any applications for financing, or bond sales analyses, should re-evaluate the financial health and projection of revenues and expenses at the time of the application or preparation for bond sale.

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Section 1: INTRODUCTION

1.1 STUDY BACKGROUND AND BEST PRACTICES

Background

The City of Newman (City) provides water services to the residents and businesses of the City. The purpose of this Water Rate Study (Study) is to determine the level of funding required over the next six years to adequately fund the water system in a safe manner; providing clean and safe potable water that meets State and Federal regulatory requirements.

This report provides an explanation and justification of the calculated water rates for the next six years and it documents adherence to the law regarding setting of rates by a municipality. Per California Constitution Article 13D, water rates shall not be extended, imposed, or increased by any agency unless it meets all of the following requirements:

(1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.

(2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.

(3) 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) No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted.

(5) No fee or charge may be imposed for general governmental services including, but not limited to, police, fire, ambulance or library, services, where the service is available to the public at large in substantially the same manner as it is to property owners.

The financial model projects revenues and expenses and calculates monthly property-related fees for the next six years. To adopt the calculated rates, the City will proceed with public notification and a public hearing as required by California's Constitution, Proposition 218.

Best Practices

Fee studies are typically conducted every three to five years to ensure revenue sufficiency. A cost-of-service analysis, which not only determines rates to support revenue sufficiency, but also examines whether customers are paying for their share of system costs and adjusts rates and customer classifications to achieve equity to the maximum extent practicable, is advisable whenever there has been a shift in the economic base of the community, and whenever proportional cost of service is in question.

As part of the regular periodic reviews of the utility fee, best practices include maintaining financial self-sufficiency, setting target reserve levels for the utility fund, and conducting regular customer outreach/ communications to educate the community on their utility system and value of the service provided.

Table 1 shows utility best practices and the City's current practices. The City last conducted a water rate study in 2019 and last increased rates January 1, 2024. A water rate study is necessary at this time to a) ensure revenue sufficiency of the water system's operations for the next six years, and b) provide revenues to continue planned system rehabilitation of the water system's infrastructure.

Table 1
Water Utility Best Practices

Best Practice	City of Newman
Rate study every 3 to 5 years	Last rate study conducted in 2019.
Collect for system rehabilitation (for upkeep of existing infrastructure) in rates	Rehabilitation is included in the rates.
Regular customer communications to educate on the utility systems and value of service	The City uses bill inserts, its website, and other regular communication platforms to communicate with customers.
Meet bond covenants	The City has a loan with the State for construction of Well 10; it has funded the debt service reserve fund and is meeting the debt service coverage requirement.
Self-sufficient enterprise fund	The Water Fund is self-sufficient; it is not supported by transfers from any other City funds.
Meet target cash balance	The City is currently meeting its target cash balance but will be short of its target cash balance in future years without rate increases.

This Study incorporates all three major elements of cost-based rate making; revenue requirement analysis, cost of service analysis, and rate-design analysis. In determining an appropriate rate structure for Newman that would meet the requirements of Proposition 218, the following key objectives were considered:

- Rates must be capable of generating sufficient revenues to meet all annual financial obligations of the water enterprise fund;

- Changes to the rate structure must be administratively feasible (compatible with the existing billing system and straightforward to explain to customers);

- The rate structure should be as reflective of local customer water use as possible; and

- Revised rates must be supportive of City goals, including meeting target reserve levels and keeping within affordability guidelines.

This report presents the result of the analysis and rate structure that best meets these objectives under current and projected conditions.

1.2 Rate Setting Principles and Organization of the Report

This report was prepared using the principles established by the American Water Works Association. The American Water Works Association "Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1 (the "M1 Manual") establishes commonly accepted professional standards for cost-of-service studies. The M1 Manual general principles of rate structure design and the objectives of the study are described below.

According to the M1 Manual, the first step in the ratemaking analysis is to determine the adequate and appropriate funding of a utility. This is referred to as the "revenue requirements" analysis. The analysis considers the short-term and long-term service objectives of the utility over a given planning horizon, including capital facilities and system operations and maintenance, to determine the adequacy of a utility's existing rates to recover its costs. After determining a utility's revenue requirements, a utility's next step is determining the cost-of-service. Utilizing a public agency's approved budget, financial reports, operating data, and capital improvement plans, a rate study generally categorizes (functionalizes) the costs, expenses, and assets of the water system among major operating functions to determine the cost-of-service.

After the assets and the costs of operating those assets are properly categorized by function, the rate study allocates those "functionalized costs" to the customer types. Rate design is the final part of the M1 Manual's rate-making procedure and generally uses the revenue requirement and cost-of-service analysis to determine appropriate rates for each customer class.

The Study is presented in four sections:

Section 1: Introduction, summary of findings, and calculated fees.
Section 2: Information about the water system including the customer base, the water fund, and future infrastructure capital needs.
Section 3: Projection of the revenue requirement and estimated future cash balances assuming the calculated rates are adopted.

Section 4: Water rates calculations and a comparison of calculated water bills with water bills in neighboring and similar communities. In addition, total water bill burden for a typical residential home is presented as a percentage of income to provide a test of affordability.

Appendix A includes support tables for the water rates analysis.

1.3 KEY FINDINGS AND CALCULATED FEES

This Study makes the following key findings:

Monthly Rates

- There is no need to change the rate structure. Examination of the types of customers and water usage by type of customer demonstrates that there has not been any significant shift in the water demand of City customers.

- The City should continue to collect monthly base rates from all water connections with service at the property, or immediately available to it, whether the customer is actively taking water through their service pipe or not.

- Both the base monthly charges (service charge and water meter replacement fee) and the water use rates need to be increased. The first increase in rates is assumed to be effective with the January 2025 billing cycle.

Calculated cost-of-service rates are shown in **Table 2**. In compliance with California SB-7, which requires all new multi-family residential development to be individually metered or sub-metered, any newly constructed apartments will pay the same base rate per unit as all current detached residential units unless the owner of the building(s) sub-meters each unit and performs its own internal water billing of each unit.

Total Monthly Water Charges

Table 3 summarizes the monthly total cost for a home with a 5/8-inch meter using 11 HCF through December 2030. Currently, a home using 11 HCF pays $49.12; starting January 2025 the bill would be $57.80. In the last year of the increases, year 6 (2030), the water bill would be $84.49.

Figure 1 shows the total monthly charges payable by a home with a 5/8-inch meter at different monthly usage levels under current rates and rates beginning January 2025. Water usage is expressed in hundred cubic feet (HCF or 'units').

Table 2
Calculated Water Rates

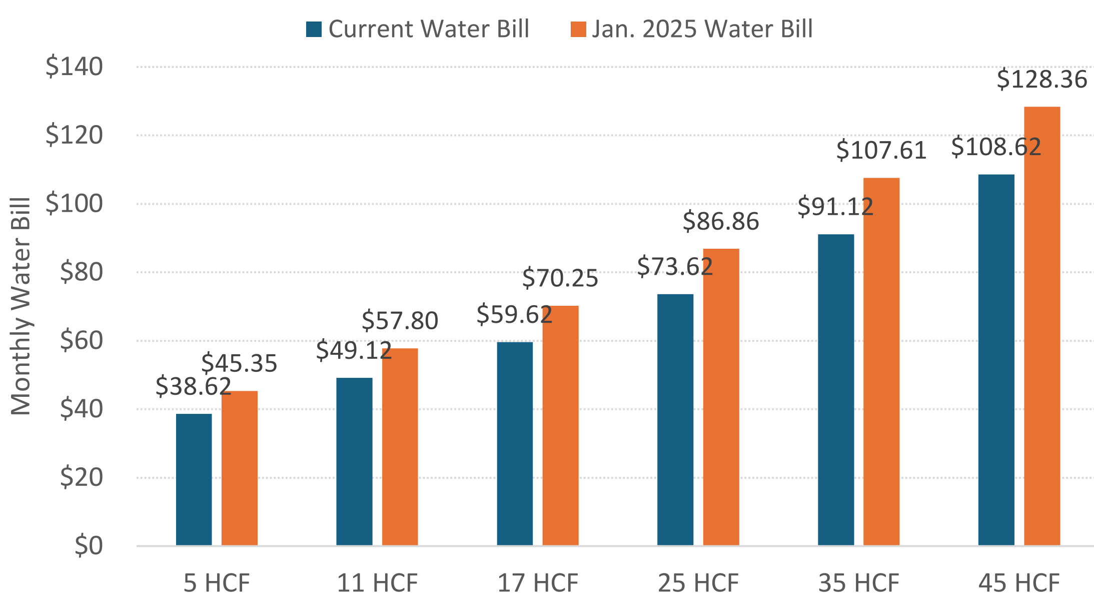
Fee Component	Current Rates	New Rate Schedule implemented January 2025	2026	2027	2028	2029	2030
Monthly Service Charge per Meter							
5/8-inch	$28.42	$32.24	$35.19	$40.17	$43.85	$45.69	$47.63
3/4-inch	$28.42	$32.24	$35.19	$40.17	$43.85	$45.69	$47.63
1-inch	$28.42	$32.24	$35.19	$40.17	$43.85	$45.69	$47.63
1.5-inch	$56.84	$64.48	$70.39	$80.33	$87.70	$91.39	$95.25
2-inch	$90.94	$103.17	$112.62	$128.53	$140.31	$146.22	$152.40
3-inch	$198.92	$225.69	$246.36	$281.16	$306.93	$319.86	$333.38
4-inch	$341.01	$386.90	$422.33	$481.99	$526.17	$548.34	$571.51
6-inch	$710.44	$806.04	$879.85	$1,004.15	$1,096.19	$1,142.37	$1,190.65
8-inch	$1,023.03	$1,160.70	$1,266.98	$1,445.98	$1,578.51	$1,645.01	$1,714.54
10-inch	$1,648.22	$1,870.02	$2,041.24	$2,329.63	$2,543.16	$2,650.30	$2,762.31
Monthly Water Meter Replacement Fee							
5/8-inch	$1.45	$2.73	$2.83	$2.93	$3.03	$3.14	$3.25
3/4-inch	$1.83	$3.28	$3.40	$3.52	$3.64	$3.77	$3.90
1-inch	$2.45	$3.69	$3.82	$3.95	$4.09	$4.24	$4.39
1.5-inch	$5.36	$8.20	$8.49	$8.79	$9.10	$9.42	$9.75
2-inch	$11.73	$19.14	$19.81	$20.51	$21.24	$21.98	$22.76
3-inch	$14.74	$24.61	$25.48	$26.37	$27.30	$28.26	$29.26
4-inch	$21.43	$38.28	$39.63	$41.03	$42.47	$43.97	$45.52
6-inch	$51.55	$91.74	$94.97	$98.32	$101.78	$105.37	$109.08
8-inch	$63.03	$110.45	$114.34	$118.36	$122.53	$126.85	$131.32
10-inch	$79.18	$137.79	$142.64	$147.67	$152.87	$158.26	$163.83
Use Charge per HCF							
Non-Landscape	$1.75	$2.08	$2.26	$2.59	$2.82	$2.93	$3.06
Landscape	$2.25	$2.49	$2.73	$3.16	$3.42	$3.53	$3.69

Table 3
Monthly Bill Impact for a Home

Customer Category		Current	Rates implemented January 2025	2026	2027	2028	2029	2030
Single Family Home 11 HCF								
Service Fee	5/8"	$28.42	$32.24	$35.19	$40.17	$43.85	$45.69	$47.63
Meter Fee	5/8"	$1.45	$2.73	$2.83	$2.93	$3.03	$3.14	$3.25
Use Charge		$19.25	$22.83	$24.91	$28.49	$31.03	$32.25	$33.61
Typical Monthly Bill		**$49.12**	**$57.80**	**$62.94**	**$71.59**	**$77.91**	**$81.09**	**$84.49**
Percentage Change			17.7%	8.9%	13.7%	8.8%	4.1%	4.2%

Source: HEC water rate study 2024.

Figure 1
Monthly Water Bill for a Home with a 5/8-inch Meter at different usage levels

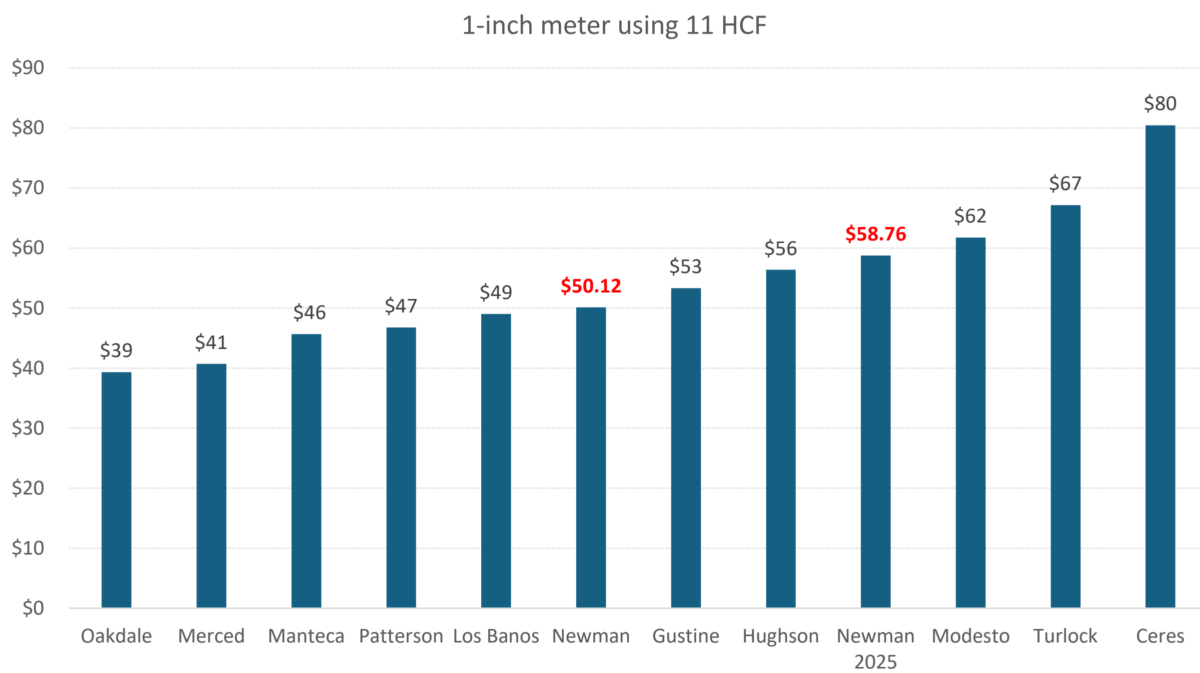


1.4 COMPARISON OF WATER BILLS WITH OTHER WATER PROVIDERS

Figure 2 compares the City's current and calculated water bill for a home using 11 HCF with the bills of other regional water providers. Note that a 1-inch meter is used for the comparison bills.

Currently, City customers have similar water bills as customers in Patterson, Los Banos, and Gustine. With the calculated rate increase in January 2025, the water bill will be close to that of homes served by Hughson and Modesto. This graph presents a snapshot in time; other cities may also be raising their water rates in January or the first half of 2025.

Figure 2
Comparison Monthly Water Bills for a Home using 11 HCF



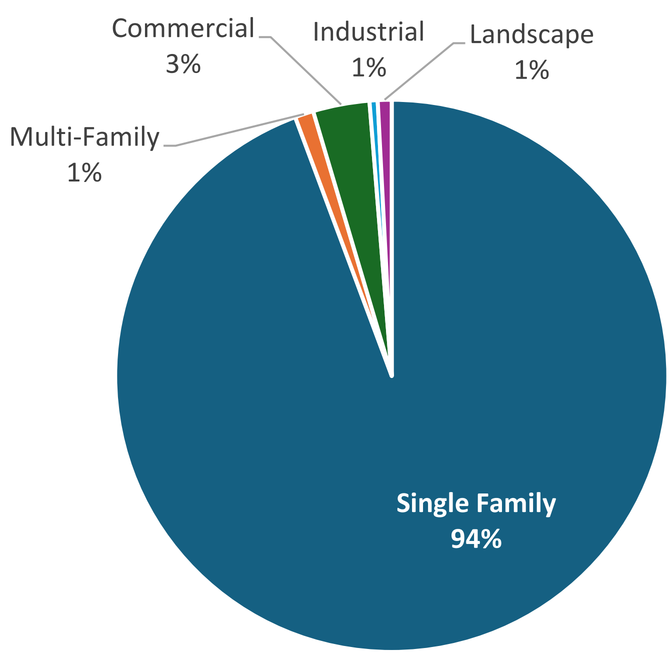
Section 2: NEWMAN CITY WATER SYSTEM

This section describes the water system's customer base, water production and consumption, and financial health of the water fund.

2.1 CUSTOMER BASE

The City serves water to about 3,400 single-family homes, more than 120 non-residential establishments, the Newman-Crows Landing Unified School District, and several irrigation-only ("landscape") customers. A pie chart illustrating the customer base is provided in **Figure 3**. As the pie chart shows, the City water customers are primarily (94%) single family residents.

Figure 3
Newman Water Customers



Per the California Department of Finance, Newman has a population of approximately 12,100, and it has sustained an annual average population increase of 2.3% since 2000. The number of occupied housing units has grown at a slightly greater rate of 2.5% since 2000. Historical population and housing estimates are shown in **Table A-1**. Based on historical growth in the City, and conversation with City staff, the water rate model includes the addition of 30 one-inch meters each year.

2.2 Water Production and Consumption

The City's water supply is 100% groundwater. Water use fluctuates from year to year depending on several factors including, but not limited to, growth, the weather, sustained drought, plumbing retrofits, and pricing of water. System-wide annual water production by month is shown in **Figure 4** for calendar years 2013 though 2023. The effects of mandatory water conservation can be seen in 2015 when summer usage dramatically decreased. The effects of continued water conservation messaging and installation of low-flow water devices are also displayed by the reduction in water production from its highest year, which was 2013, in the data presented.

Well production data is provided in **Appendix Table A-2.** Approximately 60% of annual water production is for year-round water consumption, and approximately 40% of annual water production is additional water for increased demand during the summer months.

Figure 4
Annual Water Production

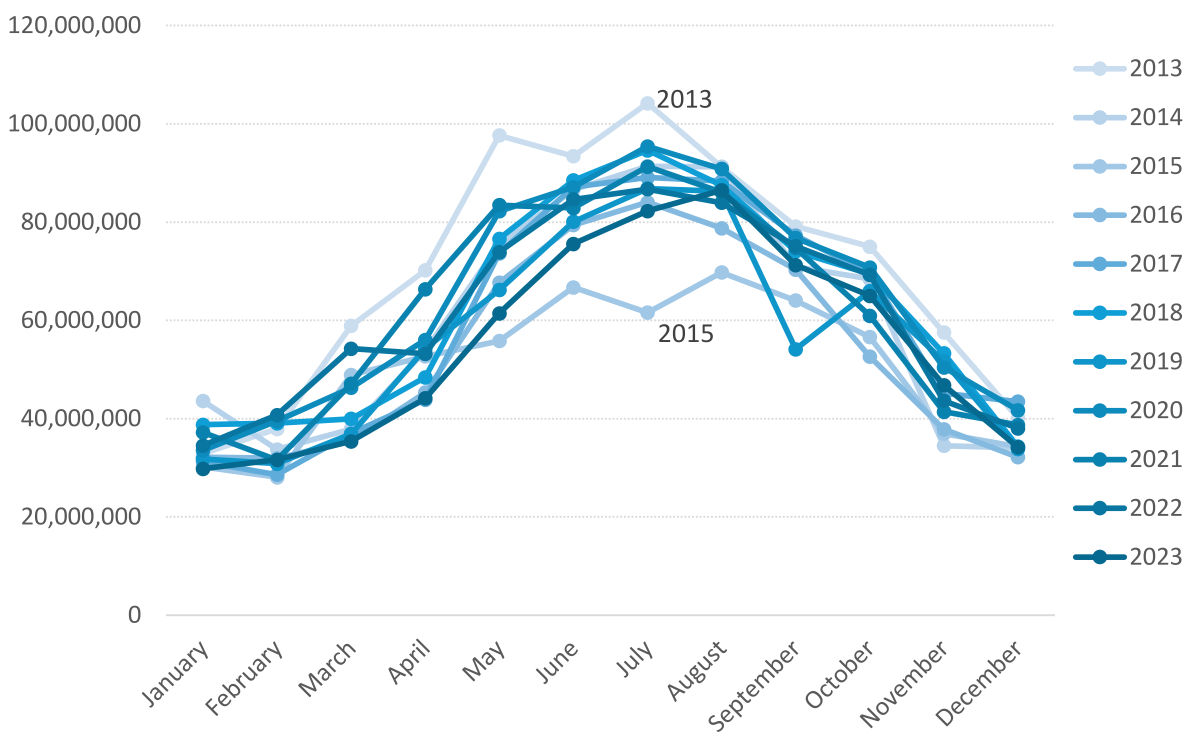


Table 4 shows median monthly water use per meter for each customer category using data spanning April 2021 through March 2024. Like most cities in the western U.S., Newman experiences greater water demand in the summer than the winter due to outside applications of water. **Appendix Table A-3** shows total water use by customer category each month, on average, for the last three years.

Historical average water use for 2019-2023 by customer category is used as the basis on which to project water use in the rate study. Historical potable water consumption is shown in **Appendix Table A-4.**

Table 4
Customer Usage Characteristics

	Median Monthly Use			Summer to
Customer Category	All Months	Summer	Winter	**Winter Ratio**
Residential	*Figures in HCF per Meter*			
Single Family	11.00	17.00	7.00	2.43
Multi Family	30.00	31.00	29.00	1.07
Non-Residential				
Commercial	4.00	5.00	3.00	1.67
Industrial	3.00	6.00	1.00	6.00
Landscape	39.00	80.50	4.00	20.13

Source: City of Newman water reads, and HEC water rate study August 2024.

2.3 THE WATER FUND

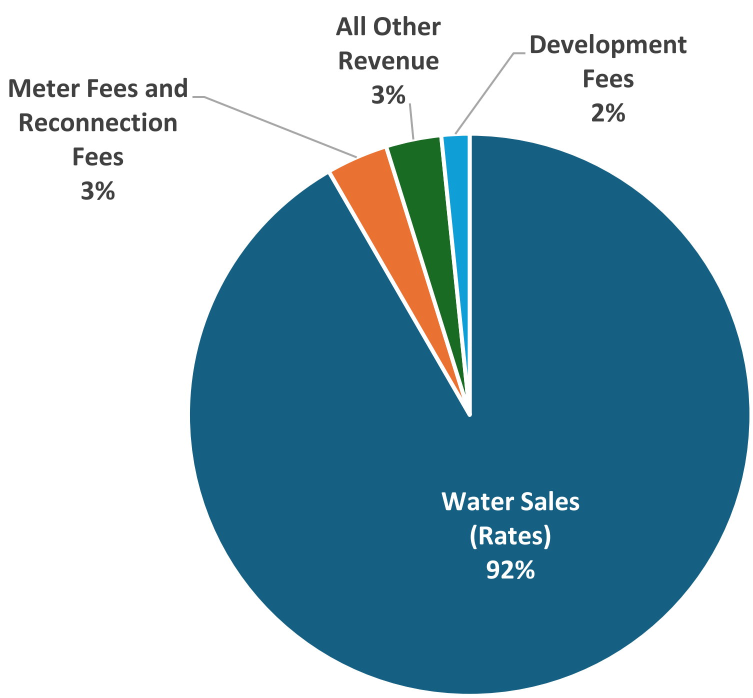
The City's water enterprise fund accounts for the revenues and expenses associated with provision of water service. An enterprise fund is a fund that is intended to recover its costs through user fees and charges for a specific service. Money collected for an enterprise fund cannot be spent on other services. Generally accepted accounting principles (GAAP) require state and local government to use the enterprise fund type to account for "business type activities". As a business type fund, enterprise funds must be self-sufficient. Enterprise funds also provide the repayment capacity for, and make debt service payments on, any debt incurred for capital projects; therefore, any water enterprise fund bond-funded projects do not diminish the City's general fund debt capacity.

It is important for enterprise funds to be self-sufficient, without subsidies from other funds, including the City's General Fund. General Fund cash should be used to protect against factors that could limit the City's ability to provide critical services. Decreasing General Fund reserves could leave the City financially vulnerable, reducing funds necessary to recover from a natural disaster, for example.

Table A-5 shows historical revenues and expenses for the water operating and capital funds for fiscal years ending 2019 through 2023, estimated numbers for fiscal year 2024, and budgeted numbers for fiscal year ending 2025. Historical financial audited statements are summarized in **Table A-6** of Appendix A for fiscal years ending 2018 through 2023.

Revenues
Water system operations are funded through rates, meter replacement fees, service fees, interest earnings, utility penalties, and other small miscellaneous revenues. **Figure 5** shows the historical share of revenues by source for the combined operating and capital funds.

Figure 5
Water Fund Annual Operating Revenue Sources



Rate revenue is generated by application of the water rate schedule shown in **Table 5**.

Water impact and connection fees, which are not updated in this study, but do provide revenues to the water capital fund, are shown in **Appendix Table A-7.**

Expenses
Annual operating costs include all water system operating expenses and capital outlay. Expenditures were grouped into six categories:

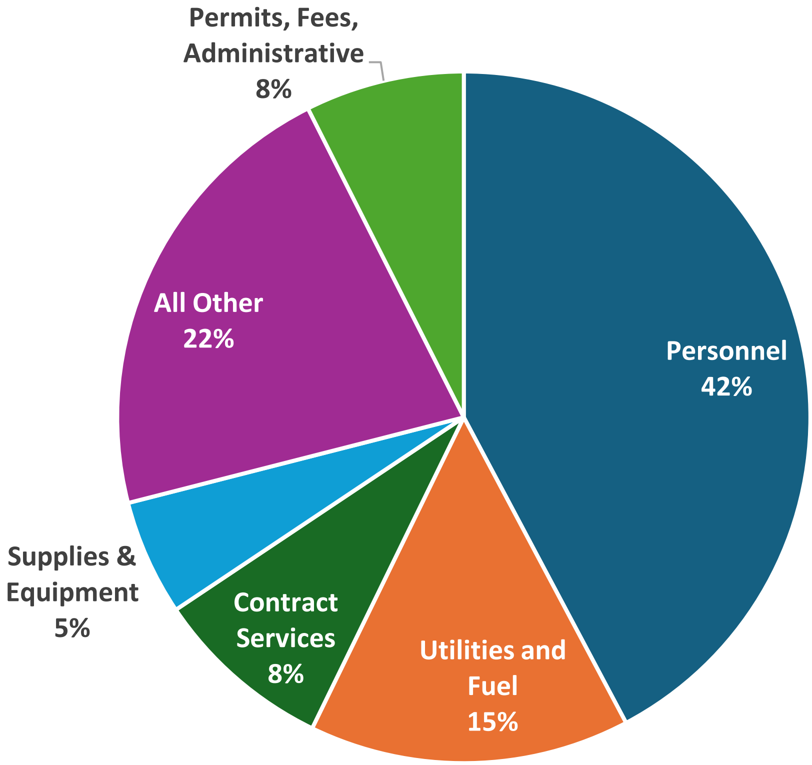
- Personnel (Payroll and Benefits)
- Contract Services
- Utilities and Fuel
- Supplies
- Debt Service
- All Other

Table 5
Current Water Rates Schedule

Fee Component	Rates
Monthly Service Charge per Meter	
5/8-inch	$28.42
3/4-inch	$28.42
1-inch	$28.42
1.5-inch	$56.84
2-inch	$90.94
3-inch	$198.92
4-inch	$341.01
6-inch	$710.44
8-inch	$1,023.03
10-inch	$1,648.22
Monthly Water Meter Replacement Fee	
5/8-inch	$1.45
3/4-inch	$1.83
1-inch	$2.45
1.5-inch	$5.36
2-inch	$11.73
3-inch	$14.74
4-inch	$21.43
6-inch	$51.55
8-inch	$63.03
10-inch	$79.18
Use Charge per HCF	
Non-Landscape	$1.75
Landscape	$2.25

Personnel, utilities and fuel, and all other expenses are the largest expenditure items. These three expense categories comprise approximately 79% of annual costs. Percentage share of historical expenses by expense category is shown in **Figure 6.**

Figure 6
Historical Water Fund Operating Expenses



Section 3: Projected Costs and Revenues

3.1 Operating Costs and Existing Debt

Projected operating costs are based on the fiscal year 2025 budget. For future year projections, personnel costs are increased 7.0% each year, electric costs and utilities are increased 10.0% each year and all other annual expenses are increased 5.0% or 3.0% each year. These cost increases were based on historical cost increases and discussions with City staff. Historical cost increases by type of expense, and comparison with increases in price indices (which reflect different measurements of inflation) is shown in **Appendix Table A-8**. It is very typical for water utility annual costs, and therefore water rates, to outstrip inflation.

In addition to historical types of costs incurred by the water fund, the City is adding new operations and maintenance costs in the next six years. Additional costs are included for contaminant testing, as well as the additions of a full-time water operator and a part-time water operator.

The City secured a loan with the State Water Boards Drinking Water State Revolving Fund (DWSRF) program to pay for the construction of Well 10. The loan carries annual debt service of $236,300. The loan will be paid off in fiscal year 2063. The loan repayment schedule is shown in **Table 6**.

Table 6
DWSRF Payment Schedule Well No. 10

		FY Ending						
Item	2023	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Principal Payment	June 30th	$236,300	$236,300	$236,300	$236,300	$236,300	$236,300	$236,300
Outstanding Balance	**$9,452,000**	$9,215,700	$8,979,400	$8,743,100	$8,506,800	$8,270,500	$8,034,200	$7,797,900
Repayment Period (years):		40	Last Payment Date:		6/30/2063	Interest Rate	0%	

Source: California DWSRF Payment Schedule for Project No. 5010013-001C - City of Newman.

3.2 Capital Projects and System Rehabilitation Costs

Capital Projects

Over the next six years, total water system capital improvement costs are estimated at $4.86 million in inflated dollars. Of the total cost, $4.07 million is to be paid for by existing customers, and $0.78 million by new customers. **Table 7** summarizes the total estimated costs in future dollars (cost estimates were provided in 2024 dollars; the rate study inflates the cost estimates by 4% each year per the approximate 5-year historical average increase in the Engineering News Record (ENR) Construction Cost Index (CCI)). **Appendix Table A-9** provides the cost estimates in 2024 dollars.

Table 7
Projected System Improvement Costs

Capital Improvement	Fiscal Year Ending 2025	2026	2027	2028	2029	2030	Estimated Total Costs
Inflation Factor --->		4.0%	4.0%	4.0%	4.0%	4.0%	
Facilities			*All Figures in Inflated Dollars*				
Well Rehabilitation [1]	$0	$0	$162,240	$0	$0	$0	$162,240
Pipeline Improvements	$150,000	$156,000	$162,240	$168,730	$175,479	$182,498	$994,946
Vehicles & Specialized Equipment	$0	$0	$81,120	$84,365	$0	$91,249	$256,734
Well 5 Chrome 6 MCLs Treatment Facilities	$0	$520,000	$1,081,600	$0	$0	$0	$1,601,600
Sample Stations Replacement Program [2]	$0	$12,480	$12,979	$13,498	$14,038	$14,600	$67,596
Meter Replacement Program [3]	$101,250	$105,300	$109,512	$113,892	$118,448	$123,186	$671,589
Fire Hydrant Replacement Program [4]	$0	$28,080	$29,203	$30,371	$31,586	$32,850	$152,090
Subtotal Facilities (rounded)	**$251,300**	**$821,900**	**$1,638,900**	**$410,900**	**$339,600**	**$444,400**	**$3,907,000**
Studies							
Water Master Plan and Water CIPs Update [5]	$0	$52,000	$0	$0	$0	$0	$52,000
Water Rate Study Update [5]	$44,000	$0	$0	$0	$0	$59,008	$103,008
Urban Water Management Plan 5 year update	$0	$0	$10,816	$0	$0	$0	$10,816
Subtotal Studies (rounded)	**$44,000**	**$52,000**	**$10,900**	**$0**	**$0**	**$59,100**	**$166,000**
Total CIP Existing Customers	**$295,300**	**$873,900**	**$1,649,800**	**$410,900**	**$339,600**	**$503,400**	**$4,072,900**
Cash-Funded	$295,300	$353,900	$568,200	$410,900	$339,600	$503,400	$2,471,300
Debt-Funded	$0	$520,000	$1,081,600	$0	$0	$0	$1,601,600
Growth Projects							
FF-01 (700-ft 8" main replace 4" main)	$0	$0	$0	$0	$0	$381,542	$381,542
FF-02 (800-ft new 8" main)	$0	$0	$0	$403,151	$0	$0	$403,151
Subtotal Growth Projects (rounded)	**$0**	**$0**	**$0**	**$404,000**	**$0**	**$382,000**	**$785,000**
TOTAL CIP	**$295,300**	**$873,900**	**$1,649,800**	**$814,900**	**$339,600**	**$885,400**	**$4,857,900**

Source: City of Newman, spring 2024.

[1] Work is pending results of Water Well Profiling.
[2] 3 stations/year @ $4,000/station.
[3] 225 meters/year @ $450/meter.
[4] 3 hydrants/year @ $9,000/hydrant.
[5] Needed for Prop 1 Grants.

One project comprises about one-third of the existing customers' cost. Well No. 5 must comply with State Chromium 6 levels by October 2027. The City anticipates executing a DWSRF loan to install the required treatment facilities to the well. Estimated annual debt service associated with securing the loan is provided in **Table 8**.

System Rehabilitation

Customers are responsible for the upkeep of existing system facilities, as well as capital costs (and associated soft costs) of new facilities. Depreciation of the water system assets is used as a proxy for the amount that should be collected each year to fund system rehabilitation, as shown in **Table 9**. The estimated system rehabilitation cost includes replacement of existing assets and assets that are estimated to be constructed during the Study time period (see **Tables A-10** and **A-11**).

Table 8
Estimated Debt Service for Well No. 5 Chromium 6 Treatment

Item	SRF
Estimated Cost in Inflated Dollars	$1,601,600
Estimated Annual Debt Service (rounded)	**$48,800**
DWSRF Loan Assumptions:	
Interest Rate	1%
Term (years)	40

Source: Newman 2024 water rate study.

The water rates include 100% depreciation; however, the revenue collection is spent on capital projects each year. In some years not all of the money collected is spent on capital projects; in these years the additional amount is kept in the reserves and spent in another year in which capital costs exceed collections for system rehabilitation.

Table 9
System Rehabilitation Costs

	FY Ending					
Depreciation	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Annual Depreciation						
Existing Assets (rounded up)	$382,000	$370,000	$368,000	$349,000	$347,000	$347,000
New Assets (rounded up)	$11,000	$41,000	$104,000	$132,000	$146,000	$175,000
Total Annual Depreciation	**$393,000**	**$411,000**	**$472,000**	**$481,000**	**$493,000**	**$522,000**
Percentage Depreciation in Rates	100%	100%	100%	100%	100%	100%
System Rehabilitation Costs in Rates	**$393,000**	**$411,000**	**$472,000**	**$481,000**	**$493,000**	**$522,000**

Source: City of Newman and HEC 2024 water rate study.

3.3 Projected Revenue Requirement

The revenue requirement is the amount of money that must be raised through monthly fees each year to achieve revenue sufficiency. The projected revenue requirement over the next six years is provided in **Table 10**.

The City anticipates raising about $2.78 million from rates in fiscal year 2025, without accounting for any change in rates during the fiscal year. In fiscal year 2025, rates need to increase to raise an additional $0.28 million, for a total of $3.06 million.

Table 10
Projected Revenue Requirement

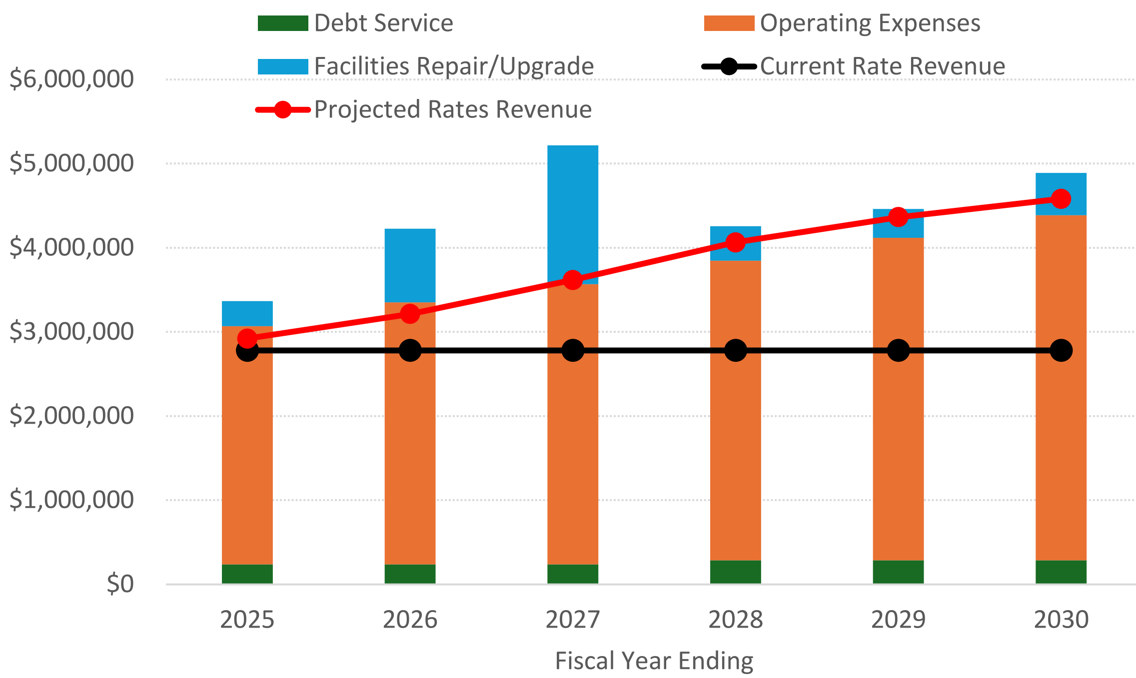
Expenses and Credits	Inflator	Fiscal Year Ending 2025 Budget	2026	2027	2028	2029	2030
Ongoing Operating Expenses				figures are rounded			
Wages and Salaries	7.0%	$691,430	$739,800	$791,600	$847,000	$906,300	$969,700
Benefits	7.0%	$462,108	$494,500	$529,100	$566,100	$605,700	$648,100
Contract Services	5.0%	$320,000	$336,000	$352,800	$370,400	$388,900	$408,300
Insurance	10.0%	$202,525	$222,800	$245,100	$269,600	$296,600	$326,300
Supplies	5.0%	$211,290	$221,900	$233,000	$244,700	$256,900	$269,700
Utilities - Electric	10.0%	$480,350	$528,400	$581,200	$639,300	$703,200	$773,500
Utilities - Gas, Telephone,	3.0%	$9,400	$9,700	$10,000	$10,300	$10,600	$10,900
Fuel	3.0%	$15,000	$15,500	$16,000	$16,500	$17,000	$17,500
Permits and Fees	3.0%	$18,000	$18,500	$19,100	$19,700	$20,300	$20,900
Equipment	3.0%	$25,969	$26,700	$27,500	$28,300	$29,100	$30,000
Administrative Surcharge	5.0%	$164,772	$173,000	$181,700	$190,800	$200,300	$210,300
Miscellaneous	3.0%	$232,050	$239,000	$246,200	$253,600	$261,200	$269,000
New Operating Expenses							
Contaminant Testing [1]	3.0%		$7,400	$7,600	$7,800	$8,000	$8,200
Full Time Operator	7.0%		$83,600	$89,500	$95,800	$102,500	$109,700
Part Time Operator	7.0%					$28,100	$30,100
Total Operating Expenses		**$2,832,894**	**$3,116,800**	**$3,330,400**	**$3,559,900**	**$3,834,700**	**$4,102,200**
Debt Service							
Well No. 10 SRF Loan		$236,300	$236,300	$236,300	$236,300	$236,300	$236,300
Chromium 6 - Well 5 SRF Loan					$48,800	$48,800	$48,800
Total Debt Service		**$236,300**	**$236,300**	**$236,300**	**$285,100**	**$285,100**	**$285,100**
System Rehabilitation							
Funded by Depreciation		$393,000	$411,000	$472,000	$481,000	$493,000	$522,000
Cash PAYG Greater than Depreciation		$0	$0	$96,200	$0	$0	$0
Total System Rehabilitation		**$393,000**	**$411,000**	**$568,200**	**$481,000**	**$493,000**	**$522,000**
Credits							
Interest Income	constant	$58,000	$58,000	$58,000	$58,000	$58,000	$58,000
Meter Replacement Fee	Table A-20	$113,900	$144,100	$150,600	$157,400	$164,500	$171,900
Water Recon Fee	constant	$23,000	$23,000	$23,000	$23,000	$23,000	$23,000
Misc Revenue/income	constant	$300	$300	$300	$300	$300	$300
Utility Application Fee	constant	$8,000	$8,000	$8,000	$8,000	$8,000	$8,000
Penalty - Utility Payments	constant	$40,000	$40,000	$40,000	$40,000	$40,000	$40,000
Total Credits		**$243,200**	**$273,400**	**$279,900**	**$286,700**	**$293,800**	**$301,200**
REVENUE REQUIREMENT		**$3,218,994**	**$3,490,700**	**$3,855,000**	**$4,039,300**	**$4,319,000**	**$4,608,100**
RATE REVENUE		**$3,059,000**	**$3,365,000**	**$3,870,000**	**$4,257,000**	**$4,470,000**	**$4,694,000**
Annual Percentage Change		10%	10%	15%	10%	5%	5%

Source: City of Newman and HEC August 2024.

[1] Chrome 6, Per-Polyfluoroalkyl (PFAS), and UCMR 6 testing.

The water revenue requirement projection is illustrated in **Figure 7**.

Figure 7
Projected Revenue Requirement



3.4 Cash Flow Projection

Figure 8 illustrates projected revenues (assuming rates are increased), expenses, and total unrestricted cash for the operating fund through fiscal year 2030. With adoption of the calculated rates, it is anticipated that the City will be able to meet all water enterprise fund obligations, including existing and potential debt service coverage requirements, and achieve a target of at least six months of operating expenses in unrestricted cash reserves.

The detailed projected cash flow, which also demonstrates the City's ability to meet debt covenants, is provided in **Table 11.** Under the terms of the existing DWSRF loan, the City must restrict one year of debt service ($236,300) in reserves. With repayment of an additional DWSRF loan anticipated to begin in 2028, the restricted funds are expected to increase to $285,100.

Cash flow for the capital fund is shown in **Table 12**. The capital fund pays for projects required of new growth.

Figure 8
Projected Operating Fund Cash Balances

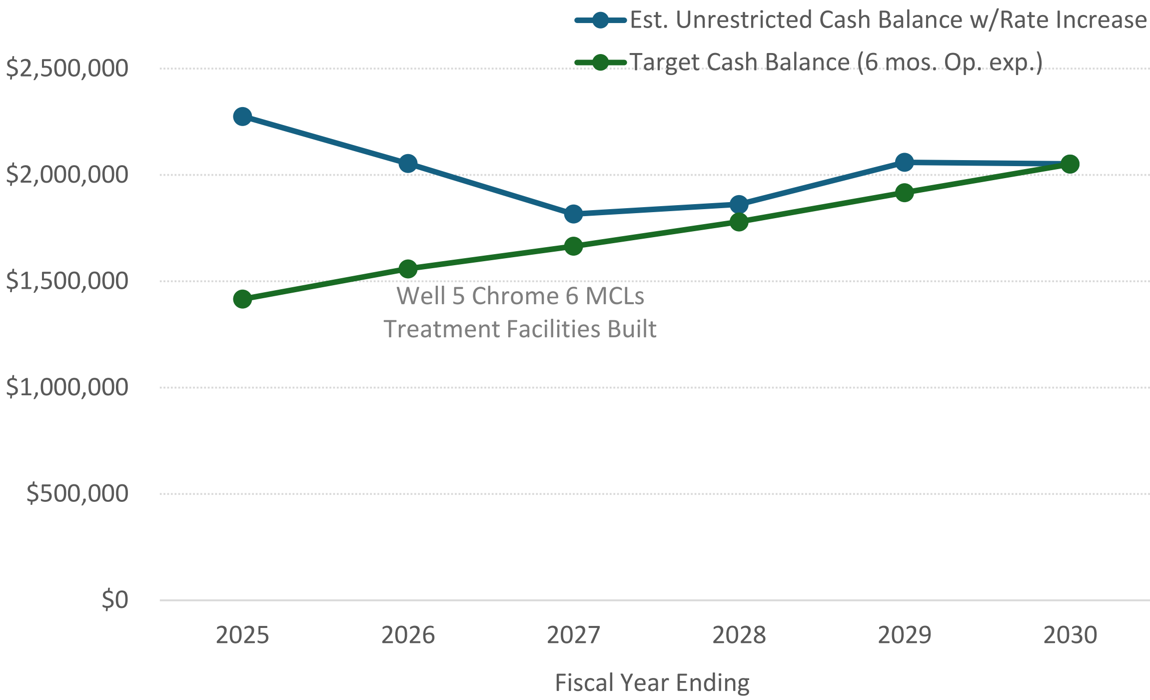


Table 11
Projected Water Operating Fund Cash Flow

Revenues and Expenses	Fiscal Year Ending 2025	2026	2027	2028	2029	2030
Rates increase	*Jan. 2025*	*Jan. 2026*	*Jan. 2027*	*Jan. 2028*	*Jan. 2029*	*Jan. 2030*
Operating Revenues						
Service Fees	$1,415,000	$1,569,900	$1,768,100	$1,986,100	$2,132,700	$2,239,500
Use Fees	$1,504,900	$1,642,000	$1,849,300	$2,077,300	$2,230,700	$2,342,400
Meter Replacement Fees	$113,900	$144,100	$150,600	$157,400	$164,500	$171,900
Subtotal Water Sales Revenues	**$3,033,800**	**$3,356,000**	**$3,768,000**	**$4,220,800**	**$4,527,900**	**$4,753,800**
Non-Water Sales	$129,300	$129,300	$129,300	$129,300	$129,300	$129,300
Total Operating Revenues	**$3,163,100**	**$3,485,300**	**$3,897,300**	**$4,350,100**	**$4,657,200**	**$4,883,100**
Operating Expenses	**$2,832,894**	**$3,116,800**	**$3,330,400**	**$3,559,900**	**$3,834,700**	**$4,102,200**
Net Revenues before Debt Service	**$330,206**	**$368,500**	**$566,900**	**$790,200**	**$822,500**	**$780,900**
Debt Service	**$236,300**	**$236,300**	**$236,300**	**$285,100**	**$285,100**	**$285,100**
Debt Service Coverage [1]	1.40	1.56	2.40	2.77	2.88	2.74
Net Revenues	**$93,906**	**$132,200**	**$330,600**	**$505,100**	**$537,400**	**$495,800**
Beginning Cash Balance [2]	$2,713,381	$2,512,000	$2,290,300	$2,052,700	$2,146,900	$2,344,700
Net Revenues	$93,906	$132,200	$330,600	$505,100	$537,400	$495,800
Capital Projects [3]	($295,300)	($353,900)	($568,200)	($410,900)	($339,600)	($503,400)
Estimated Ending Balance (rounded)	**$2,512,000**	**$2,290,300**	**$2,052,700**	**$2,146,900**	**$2,344,700**	**$2,337,100**
Restricted	$236,300	$236,300	$236,300	$285,100	$285,100	$285,100
Unrestricted	**$2,275,700**	**$2,054,000**	**$1,816,400**	**$1,861,800**	**$2,059,600**	**$2,052,000**
Target Unrestricted Balance [4]	**$1,416,447**	**$1,558,400**	**$1,665,200**	**$1,779,950**	**$1,917,350**	**$2,051,100**

Source: City of Newman and HEC, August 2024.

[1] Per SRF Project No. 5010013-001C, debt service coverage ratio must be at least 1.20.

[2] Operating fund 63 cash balance as of 7/1/2024.

[3] Capital projects for system rehabilitation only.

[4] Six months of operating expenditures.

Table 12
Projected Capital Fund Cash Flow

Capital Fund	2025	2026	2027	2028	2029	2030
Beginning Balance	($568,260)	($414,260)	($205,965)	$121,935	$46,684	$374,584
plus Connection / Impact Fees [1]	$154,000	$208,295	$327,900	$327,900	$327,900	$327,900
less Project FF_01	$0	$0	$0	$0	$0	($381,542)
less Project FF_02	$0	$0	$0	($403,151)	$0	$0
Ending Balance Fund 64	**($414,260)**	**($205,965)**	**$121,935**	**$46,684**	**$374,584**	**$320,941**

Source: City of Newman August 2024.

[1] FY25 budget. For future years, the estimated number of new 1-inch meters is multiplied by the anticipated fee in place.

Estimated New 1-inch Meters		30	30	30	30	30
Proposed New Fee Schedule in place by Jan. 2025		$10,930	$10,930	$10,930	$10,930	$10,930
Current Fee for New 1-inch Meter	$2,956					

SECTION 4: MONTHLY FEE CALCULATIONS

4.1 COST CLASSIFICATION AND ALLOCATION

After determining the revenue requirement, the next step is determining the cost-of-service. Utilizing the fiscal year 2024 expenditures, operating data, and infrastructure asset values, the rate study categorizes (functionalizes) the assets and costs of the water system among major operating functions to determine the cost-of-service.

Functional cost allocation for the water system is provided in Appendix A **Tables A-12** and **A-13.** Actual fiscal year 2024 water fund expenditures were allocated to the different functions of water service based on one of five methodologies described below.

1. **Plant-in-Service.** Plant-in-service costs include the original cost of current water system assets. Total cost is allocated 1% to customers, 75% to capacity, and 24% to commodity costs.

2. **Average to Peak Month Costs.** Certain costs are allocated to reflect the cost of additional water production during the peak usage months. These costs are allocated 41% to capacity and 59% to commodity.

3. **Utilities.** Utilities costs (electricity) are allocated 10% to capacity and 90% to use. Electricity costs are driven by water demand.

4. **Customers.** Costs such as most administrative staff costs, water membership/dues, printing and postage are allocated 100% to customer costs. These costs are not affected by the amount of capacity available, or the quantity of water delivered.

5. **Average of Classified Costs.** Some expenses are allocated to multiple functions of water service because they do not directly relate to customer functions, water system capacity, or water deliveries quantity. These expenses are allocated among the customer, capacity, and commodity functions based on the combined percentage allocation of all classified costs.

The cost classification provides a guideline for the City in determining the portion of revenue requirement to collect through base monthly service charges versus usage charges. Base monthly service charges are fixed at the same amount each month. Usage charges billed to customers are variable because they depend on the quantity of water consumed each month.

Fixed Costs

As described in the AWWA M1 Manual, fixed costs generally consist of costs that a utility incurs to serve customers irrespective of the amount or rate of water used. These typically include (1) customer-related costs such as administrative and billing costs associated with meter reading, postage, and billing, and (2) the infrastructure (capacity-related facilities) required to provide service to customers. Customer and capacity costs are allocated to customers based on the number of Equivalent Meter Units (EMU)s, which is explained in 4.2 of this report section.

Variable Costs
Variable costs are those costs that change in total as the volume of water consumption changes, as measured in a specific time period. These include well pumping and distribution electricity costs, and costs related to plant-in-service, the largest of which is supplies, as well as other costs determined in the functional allocation. Variable costs are recovered through use charges applied per hundred cubic feet (HCF) consumed.

The costs are functionalized and allocated to fixed charges and use charges as shown in **Table 13**. In total, the functional allocation assigns 49% of costs to service charges and 51% of costs to use charges.

Table 13
Allocation of Revenue Requirement to Service and Use Charges

		FY Ending					
Cost Classification		**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Rates Revenue		$3,059,000	$3,365,000	$3,870,000	$4,257,000	$4,470,000	$4,694,000
Fixed Monthly Charges							
Customer	31%	$951,558	$1,046,745	$1,203,835	$1,324,218	$1,390,476	$1,460,155
Capacity (Readiness-to-Serve)	18%	$543,584	$597,960	$687,699	$756,469	$794,319	$834,124
Total Fixed Monthly Charges	**49%**	**$1,495,142**	**$1,644,705**	**$1,891,534**	**$2,080,687**	**$2,184,795**	**$2,294,279**
Use Charges							
Capacity (Peaking)	12%	$371,009	$408,122	$469,371	$516,308	$542,142	$569,310
Commodity	39%	$1,192,848	$1,312,172	$1,509,095	$1,660,005	$1,743,064	$1,830,412
Total Use Charges	**51%**	**$1,563,858**	**$1,720,295**	**$1,978,466**	**$2,176,313**	**$2,285,205**	**$2,399,721**

Source: HEC water rate study, August 2024.

4.2 RATE CALCULATIONS

Service Charges
The calculation of monthly service charges by meter size is shown in **Table 14**.

Fixed costs are divided by the number of EMUs to determine the per month service charges. The most common method for levying fixed charges is by meter size because meter size is an indicator of potential capacity or demand requirement that each customer places on the water system. Typically, but not always, the ratio at which the meter charge increases is a function of the meter's safe operating capacity as established by the American Water Works Association. These meter ratios are used because a significant portion of a water system's design, and, in turn, the utility's operating and capital costs are related to meeting capacity needs. The 2015 San Juan Capistrano decision reaffirmed that rates must be proportional to the costs of service received. Customers with larger water meters have greater capacity to use the water system; therefore, base monthly service charges should be collected by water meter size.

Table 14
Calculation of Monthly Service Charges

	FY Ending					
Item	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Est. Billable EMUs [1]	3,864	3,894	3,924	3,954	3,984	4,014
Allocated Costs	**$1,495,142**	**$1,644,705**	**$1,891,534**	**$2,080,687**	**$2,184,795**	**$2,294,279**
Monthly Service Charge per Meter						
5/8-inch	**$32.24**	**$35.19**	**$40.17**	**$43.85**	**$45.69**	**$47.63**
3/4-inch	$32.24	$35.19	$40.17	$43.85	$45.69	$47.63
1-inch	$32.24	$35.19	$40.17	$43.85	$45.69	$47.63
1.5-inch	$64.48	$70.39	$80.33	$87.70	$91.39	$95.25
2-inch	$103.17	$112.62	$128.53	$140.31	$146.22	$152.40
3-inch	$225.69	$246.36	$281.16	$306.93	$319.86	$333.38
4-inch	$386.90	$422.33	$481.99	$526.17	$548.34	$571.51
6-inch	$806.04	$879.85	$1,004.15	$1,096.19	$1,142.37	$1,190.65
8-inch	$1,160.70	$1,266.98	$1,445.98	$1,578.51	$1,645.01	$1,714.54
10-inch	$1,870.02	$2,041.24	$2,329.63	$2,543.16	$2,650.30	$2,762.31

Source: HEC.

[1] Projected meter equivalents based on addition of 30 1-inch meters each year.

The calculation of EMUs is provided in **Table 15.** Supporting **Table A-14** breaks down the meters by customer type. As of April 2024, the City had 3,576 billing water meters.

Use Charges

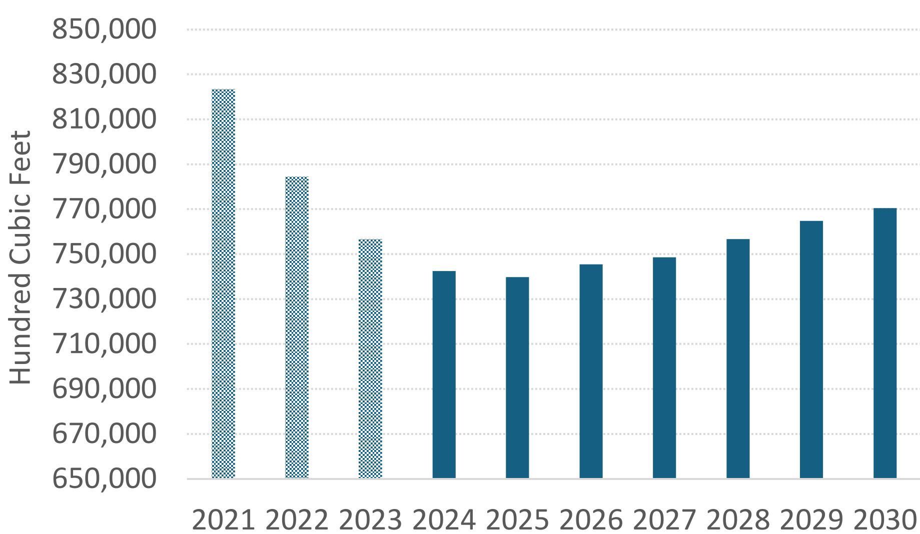
The calculation of use charges is based on allocated cost and projected water use. Historical water demand and projected water demand for the next six years is shown in **Figure 9**. The summary of water demand by customer category (**Table A-15**) is based on average water use for the past three years plus the assumed addition of 30 1-inch meters per year. In addition, the projected water demand accounts for customers' reactions to price increases. The relationship between increased prices and decreased demand is referred to as price elasticity. Price elasticity varies by geography due to many micro-economic variables. HEC applied industry knowledge to establish assumed price elasticity factors for the Study. Price elasticity analysis is shown in **Tables A-16** and **A-17**.

Table 15
Equivalent Meter Units

Meter Size	Number of Billing Meters	Meter Flow (gpm)	Ratios	Billable Equivalent Meter Units
5/8-inch	3,093	10	1.0	3,093
3/4-inch	256	15	1.0	256
1-inch	159	25	1.0	159
1.5-inch	7	50	2.0	14
2-inch	47	80	3.2	150
3-inch	3	175	7.0	21
4-inch	8	300	12.0	96
6-inch	3	625	25.0	75
8-inch	0	900	36.0	0
10-inch	0	1,450	58.0	0
Total	**3,576**			**3,864**

Source: City of Newman and AWWA.

Figure 9
Historical and Projected Water Demand



Capacity (peaking) costs are allocated among the customer categories using maximum day and month usage data presented in **Table A-18**. Commodity (use) costs are allocated using total annual water use by customer category.

Table 16
Use Costs Allocation to Customer Categories

Customer Category	% Share	FY Ending 2025	2026	2027	2028	2029	2030
Capacity (Peaking) Cost Share							
Total Cost Share		**$371,009**	**$408,122**	**$469,371**	**$516,308**	**$542,142**	**$569,310**
Residential							
Single Family	70%	$258,087	$283,904	$326,511	$359,162	$377,132	$396,031
Multi Family	3%	$11,674	$12,842	$14,769	$16,246	$17,059	$17,914
Non-Residential							
Commercial	3%	$12,517	$13,769	$15,835	$17,419	$18,290	$19,207
Industrial	8%	$29,212	$32,134	$36,957	$40,652	$42,686	$44,826
Landscape	16%	$59,520	$65,473	$75,299	$82,829	$86,974	$91,332
Total Capacity (Peaking) Costs							
Commodity (Use) Cost Share							
Total Cost Share		**$1,192,848**	**$1,312,172**	**$1,509,095**	**$1,660,005**	**$1,743,064**	**$1,830,412**
Residential							
Single Family	70%	$831,842	$915,054	$1,052,380	$1,157,618	$1,215,539	$1,276,452
Multi Family	4%	$44,492	$48,943	$56,288	$61,916	$65,014	$68,272
Non-Residential							
Commercial	4%	$52,635	$57,900	$66,590	$73,248	$76,913	$80,768
Industrial	13%	$151,156	$166,277	$191,231	$210,354	$220,879	$231,948
Landscape	9%	$112,723	$123,999	$142,608	$156,868	$164,717	$172,972
Total Commodity (Use) Costs		**$1,192,848**	**$1,312,172**	**$1,509,095**	**$1,660,005**	**$1,743,064**	**$1,830,412**
Total Costs to be Recovered through Use Charges							
Total Cost Share							
Single Family	70%	$1,089,929	$1,198,957	$1,378,890	$1,516,779	$1,592,672	$1,672,483
Multi Family	4%	$56,166	$61,785	$71,057	$78,163	$82,074	$86,187
Non-Residential							
Commercial	4%	$65,152	$71,669	$82,425	$90,667	$95,204	$99,974
Industrial	12%	$180,368	$198,411	$228,188	$251,006	$263,566	$276,773
Landscape	11%	$172,242	$189,472	$217,907	$239,698	$251,691	$264,304
Total Costs		**$1,563,858**	**$1,720,295**	**$1,978,466**	**$2,176,313**	**$2,285,205**	**$2,399,721**

Source: City consumption records and HEC 2024 water rate study.

The calculation of cost per HCF for non-landscape and landscape meters is presented in **Table 17.**

Table 17
Calculation of Use Charges per HCF

Customer	FY Ending					
Category	2025	2026	2027	2028	2029	2030
Non-Landscape						
Use in HCF	670,594	675,933	679,707	686,603	693,524	698,866
Allocated Cost	$1,391,615	$1,530,822	$1,760,559	$1,936,615	$2,033,514	$2,135,418
Cost per HCF	**$2.08**	**$2.26**	**$2.59**	**$2.82**	**$2.93**	**$3.06**
Landscape						
Use in HCF	69,168	69,472	68,898	70,076	71,261	71,564
Allocated Cost	$172,242	$189,472	$217,907	$239,698	$251,691	$264,304
Cost per HCF	**$2.49**	**$2.73**	**$3.16**	**$3.42**	**$3.53**	**$3.69**

Source: City of Newman and HEC.

Meter Replacement Fee

The calculated meter replacement fees are shown in **Table 18**. Supporting **Table A-19** provides the basis of the water meter replacement fee costs. Projected revenue from the meter replacement fees is calculated in **Table A-20**.

Table 18
Calculated Meter Replacement Fee

Meter	Rates implemented January					
Size	2025	2026	2027	2028	2029	2030
San Francisco CPI Historical Annual Increase				*3.5%*		
5/8-inch	$2.73	$2.83	$2.93	$3.03	$3.14	$3.25
3/4-inch	$3.28	$3.40	$3.52	$3.64	$3.77	$3.90
1-inch	$3.69	$3.82	$3.95	$4.09	$4.24	$4.39
1.5-inch	$8.20	$8.49	$8.79	$9.10	$9.42	$9.75
2-inch	$19.14	$19.81	$20.51	$21.24	$21.98	$22.76
3-inch	$24.61	$25.48	$26.37	$27.30	$28.26	$29.26
4-inch	$38.28	$39.63	$41.03	$42.47	$43.97	$45.52
6-inch	$91.74	$94.97	$98.32	$101.78	$105.37	$109.08
8-inch	$110.45	$114.34	$118.36	$122.53	$126.85	$131.32
10-inch	$137.79	$142.64	$147.67	$152.87	$158.26	$163.83

Source HEC.

Calculated Rate Schedule

Total calculated rates include the fixed monthly service charges and variable use charges per HCF. The calculated water rates schedule for the next six years is provided in **Table 19**.

Table 19
Calculated Water Rates

	Current	New Rate Schedule implemented January					
Fee Component	**Rates**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Monthly Service Charge per Meter							
5/8-inch	$28.42	$32.24	$35.19	$40.17	$43.85	$45.69	$47.63
3/4-inch	$28.42	$32.24	$35.19	$40.17	$43.85	$45.69	$47.63
1-inch	$28.42	$32.24	$35.19	$40.17	$43.85	$45.69	$47.63
1.5-inch	$56.84	$64.48	$70.39	$80.33	$87.70	$91.39	$95.25
2-inch	$90.94	$103.17	$112.62	$128.53	$140.31	$146.22	$152.40
3-inch	$198.92	$225.69	$246.36	$281.16	$306.93	$319.86	$333.38
4-inch	$341.01	$386.90	$422.33	$481.99	$526.17	$548.34	$571.51
6-inch	$710.44	$806.04	$879.85	$1,004.15	$1,096.19	$1,142.37	$1,190.65
8-inch	$1,023.03	$1,160.70	$1,266.98	$1,445.98	$1,578.51	$1,645.01	$1,714.54
10-inch	$1,648.22	$1,870.02	$2,041.24	$2,329.63	$2,543.16	$2,650.30	$2,762.31
Monthly Water Meter Replacement Fee							
5/8-inch	$1.45	$2.73	$2.83	$2.93	$3.03	$3.14	$3.25
3/4-inch	$1.83	$3.28	$3.40	$3.52	$3.64	$3.77	$3.90
1-inch	$2.45	$3.69	$3.82	$3.95	$4.09	$4.24	$4.39
1.5-inch	$5.36	$8.20	$8.49	$8.79	$9.10	$9.42	$9.75
2-inch	$11.73	$19.14	$19.81	$20.51	$21.24	$21.98	$22.76
3-inch	$14.74	$24.61	$25.48	$26.37	$27.30	$28.26	$29.26
4-inch	$21.43	$38.28	$39.63	$41.03	$42.47	$43.97	$45.52
6-inch	$51.55	$91.74	$94.97	$98.32	$101.78	$105.37	$109.08
8-inch	$63.03	$110.45	$114.34	$118.36	$122.53	$126.85	$131.32
10-inch	$79.18	$137.79	$142.64	$147.67	$152.87	$158.26	$163.83
Use Charge per HCF							
Non-Landscape	$1.75	$2.08	$2.26	$2.59	$2.82	$2.93	$3.06
Landscape	$2.25	$2.49	$2.73	$3.16	$3.42	$3.53	$3.69

4.3 SINGLE-FAMILY BILL IMPACTS

Residential bill impacts between current rates and new rates beginning January 2025 at different use levels are shown in **Table 20** for a home with a 5/8-inch meter. Most homes would have an increase of about $8-$9 per month, on average.

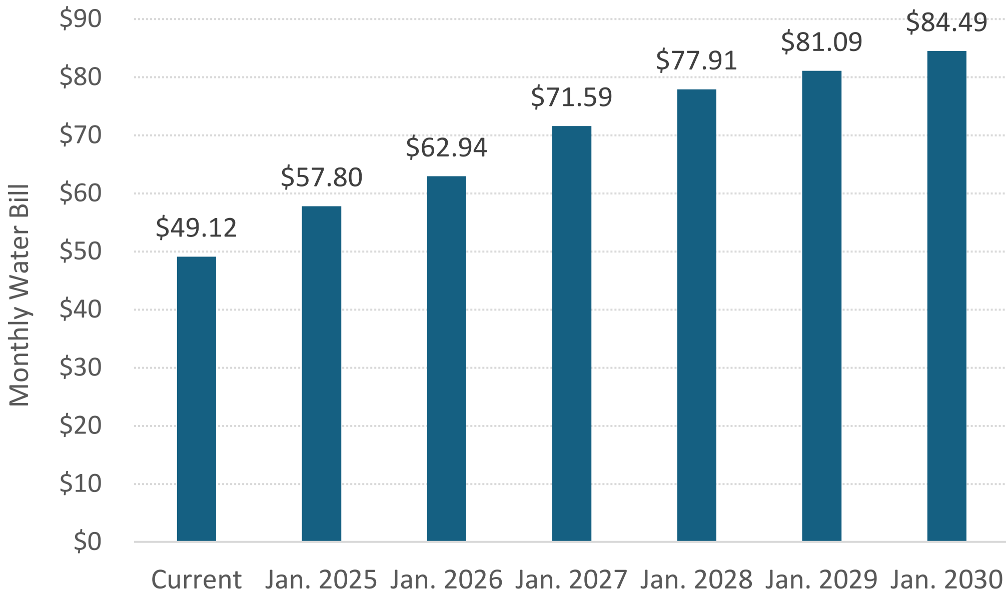
Table 20
Single Family Water Usage Monthly Bill Impacts

Monthly Use in HCF	Current: Service Fee 5/8-inch	Current: Meter Fee 5/8-inch	Current: Use Charge	Total Monthly Bill	Jan-25: Service Fee 5/8-inch	Jan-25: Meter Fee 5/8-inch	Jan-25: Use Charge	Total Monthly Bill	Change in Bill
			Rate per HCF *$1.75*				*Rate per HCF* *$2.08*		
1	$28.42	$1.45	$1.75	**$31.62**	$32.24	$2.73	$2.08	**$37.05**	$5.43
2	$28.42	$1.45	$3.50	**$33.37**	$32.24	$2.73	$4.15	**$39.13**	$5.76
3	$28.42	$1.45	$5.25	**$35.12**	$32.24	$2.73	$6.23	**$41.20**	$6.08
4	$28.42	$1.45	$7.00	**$36.87**	$32.24	$2.73	$8.30	**$43.28**	$6.41
5	$28.42	$1.45	$8.75	**$38.62**	$32.24	$2.73	$10.38	**$45.35**	$6.73
6	$28.42	$1.45	$10.50	**$40.37**	$32.24	$2.73	$12.45	**$47.43**	$7.06
7	$28.42	$1.45	$12.25	**$42.12**	$32.24	$2.73	$14.53	**$49.50**	$7.38
8	$28.42	$1.45	$14.00	**$43.87**	$32.24	$2.73	$16.60	**$51.58**	$7.71
9	$28.42	$1.45	$15.75	**$45.62**	$32.24	$2.73	$18.68	**$53.65**	$8.03
10	$28.42	$1.45	$17.50	**$47.37**	$32.24	$2.73	$20.75	**$55.73**	$8.36
11	$28.42	$1.45	$19.25	**$49.12**	$32.24	$2.73	$22.83	**$57.80**	$8.68
12	$28.42	$1.45	$21.00	**$50.87**	$32.24	$2.73	$24.90	**$59.88**	$9.01
13	$28.42	$1.45	$22.75	**$52.62**	$32.24	$2.73	$26.98	**$61.95**	$9.33
14	$28.42	$1.45	$24.50	**$54.37**	$32.24	$2.73	$29.05	**$64.03**	$9.66
15	$28.42	$1.45	$26.25	**$56.12**	$32.24	$2.73	$31.13	**$66.10**	$9.98
16	$28.42	$1.45	$28.00	**$57.87**	$32.24	$2.73	$33.20	**$68.18**	$10.31
17	$28.42	$1.45	$29.75	**$59.62**	$32.24	$2.73	$35.28	**$70.25**	$10.63
18	$28.42	$1.45	$31.50	**$61.37**	$32.24	$2.73	$37.35	**$72.33**	$10.96
19	$28.42	$1.45	$33.25	**$63.12**	$32.24	$2.73	$39.43	**$74.40**	$11.28
20	$28.42	$1.45	$35.00	**$64.87**	$32.24	$2.73	$41.50	**$76.48**	$11.61
25	$28.42	$1.45	$43.75	**$73.62**	$32.24	$2.73	$51.88	**$86.86**	$13.24
30	$28.42	$1.45	$52.50	**$82.37**	$32.24	$2.73	$62.26	**$97.23**	$14.86
35	$28.42	$1.45	$61.25	**$91.12**	$32.24	$2.73	$72.63	**$107.61**	$16.49
40	$28.42	$1.45	$70.00	**$99.87**	$32.24	$2.73	$83.01	**$117.98**	$18.11
45	$28.42	$1.45	$78.75	**$108.62**	$32.24	$2.73	$93.38	**$128.36**	$19.74
50	$28.42	$1.45	$87.50	**$117.37**	$32.24	$2.73	$103.76	**$138.74**	$21.37

Source: HEC.

Figure 10 shows projected single family water bills for Newman through December 2030 at 11 HCF water usage per month.

Figure 10
Projected Single Family Bill for 11 HCF



Affordability Test

Table 21 shows two pieces of information considered by federal and state agencies when offering financial assistance to water providers.

1. The median household income (MHI) of the community compared to the State MHI.
2. The percentage of MHI spent on water bills.

First, the City of Newman has an MHI that is 83.26% of the State's MHI. If a community's MHI is less than 80 percent of the State MHI, the community is considered "Disadvantaged", and more advantageous financing, such as loan repayment term, or grant and/or principal forgiveness, will be provided. The City of Newman does not meet the definition of Disadvantaged, making the more advantageous financing more challenging to get, unless a public health issue is being addressed.

Second, the water bill for an account with a 1-inch meter and consumption of 11 HCF is $50.12 and calculated to be $58.76 starting January 1, 2025. These bills are lower than 1.0% of the City's monthly MHI. Water rates usually need to be greater than 1.5% of MHI for federal and state agencies to offer principal forgiveness or grant funding, and bills below this level are considered reasonable.

The MHI analysis demonstrates that water bills (and rates) are affordable using the funding agencies' criteria.

Table 21
Test of Water Rates Affordability

Item	Current (2024)	Calculated Jan 2025
Median Household Income (MHI)		
Statewide California [1]	$91,905	
Estimated Newman [1]	$76,520	
Newman MHI as % of the State MHI [2]	**83.26%**	
Monthly Water Bill	***Bill for a 1-inch meter***	
Newman Monthly MHI	$6,377	$6,377
Avg. Monthly Water Bill	$50.12	$58.76
Avg. Monthly Bill as % of Newman MHI [3]	**0.79%**	**0.92%**

Source: HEC, California State Water Resources Control Board, and US Census Bureau.

[1] 2022 5-year American Community Survey.
[2] Per the Drinking Water State Revolving Fund program, a community with an MHI <80% of the Statewide MHI is Disadvantaged.
[3] Generally, water bills <2.0% are considered reasonable.

4.4 NON-RESIDENTIAL BILL IMPACTS

The effect of the calculated rate increases for a sample of non-residential customer types is shown in **Figure 11**. The impact is shown on an average monthly basis. Because bills for non-residential customers will vary by business type and through the year, the examples given are only illustrative. A low, medium, and high-water user were selected for illustration.

The impacts to Saputo, the largest industrial user of water, and the Newman Crows Landing Unified School District were calculated separately using actual water consumption from 2023. **Figure 12** shows the average monthly bill impacts to these two customers.

Figure 11
Estimated Monthly Bill Impacts for Sample Commercial Customers

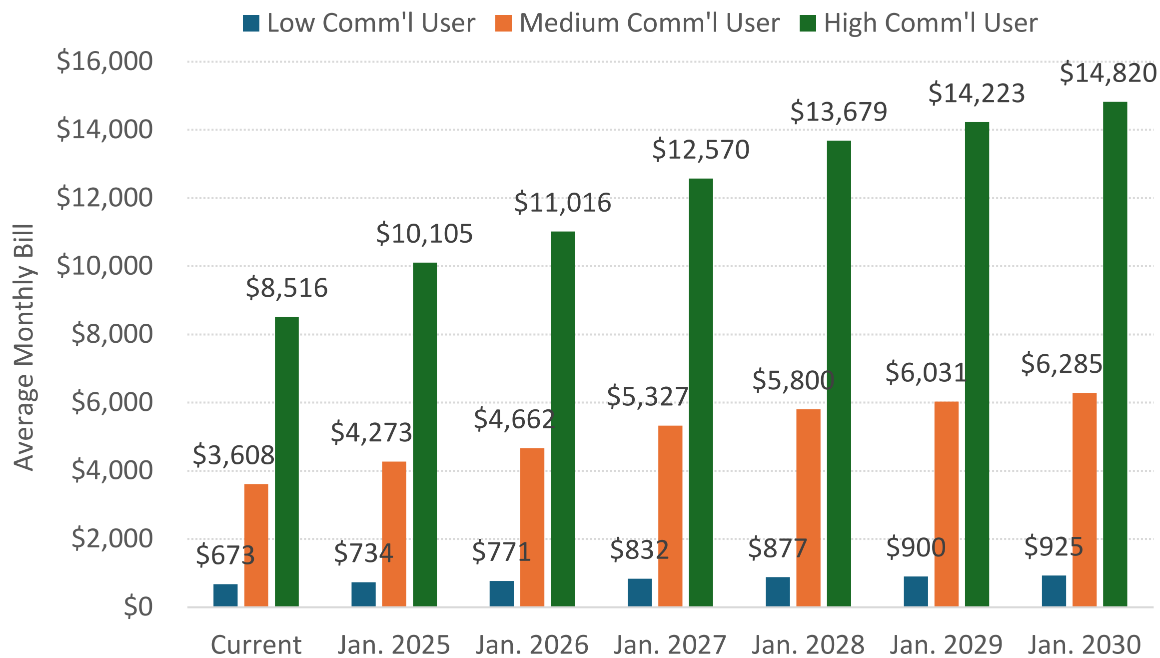
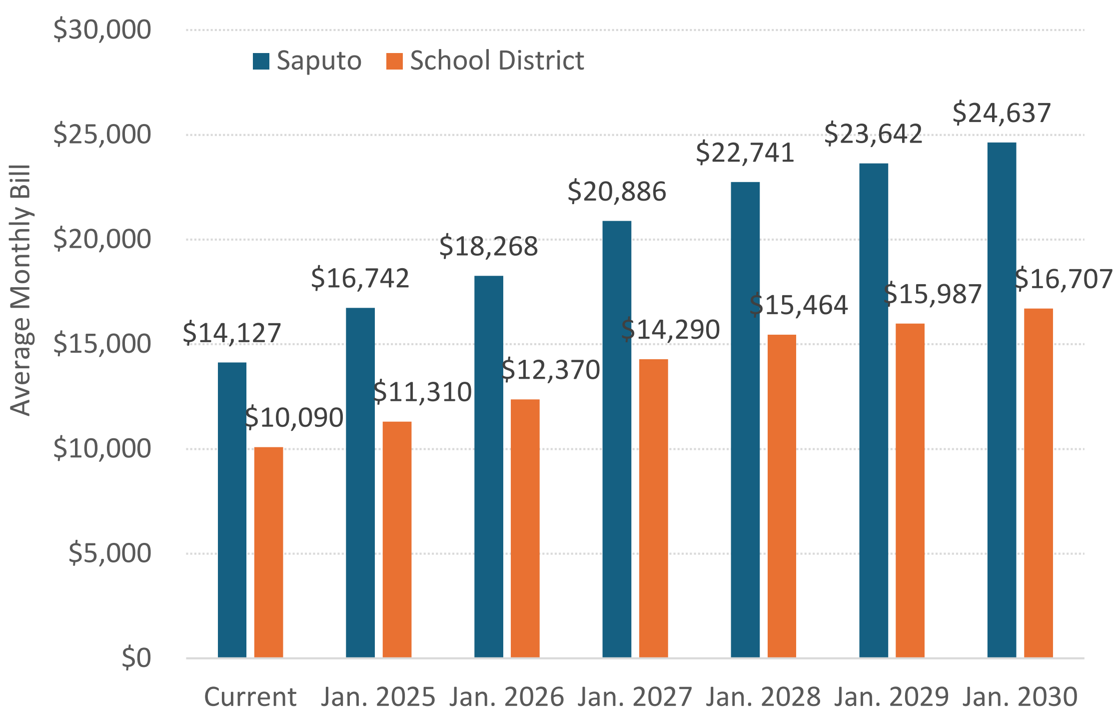


Figure 12
Estimated Bill Impacts to Newman-Crows Landing USD and Saputo



APPENDIX A

WATER FEES

SUPPORT TABLES

Table A-1
City of Newman Water Rate Study
Historical Population and Housing Estimates

Year	Population			Housing Units		
	Persons	Increase/ Decrease	% Change	Units	Increase/ Decrease	% Change
2000	7,092			2,078		
2001	7,504	412	5.8%	2,279	201	9.7%
2002	7,569	65	0.9%	2,283	4	0.2%
2003	7,786	217	2.9%	2,335	52	2.3%
2004	8,342	556	7.1%	2,503	168	7.2%
2005	9,111	769	9.2%	2,756	253	10.1%
2006	10,086	975	10.7%	3,092	336	12.2%
2007	10,227	141	1.4%	3,160	68	2.2%
2008	10,507	280	2.7%	3,243	83	2.6%
2009	10,716	209	2.0%	3,305	62	1.9%
2010	10,224	-492	-4.6%	3,357	52	1.6%
2011	10,634	410	4.0%	3,431	74	2.2%
2012	10,726	92	0.9%	3,439	8	0.2%
2013	10,798	72	0.7%	3,438	-1	0.0%
2014	10,864	66	0.6%	3,437	-1	0.0%
2015	10,932	68	0.6%	3,437	0	0.0%
2016	11,130	198	1.8%	3,469	32	0.9%
2017	11,471	341	3.1%	3,527	58	1.7%
2018	11,497	26	0.2%	3,599	72	2.0%
2019	11,738	241	2.1%	3,655	56	1.6%
2020	12,356	618	5.3%	3,739	84	2.3%
2021	12,334	-22	-0.2%	3,743	4	0.1%
2022	12,218	-116	-0.9%	3,755	12	0.3%
2023	12,103	-115	-0.9%	3,761	6	0.2%
2024	12,121	18	0.1%	3,765	4	0.1%
Total Change	5,029		**2.3%**	1,687		**2.5%**
Last 10 years	1,257		**1.1%**	328		**0.9%**

Source: California Department of Finance. stats

Table A-2
City of Newman Water Rate Study
Well Production Data

Month	2019	2020	2021	2022	2023		Annual Average	% Delivery by Month
	Calendar Year							
			All Figures in Gallons				**2019-2023**	
January	31,799,000	33,582,000	37,217,000	34,546,146	29,819,000		33,392,629	4.6%
February	30,853,000	39,505,000	31,609,000	40,734,915	31,650,603		34,870,504	4.9%
March	36,908,000	46,302,000	47,099,000	54,246,533	35,408,932		43,992,893	6.1%
April	54,286,000	56,028,000	66,367,000	53,206,317	44,153,979		54,808,259	7.6%
May	66,211,000	82,231,000	83,475,000	73,925,445	61,427,269		73,453,943	10.2%
June	80,099,000	87,110,000	82,879,891	84,615,118	75,571,807		82,055,163	11.4%
July	86,849,000	95,396,000	91,297,000	86,714,899	82,270,231		88,505,426	12.3%
August	86,258,000	90,827,000	86,068,960	83,963,727	86,459,505		86,715,438	12.1%
September	54,139,000	76,758,000	74,754,000	75,117,160	71,261,350		70,405,902	9.8%
October	65,944,000	70,779,000	60,957,000	69,264,551	64,997,049		66,388,320	9.2%
November	51,701,000	50,445,000	41,424,100	43,652,000	46,818,517		46,808,123	6.5%
December	33,829,000	41,727,000	38,724,884	38,028,021	34,207,956		37,303,372	5.2%
Total	**678,876,000**	**770,690,000**	**741,872,835**	**738,014,832**	**664,046,198**	***A***	**718,699,973**	**100.0%**
Peaking Period (May through October inclusive)						***B***	467,524,192	65%
Base Monthly Flow (December through February)						***C***	35,188,835	
Base Annual Flow						***D = C*12***	**422,266,020**	**59%**
Additional Flow						***E = A-D***	**296,433,953**	**41%**

Source: City of Newman. wells

Table A-3
City of Newman Water Rate Study
Average 3-Year Consumption by Customer Category by Month

Customer Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Base	Peaking
Residential														[1]	[2]
Single Family	28,802	27,993	29,533	37,022	47,632	59,466	62,448	65,227	63,888	53,433	42,266	31,843	549,552	345,312	204,240
Multi Family	2,161	1,972	1,842	2,214	2,449	2,859	3,208	2,830	2,846	2,785	2,036	2,191	29,393	23,897	5,496
Subtotal Residential	**30,962**	**29,965**	**31,375**	**39,236**	**50,080**	**62,326**	**65,656**	**68,057**	**66,734**	**56,218**	**44,302**	**34,034**	**578,945**	**369,209**	**209,736**
Non-Residential															
Commercial	2,326	2,484	2,583	2,551	2,759	2,829	3,327	3,222	3,923	3,360	3,010	2,401	34,773	29,572	5,201
Industrial	8,282	7,286	7,500	7,303	8,117	8,375	8,908	8,432	10,155	8,998	8,525	7,979	99,861	92,271	7,590
Landscape	962	786	1,487	3,033	6,641	9,499	13,521	12,772	10,946	8,737	4,443	1,643	74,470	12,937	61,532
Subtotal Non-Res.	**11,570**	**10,555**	**11,570**	**12,887**	**17,517**	**20,703**	**25,756**	**24,426**	**25,024**	**21,095**	**15,978**	**12,022**	**209,103**	**134,780**	**74,323**
Total HCF [2]	**42,533**	**40,520**	**42,944**	**52,123**	**67,598**	**83,029**	**91,413**	**92,483**	**91,758**	**77,313**	**60,280**	**46,056**	**788,049**	**503,989**	**284,059**
Percentage	5%	5%	5%	7%	9%	11%	12%	12%	12%	10%	8%	6%	**100%**	**64%**	**36%**

Source: City of Newman water meter reads.

[1] Average winter month consumption multiplied by twelve.
[2] All water use greater than average wintertime monthly water (base) use.

Table A-4
City of Newman Water Rate Study
Historical Potable Water Demand

Customer Category	2021	2022	2023	Average	Percent of Avg.	Est. Base Year
						[1]
Residential						2024
Single Family	583,067	545,981	519,608	549,552	70%	517,808
Multi Family	31,520	28,960	27,700	29,393	4%	27,695
Subtotal Residential	**614,587**	**574,941**	**547,308**	**578,945**	**73%**	**545,503**
Non-Residential						
Commercial	33,100	33,938	37,281	34,773	4%	32,764
Industrial	105,728	100,137	93,717	99,861	13%	94,092
Landscape	69,889	75,327	78,193	74,470	9%	70,168
Subtotal Non-Residential	**208,717**	**209,402**	**209,191**	**209,103**	**27%**	**197,025**
Total HCF [2]	**823,304**	**784,343**	**756,499**	**788,049**	**100%**	**742,528**
Newman Residents	12,334	12,218	12,103			
Annual HCF per Resident	67	64	63	64		

Source: City of Newman.

[1] The average 3-year demand is reduced 5% to account for potential drought years.

[2] Excludes unbilled water for municipal purposes, hydrant and line flushing, well start up water, and system leaks.

Table A-5
City of Newman Water Rate Study
Historical and Budgeted Financial Information

Revenues and Expenses	**FY Ending 2019**	**2020**	**2021**	**2022**	**2023**	**2024** Unaudited	**2025** Budget
OPERATING FUND							
Revenues							
Interest Income	$27,735	$17,665	$7,839	$7,777	($22,070)	$40,761	$58,000
Water Income	$1,530,049	$1,748,094	$2,163,869	$2,076,615	$2,559,072	$2,743,243	$2,781,000
Water Meter Replacement Fee	$66,543	$62,898	$67,244	$69,067	$76,817	$90,107	$90,000
Water Recon Fee	$15,050	$12,425	$100	$9,095	$24,750	$23,825	$23,000
Administrative Surcharge	$0	$47	$0	$0	$0	$0	$0
Misc Revenue/income	$1,434	$0	$0	$97	$187	$0	$300
Refunds & Reimbursements	$0	$0	$564	$0	$0	$168	$0
Salary Reimbursements	$4,015	$4,627	$3,487	$3,208	$0	($307)	$0
Utility Application Fee	$10,625	$8,450	$7,600	$8,250	$7,225	$7,700	$8,000
Penalty - Utility Payments	$33,691	$32,939	$116,677	$69,192	$29,423	$40,204	$40,000
Total Revenues	**$1,689,143**	**$1,887,144**	**$2,367,380**	**$2,243,301**	**$2,675,404**	**$2,945,700**	**$3,000,300**
Expenses							
Wages and Salaries	$425,747	$455,458	$488,590	$551,681	$582,350	$626,753	$691,430
Benefits	$321,647	$544,330	$344,678	$313,473	$372,442	$365,447	$462,108
Contract Services	$175,138	$145,836	$133,963	$196,909	$233,443	$213,465	$320,000
Insurance	$53,507	$57,615	$65,749	$89,266	$114,540	$147,269	$202,525
Supplies	$5,861	$12,468	$110,962	$96,780	$143,170	$115,722	$211,290
Utilities - Electric	$183,062	$200,345	$207,263	$302,681	$371,753	$426,347	$480,350
Utilities - Gas, Telephone,	$9,839	$10,878	$6,134	$26,105	$9,450	$12,247	$9,400
Fuel	$11,715	$11,647	$11,775	$17,221	$16,781	$14,868	$15,000
Permits and Fees	$15,848	$18,228	$19,099	$33,899	$26,080	$39,784	$18,000
Equipment	$1,177	$9,508	$9,821	$9,320	$26,103	$60,776	$25,969
Administrative Surcharge	$89,485	$117,869	$120,371	$145,811	$130,178	$165,100	$164,772
City Hall Purchase	$0	$0	$0	$0	$0	$0	$0
Miscellaneous	$1,155,990	$965,932	$155,320	$220,899	$319,826	$234,431	$232,050
Total Expenses	**$2,449,015**	**$2,550,114**	**$1,673,724**	**$2,004,045**	**$2,346,118**	**$2,422,207**	**$2,832,894**
Debt (Interest only)	$7,643	$6,044	$4,390	$2,683	$911	$0	$0
Transfers In	$0	$0	$0	$344,600	$0	$0	$0
Transfers Out	$910,896	$734,625	$5,945	$0	$0	$0	$0
Net Operating Fund Revenues	**($1,678,412)**	**($1,403,638)**	**$683,322**	**$236,573**	**$328,375**	**$523,493**	**$167,406**
CAPITAL FUND							
Revenues							
Dev Fees - Cap Conn Water	$7,763	$23,132	$2,588	$9,160	$17,595	$46,575	$86,000
Impact Fees - Water	$18,243	$29,419	$3,440	$6,069	$15,362	$45,471	$68,000
Interest Income	$0	$0	$0	$0	($158)	$0	$0
Water Meter Fee	$0	$0	$0	$0	$0	$0	$0
Refunds & Reimbursements	$411	$135	$47	$0	$0	$0	$0
Total Revenues	**$26,416**	**$52,686**	**$6,074**	**$15,228**	**$32,799**	**$92,046**	**$154,000**
Expenses							
Contract Services	$35,905	$64,233	$0	$0	$0	$0	$0
Administrative Surcharge	$1,840	$0	$3,017	$5,670	$0	$0	$0
Equipment	$0	$0	$0	$0	$0	$0	$0
Loss on Equipment	$0	$68,750	$0	$0	$0	$0	$0
Land Acquisition	$0	$0	$0	$0	$0	$0	$0
Building Improvements [1]	$0	$0	$0	$0	$0	$0	$150,000
Water Capital Improvements	$0	$111,213	$0	$0	$0	$0	$0
Total Expenses	**$37,745**	**$244,196**	**$3,017**	**$5,670**	**$0**	**$0**	**$150,000**
Transfers In	$910,896	$732,842	$400,000	$0	$0	$0	$0
Net Capital Fund Revenues	**$899,567**	**$541,332**	**$403,057**	**$9,558**	**$32,799**	**$92,046**	**$4,000**

Source: City of Newman.

[1] The FY 2025 budget includes $150,000 for building improvements (pipeline replacement). This is included in the CIP.

Table A-6
City of Newman Water Rate Study
Audited Financial Statements

Revenues and Expenses	FY Ending 2018	2019	2020	2021	2022	2023
Operating Revenues						
Service Charges	$1,612,158	$1,611,642	$1,823,417	$2,231,213	$2,154,777	$2,660,639
Miscellaneous Revenue	$52,250	$49,765	$46,063	$128,330	$80,749	$36,834
Subtotal Operating Revenues	**$1,664,408**	**$1,661,407**	**$1,869,480**	**$2,359,543**	**$2,235,526**	**$2,697,473**
Operating Expenses						
Employee Services	$618,508	$747,394	$999,789	$833,268	$865,153	$954,793
Supplies and Services	$824,059	$828,471	$1,059,897	$837,529	$1,147,338	$1,391,324
Subtotal Operating Expenses	**$1,442,567**	**$1,575,865**	**$2,059,686**	**$1,670,797**	**$2,012,491**	**$2,346,117**
Non-Operating Revenues						
Investment Earnings	$19,804	$27,735	$17,665	$7,839	$7,777	$22,229
Development Fees	$49,705	$26,416	$52,686	$6,075	$15,229	$32,957
Interest Expense	($9,203)	($7,643)	($6,044)	($4,390)	($2,683)	($911)
Subtotal Non-Operating Revenues	**$60,306**	**$46,508**	**$64,307**	**$9,524**	**$20,323**	**$54,275**
Transfer In	$303,503	$910,896	$732,842	$400,000	$344,600	$0
Transfer Out	($45,612)	($910,896)	($734,625)	($5,945)	$0	$0
Net Income	**$540,038**	**$132,050**	**($127,682)**	**$1,092,325**	**$587,958**	**$405,631**
Depreciation	$121,377	$121,560	$135,289	$127,121	$326,000	$383,703
Net Income with Depreciation	**$418,661**	**$10,490**	**($262,971)**	**$965,204**	**$261,958**	**$21,928**

Source: City of Newman Audited Financial Statements.

Table A-7
City of Newman Water Rate Study
Water Impact and Connection Fees

Land Use	Vested Map	New Development	Connection Fee	Water Meter Fee
		03/01/24 through 02/29/25		
Residential Land Use	**impact fees per unit**		**fees per connection**	
Low Density	$1,666.78	$1,721.32	$1,035.00	$200.00
Medium Density	$787.70	$840.35	$1,035.00	$200.00
High Density	N/A	$525.22	$1,035.00	$200.00

Source: City of Newman. conn

Table A-8
City of Newman Water Rate Study
Comparison of Historical Operating Expenses to Standard Indices

	FY Ending						Change	
Operating Expenses	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	Total 2019-2024	Average Annual
Wages and Salaries	$425,747	$455,458	$488,590	$551,681	$582,350	$626,753	$201,006	8.0%
Benefits	$321,647	$544,330	$344,678	$313,473	$372,442	$365,447	$43,799	2.6%
Contract Services	$175,138	$145,836	$133,963	$196,909	$233,443	$213,465	$38,327	4.0%
Insurance	$53,507	$57,615	$65,749	$89,266	$114,540	$147,269	$93,761	22.4%
Supplies	$5,861	$12,468	$110,962	$96,780	$143,170	$115,722	$109,862	81.6%
Utilities - Electric	$183,062	$200,345	$207,263	$302,681	$371,753	$426,347	$243,285	18.4%
Utilities - Gas, Telephone,	$9,839	$10,878	$6,134	$26,105	$9,450	$12,247	$2,408	4.5%
Fuel	$11,715	$11,647	$11,775	$17,221	$16,781	$14,868	$3,152	4.9%
Permits and Fees	$15,848	$18,228	$19,099	$33,899	$26,080	$39,784	$23,936	20.2%
Administrative Surcharge	$89,485	$117,869	$120,371	$145,811	$130,178	$165,100	$75,615	13.0%
Total Expenses [1]	**$1,291,849**	**$1,574,674**	**$1,508,583**	**$1,773,826**	**$2,000,189**	**$2,127,001**	**$835,152**	**10.5%**
Engineering News Record	*Jun 2019*	*Jun 2020*	*Jun 2021*	*Jun 2022*	*Jun 2023*	*Jun 2024*		
ENR Construction Cost Index 20-City [2]	11,268	11,436	12,112	13,111	13,345	13,547	2,278	3.8%
ENR Construction Cost Index San Francisco	12,354	13,023	13,459	15,356	15,367	15,367	3,013	4.5%
Bureau of Labor Statistics								
Consumer Price Index - West Region	271	274	288	313	324	334	63	4.3%
Consumer Price Index - San Francisco	295	300	309	331	340	351	56	3.5%

Source: City of Newman, California Department of Finance, and the Engineering News Record.

[1] Total excludes equipment and miscellaneous which are highly variable year to year.

Table A-9
City of Newman Water Rate Study
Estimated Capital Improvements Program in Current Dollars

Capital Improvement	Fiscal Year Ending					
	2025	2026	2027	2028	2029	2030
Facilities			*All Figures in 2024 Dollars*			
Well Rehabilitation [1]			$150,000			
Pipeline Improvements	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000
Vehicles & Specialized Equipment			$75,000	$75,000		$75,000
Well 5 Chrome 6 MCLs Treatment Facilities		$500,000	$1,000,000			
Sample Stations Replacement Program [2]		$12,000	$12,000	$12,000	$12,000	$12,000
Meter Replacement Program [3]	$101,250	$101,250	$101,250	$101,250	$101,250	$101,250
Fire Hydrant Replacement Program [4]		$27,000	$27,000	$27,000	$27,000	$27,000
Subtotal Facilities	**$251,250**	**$790,250**	**$1,515,250**	**$365,250**	**$290,250**	**$365,250**
Studies						
Water Master Plan and Water CIPs Update [5]		$50,000				
Water Rate Study Update [5]	$44,000					$48,500
Urban Water Management Plan 5 year update			$10,000			
Subtotal Studies	**$44,000**	**$50,000**	**$10,000**	**$0**	**$0**	**$48,500**
Total CIP Existing Customers	**$295,250**	**$840,250**	**$1,525,250**	**$365,250**	**$290,250**	**$413,750**
Growth Projects						
FF-01 (700-ft 8" main replace 4" main)						$313,600
FF-02 (800-ft new 8" main)				$358,400		
Subtotal Growth Projects	**$0**	**$0**	**$0**	**$358,400**	**$0**	**$313,600**
TOTAL CIP	**$295,250**	**$840,250**	**$1,525,250**	**$723,650**	**$290,250**	**$727,350**

Source: City of Newman spring 2024.

[1] Work is pending results of Water Well Profiling.
[2] 3 stations/year @ $4,000/station.
[3] 225 meters/year @ $450/meter.
[4] 3 hydrants/year @ $9,000/hydrant.
[5] Needed for Prop 1 Grants.

Table A-10
City of Newman Water Rate Study
Depreciation of New Assets

New Asset	Asset Life	FY Ending 2025	2026	2027	2028	2029	2030
	years						
Well Rehabilitation	30	$0	$0	$5,408	$5,408	$5,408	$5,408
Pipeline Improvements	80	$1,875	$3,825	$5,853	$7,962	$10,156	$12,437
Vehicles & Specialized Equipment	10	$0	$0	$8,112	$16,548	$16,548	$25,673
Well 5 Chrome 6 MCLs Treatment Facilities	30	$0	$17,333	$53,387	$53,387	$53,387	$53,387
Sample Stations Replacement Program	15	$0	$832	$1,697	$2,597	$3,533	$4,506
Meter Replacement Program	12	$8,438	$17,213	$26,339	$35,830	$45,700	$55,966
Fire Hydrant Replacement Program	20	$0	$1,404	$2,864	$4,383	$5,962	$7,605
FF-01 (700-ft 8" main replace 4" main)	80	$0	$0	$0	$0	$0	$4,769
FF-02 (800-ft new 8" main)	80	$0	$0	$0	$5,039	$5,039	$5,039
Total Assets		**$10,313**	**$40,607**	**$103,660**	**$131,154**	**$145,733**	**$174,790**

Source: City of Newman August 2024.

Table A-11
City of Newman Water Rate Study
Depreciation of Existing Assets

	FY Ending					
Asset Type	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
INFRASTRUCTURE						
WATER WELL #5	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
WELL 1- GENERATOR/MOVE	$73	$73	$73	$73	$73	$73
WELL 7-TEST WORK	$211	$211	$211	$211	$211	$211
WELL 1-AUTODIALER-TELEME	$114	$114	$114	$114	$114	$114
WATER WELL #6 VARIABLE FRQ DRIVE	$434	$434	$434	$434	$434	$434
FIRE HYDRANTS PROJECT	$1,188	$1,188	$1,188	$1,188	$1,188	$1,188
WATER WELL #1 (INCLUDES BLDG)	$8,750	$8,750	$8,750	$8,750	$8,750	$8,750
MUNICIPAL WELL	$22,862	$22,862	$22,862	$22,862	$22,862	$22,862
WATER LINE - BARRINGTON AVE	$1,227	$1,227	$1,227	$1,227	$1,227	$1,227
WATER LINE - SHERMAN PKY	$2,182	$2,182	$2,182	$2,182	$2,182	$2,182
WATER LINE - SHERMAN PKY	$2,585	$2,585	$2,585	$2,585	$2,585	$2,585
WATER LINE - BANFF	$1,355	$1,355	$1,355	$1,355	$1,355	$1,355
WATER LINE - SHERMAN PKY	$5,169	$5,169	$5,169	$5,169	$5,169	$5,169
ELECTRIC GATE - CORP YARD	$111	$111	$111	$111	$111	$111
WELL #6R	$18,943	$18,943	$18,943	$18,943	$18,943	$18,943
WELL #10 Site (Well, Tank, Booster, Etc.)	$260,853	$260,853	$260,853	$260,853	$260,853	$260,853
SUBTOTAL INFRASTRUCTURE	**$331,056**	**$331,056**	**$331,056**	**$331,056**	**$331,056**	**$331,056**
BUILDINGS						
WATER OFFICE-IMPROVEMENTS	$94	$1	$0	$0	$0	$0
New Storage Unit	$211	$211	$211	$211	$211	$211
938 FRESNO ST - NEW CITY HALL	$10,984	$10,984	$10,984	$10,984	$10,984	$10,984
938 FRESNO ST. - IMPROVEMENTS	$2,586	$2,586	$2,586	$2,586	$2,586	$2,586
Modular Building Public Works	$841	$841	$841	$841	$841	$841
Water Tower Fencing	$551	$551	$551	$551	$551	$551
SUBTOTAL BUILDINGS	**$15,268**	**$15,174**	**$15,174**	**$15,174**	**$15,174**	**$15,174**
EQUIPMENT						
Ford F250 - 1FTBF2A6XKEF56215	$11,642	$0	$0	$0	$0	$0
Klopping Hardie - PTO-60 - Sports Turf Renovator	$47	$0	$0	$0	$0	$0
Kubota Tractor L4701DT - KBUL4CDRKKJG66890	$499	$0	$0	$0	$0	$0
New Server - MS02	$1,645	$1,645	$411	$0	$0	$0
New Server - AS01 - Springbrook	$1,005	$1,005	$251	$0	$0	$0
2022 Ford Superduty F-250 - 1FDBF2A61NEF14399	$5,404	$5,404	$5,404	$1,351	$0	$0
USJ 4018-600 Trailer Mounted Jetting Unit	$14,811	$14,811	$14,811	$1,234	$0	$0
SUBTOTAL EQUIPMENT	**$35,053**	**$22,865**	**$20,878**	**$2,585**	**$0**	**$0**
TOTAL WATER ASSETS	**$381,376**	**$369,095**	**$367,107**	**$348,815**	**$346,229**	**$346,229**

Source: City of Newman financial records 2024.

Table A-12
City of Newman Water Rate Study
Functional Allocation of Plant In Service

Plant in Service	Customer	Capacity (Readiness-to-Serve)	Capacity (Peaking)	Commodity (Use)	Total Cost	Customer	Capacity (Readiness-to-Serve)	Capacity (Peaking)	Commodity (Use)
Pumps			5%	95%	$28,701	$0	$0	$1,435	$27,266
Water Lines	5%	70%	25%		$500,690	$25,035	$350,483	$125,173	$0
Wells		50%	25%	25%	$12,660,893	$0	$6,330,447	$3,165,223	$3,165,223
Hydrants	5%	70%	25%		$47,516	$2,376	$33,261	$11,879	$0
General Buildings [1]	10%	90%			$132,938	$13,294	$119,644	$0	$0
Equipment	15%	15%	35%	35%	$199,827	$29,974	$29,974	$69,939	$69,939
Total Plant in Service					**$13,570,565**	**$70,678**	**$6,863,809**	**$3,373,649**	**$3,262,429**
Percentage of Plant in Service					**100%**	**1%**	**51%**	**25%**	**24%**

Source: HEC. plant

[1] Excludes City Hall.

Table A-13
City of Newman Water Rate Study
Functional Allocation of Operating Costs

			Fixed Costs		Variable Costs		
Expenditures	**ACTUAL FY 2024**	**Allocation Basis**	Customer	Capacity (Readiness-to-Serve)	Capacity (Peaking)	Commodity (Use)	**Unclassified**
Personnel - Reg	$616,968	Avg. of Classified	0%	0%	0%	0%	100%
Personnel - OT	$9,786	Avg. of Classified	0%	0%	0%	0%	100%
Retirement - PERS	$138,952	Avg. of Classified	0%	0%	0%	0%	100%
Social Security	$46,376	Avg. of Classified	0%	0%	0%	0%	100%
Health Insurance	$113,581	Avg. of Classified	0%	0%	0%	0%	100%
SUI - Unemployment	$911	Avg. of Classified	0%	0%	0%	0%	100%
Workers Comp	$44,716	Avg. of Classified	0%	0%	0%	0%	100%
Uniform Allowance	$4,005	Avg. of Classified	0%	0%	0%	0%	100%
Life Insurance	$118	Avg. of Classified	0%	0%	0%	0%	100%
Dental/Vision	$16,789	Avg. of Classified	0%	0%	0%	0%	100%
Contract Service	$213,465	Avg. of Classified	0%	0%	0%	0%	100%
Accounting/Audit	$11,225	Customers	100%	0%	0%	0%	0%
Credit Card Charges	$31,161	Customers	100%	0%	0%	0%	0%
Equip Repair	$29,257	Plant In Service	1%	51%	25%	24%	0%
Medical Exam	$99	Avg. of Classified	0%	0%	0%	0%	100%
Supplies	$117,972	Plant In Service	1%	51%	25%	24%	0%
Supplies - Computer	$8,420	Customers	100%	0%	0%	0%	0%
Supplies - Postage	$718	Customers	100%	0%	0%	0%	0%
Supplies - Meters	$106,584	Customers	100%	0%	0%	0%	0%
Utilities - PG&E	$426,347	Utilities	0%	0%	10%	90%	0%
Utilities - Telephones	$11,528	Customers	100%	0%	0%	0%	0%
Fuel Expense	$14,868	Plant In Service	1%	51%	25%	24%	0%
Natural Gas	$719	Utilities	0%	0%	10%	90%	0%
Vehicle Maintenance	$6,848	Plant In Service	1%	51%	25%	24%	0%
Advertising	$4,735	Customers	100%	0%	0%	0%	0%
Liability Ins	$84,581	Plant In Service	1%	51%	25%	24%	0%
General Ins	$62,688	Avg. of Classified	0%	0%	0%	0%	100%
Dues/Publications	$4,411	Avg. of Classified	0%	0%	0%	0%	100%
Bad Debt	$9,190	Customers	100%	0%	0%	0%	0%
Administrative Surcharge	$165,100	Customers	100%	0%	0%	0%	0%
Permits & Fees	$39,784	Customers	100%	0%	0%	0%	0%
Property Tax	$639	Customers	100%	0%	0%	0%	0%
Travel/Meetings	$2,983	Avg. of Classified	0%	0%	0%	0%	100%
Equipment	$60,776	Plant In Service	1%	51%	25%	24%	0%
Bldg Improvements	$15,912	Plant In Service	1%	51%	25%	24%	0%
TOTAL OPERATING COST	**$2,422,207**		**$390,802**	**$167,017**	**$124,798**	**$463,744**	**$1,275,846**
Reallocate Unclassified			$434,945	$185,882	$138,894	$516,125	
ALLOCATION OF OPERATING COSTS			**$825,747**	**$352,899**	**$263,692**	**$979,870**	
Existing Debt Service	$236,300	Plant In Service	1%	51%	25%	24%	
Debt Service			**$1,231**	**$119,517**	**$58,744**	**$56,808**	
TOTAL ALLOCATED COSTS	**$2,658,507**		**$826,978**	**$472,417**	**$322,436**	**$1,036,677**	
Percentage of Allocation			31%	18%	12%	39%	

Source: City of Newman financials, and HEC August 2024.

Table A-14
City of Newman Water Rate Study
Number of Meters and Meter Equivalents

Meter Size	Total	Customer Type: Single Family	Multi-Family	Commercial	Industrial	Landscape
Meters						
5/8-inch	3,093	3,003	18	67	4	1
3/4-inch	256	247		5	2	2
1-inch	159	123	6	19	2	9
1.5-inch	7		1	3	1	2
2-inch	47		11	19	6	11
3-inch	3		1	1		1
4-inch	8			4	2	2
6-inch	3		2			1
8-inch	0					
10-inch	0					
Total Meters	**3,576**	**3,373**	**39**	**118**	**17**	**29**
Meter Equivalents						
5/8-inch	3,093	3,003	18	67	4	1
3/4-inch	256	247	0	5	2	2
1-inch	159	123	6	19	2	9
1.5-inch	14	0	2	6	2	4
2-inch	150	0	35	61	19	35
3-inch	21	0	7	7	0	7
4-inch	96	0	0	48	24	24
6-inch	75	0	50	0	0	25
8-inch	0	0	0	0	0	0
10-inch	0	0	0	0	0	0
Total Meter Equivalents	**3,864**	**3,373**	**118**	**213**	**53**	**107**

Source: City of Newman 2024 customer database.

Table A-15
City of Newman Water Rate Study
Summary of Projected Billed Water Demand

Customer Category	Base	FY Ending 2025	2026	2027	2028	2029	2030
				Units in HCF			
Residential							
Single Family	517,808	516,149	520,687	523,756	529,763	535,796	540,346
Multi Family	27,695	27,666	27,909	28,126	28,395	28,666	28,909
Subtotal Residential	**545,503**	**543,814**	**548,596**	**551,882**	**558,159**	**564,461**	**569,255**
Non-Residential							
Commercial	32,764	32,708	32,852	32,946	33,138	33,329	33,471
Industrial	94,092	94,072	94,485	94,879	95,307	95,734	96,140
Landscape	70,168	69,168	69,472	68,898	70,076	71,261	71,564
Subtotal Non-Residential	**197,025**	**195,948**	**196,809**	**196,722**	**198,521**	**200,324**	**201,175**
Total Billed Water Use	**742,528**	**739,762**	**745,405**	**748,605**	**756,680**	**764,785**	**770,431**

Source: City of Newman and HEC.

Table A-16
City of Newman Water Rate Study
Price Elasticity Assumptions

Customer Type	Estimated Elasticity	FY Ending 2025	2026	2027	2028	2029	2030
% Change in Price to Meet Revenue Requirement		10.0%	10.0%	15.0%	10.0%	5.0%	5.0%
Assumption for Inflation		4.3%	4.3%	4.3%	4.3%	4.3%	4.3%
Price Increase Adjusted for Inflation		**5.7%**	**5.7%**	**10.7%**	**5.7%**	**0.7%**	**0.7%**
Single Family	-0.15	-0.9%	-0.9%	-1.6%	-0.9%	-0.1%	-0.1%
Multi-Family	-0.10	-0.6%	-0.6%	-1.1%	-0.6%	-0.1%	-0.1%
Commercial	-0.20	-1.1%	-1.1%	-2.1%	-1.1%	-0.1%	-0.1%
Industrial	-0.05	-0.3%	-0.3%	-0.5%	-0.3%	0.0%	0.0%
Landscape	-0.30	-1.7%	-1.7%	-3.2%	-1.7%	-0.2%	-0.2%

Source: HEC.

Table A-17
City of Newman Water Rate Study
Projected Changes in Water Demand due to Price Changes

Customer Category	FY Ending 2025	2026	2027	2028	2029	2030
Projected Growth [1]		0.88%	0.87%	0.86%	0.86%	0.85%
Residential						
Single Family	517,808	522,361	526,914	531,466	536,019	540,572
Multi Family	27,695	27,939	28,182	28,426	28,670	28,913
Subtotal Residential	**545,503**	**550,300**	**555,096**	**559,892**	**564,689**	**569,485**
Non-Residential						
Commercial	32,764	32,908	33,052	33,195	33,337	33,478
Industrial	94,092	94,506	94,918	95,328	95,736	96,143
Landscape	70,168	70,477	70,784	71,089	71,394	71,697
Subtotal Non-Residential	**197,025**	**197,891**	**198,753**	**199,612**	**200,467**	**201,318**
Total Billable Water	**742,528**	**748,191**	**753,850**	**759,505**	**765,156**	**770,804**
Change in Demand due to Price [2]						
Residential						
Single Family	-1,659	-1,674	-3,157	-1,703	-224	-226
Multi Family	-30	-30	-57	-31	-4	-4
Subtotal Residential	**-1,689**	**-1,704**	**-3,214**	**-1,734**	**-228**	**-230**
Non-Residential						
Commercial	-56	-57	-106	-57	-7	-7
Industrial	-21	-21	-39	-21	-3	-3
Landscape	-1,000	-1,004	-1,886	-1,013	-133	-133
Subtotal Non-Residential	**-1,077**	**-1,082**	**-2,031**	**-1,091**	**-143**	**-143**
Total Billable Water	**-2,766**	**-2,786**	**-5,245**	**-2,825**	**-370**	**-373**

Source: HEC.

[1] Growth for residential is approximately equal to 30 new residential units each year; growth for non-residential (supporting new residential growth) is estimated at 50% of the residential growth.

[2] Change applied to peak months water use (May-October) only.

		% of Consumption	
Single Family	37%	Commercial	15%
Multi Family	19%	Industrial	8%
		Landscape	83%

Table A-18
City of Newman Water Rate Study
Calculation of Share of Maximum Day Water Use by Customer Category

Customer Type	Average Month Use (AM)	Non-Coincident Maximum Month Use (MM)	MM/AM Ratio	MD Peak Ratio	Max Daily Use	% of Avg. Month	% of Peak Month	% of Max. Day
	a	*b*	*c = b/a*	*d (below)*	*e = d*(b/31)*	*f = a/total a*	*g = b/total b*	*h = e/total e*
Residential	cu. ft.	cu. ft.			cu. ft.			
Single Family	45,796	65,227	1.42	2.36	4,974	70%	68%	70%
Multi Family	2,449	3,208	1.31	2.17	225	4%	3%	3%
Non-Residential								
Commercial	2,898	3,923	1.35	1.91	241	4%	4%	3%
Industrial	8,322	10,155	1.22	1.72	563	13%	11%	8%
Landscape	6,206	13,521	2.18	2.63	1,147	9%	14%	16%
Total	**65,671**	**96,034**			**7,150**			

Calculation of MD Peak Factor	**Single Unit**	**Multi-F**	**Comm'l**	**Industrial**	**Landscape**
MM/AD Factor	1.42	1.31	1.35	1.22	2.18
System MD/MM Production Ratio [1]	1.21	1.21	1.21	1.21	1.21
Weekly Usage Adjustment	1.38	1.38	1.17	1.17	1.00
Calculated MD Peak Factor	**2.36**	**2.17**	**1.91**	**1.72**	**2.63**

Source: City of Newman, AWWA M1 Manual, and HEC.

[1] Calculation:	**2021**	**2022**	**2023**	
Maximum Day (MG)	3.40	3.69	3.20	
	7/25/2021	7/1/2022	8/9/2023	
Maximum Month (MG)	91.30	86.71	86.46	
Average MGD in the Max. Month	2.95	2.80	2.79	**Average**
Ratio of Max. Day to Avg. in Max. Month	1.15	1.32	1.15	**1.21**

Table A-19
City of Newman Water Rate Study
Meter Replacement Costs Estimate

Item		**Water Meter Size**									
		5/8	**3/4**	**1"**	**1 1/2"**	**2"**	**3"**	**4"**	**6"**	**8"**	**10"**
Meter											
New Meter & Encoder		$315	$378	$425	$945	$2,205	$2,835	$4,410	$8,505	$9,450	$12,600
Plate Strainers		$0	$0	$0	$0	$0	$0	$0	$2,063	$3,273	$3,273
Subtotal Meter Costs		**$315**	**$378**	**$425**	**$945**	**$2,205**	**$2,835**	**$4,410**	**$10,568**	**$12,723**	**$15,873**
Installation Costs	20%	$63	$76	$85	$189	$441	$567	$882	$2,114	$2,545	$3,175
Administration Costs	5%	$16	$19	$21	$47	$110	$142	$221	$528	$636	$794
Total Cost per Meter		**$394**	**$473**	**$531**	**$1,181**	**$2,756**	**$3,544**	**$5,513**	**$13,210**	**$15,904**	**$19,842**
Replacement Interval (years)		12	12	12	12	12	12	12	12	12	12
Cost per Meter per Year		$32.81	$39.38	$44.27	$98.44	$229.69	$295.31	$459.38	$1,100.87	$1,325.35	$1,653.47
Monthly Meter Cost FY 2025		**$2.73**	**$3.28**	**$3.69**	**$8.20**	**$19.14**	**$24.61**	**$38.28**	**$91.74**	**$110.45**	**$137.79**

Source: Newman Public Works August 2024 and HEC.

Table A-20
City of Newman Water Rate Study
Meter Replacement Fee Revenue Estimate

	FY Ending					
Item	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Total Water Meters Revenue	$113,978	$142,816	$147,847	$153,056	$158,448	$164,030
Cumulative New Water Meters [1]	0	30	60	90	120	150
Fee Per Meter per Month	$3.69	$3.82	$3.95	$4.09	$4.24	$4.39
Annual New Water Meter Fee Revenue	**$0**	**$1,375**	**$2,847**	**$4,420**	**$6,102**	**$7,896**
Estimated Meter Fees Revenue	**$113,900**	**$144,100**	**$150,600**	**$157,400**	**$164,500**	**$171,900**

Source: City of Newman and HEC.

[1] All new meters assumed to be 1" for purposes of projection.