



# Water Rate Summary

City of Manzanita

Final Report

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**Oregon Association of Water Utilities**

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## Background:

The City of Manzanita owns and operates a water system and sells water primarily to customers inside the city limits, and within the City's urban growth area. This activity of the city essentially operates as a business under the umbrella of the city government. The water utility is governed by the city charter and city ordinance 90-8. Section 41 of the City's Charter states:

Section 41. Water Fund Restrictions. All revenues received by the City from operations of the municipal water supply system shall be placed into a special fund to be known as the "Water Fund", and such fund shall be used only for the following purposes:

For the payment of the costs of operation and maintenance of the city water supply system.  
For the payment of the interest on outstanding warrants or bonds issued hereunder.  
For the payment of principal of such warrants or bonds.  
For the payment of costs of future additions, betterments and extensions of the city water supply system.

Essentially all revenue generated from fees charged for the water system must be used for the operations and maintenance of the water system. The water system is a proprietary fund under Oregon law, and as such all revenue generated by the water utility is kept in a separate fund for the purpose of operations and maintenance of the water system.

Ordinance 90-8 includes additional specificity relating to the water system. The ordinance includes 18 sections related to includes how water service is provided to customers, how connections are established, when service can be refused and discontinued, payment of bills and reading of water meters, adjustments to accounts, location of control valves, changes in locations of meters or service connections, ownership maintenance requirements, damages to the water system, contamination of the water supply, water conservation, and establishes penalties for violations related to the water system.

Together the Charter and Ordinance 90-8 establish the legal obligations of the City in operating and maintaining a water system including the establishment of water rates. Section 17 of Ordinance 90-8 states that "City Council is hereby authorized and empowered hereafter to adopt, place in force and effect by resolution such water rate use and service scheduled as said city Council may deem to be in the interest of operating and maintaining the water system."

On July 5, 2023, the Manzanita City Council unanimously adopted new water rates by resolution. The Council also elected to change the cadence of the billing system to move from a quarterly system to a monthly system. The new rates and monthly cadence were implemented in October 2023.

Subsequently staff recognized that there was a need for a housekeeping amendment to Ordinance 90-8 to officially allow for monthly reading and billings. Therefore, on April 3, 2024, the Manzanita City Council Enacted Ordinance No. 24-01 which amended Ordinance No. 90-8 to allow for monthly readings of water meters and monthly billing for water service.

On April 8, 2024, the city received a prospective petition for referendum from Randy Kugler to refer to the decision made by City Council in enacting Ordinance 24-01 to the voters. Unless an emergency clause is in place, ordinances do not go into effect for 30 days and Ordinance 94-7 affords citizens the right to subject a non-emergency ordinance adopted by City Council to the referendum process so long as the City receives that referendum petition within 30 days after City Council enacts the measure at issue. Mr. Kugler submitted a petition to refer Ordinance 24-01 to the voters within that time frame. The city informed Mr. Kugler on May 31 that on May 30<sup>th</sup> the Tillamook County Clerk confirmed that Mr. Kugler had collected enough valid signatures for the referendum. Invocation of the referendum power results in suspension of Ordinance 24-01 until a vote occurs.

In response to the referendum City executed a contract with OAWU to conduct a water rate study to develop a quarterly rate structure to provide city council with a factual basis for which to determine new quarterly rates if the voters elect to revoke Ordinance 24-01. The vote on this issue will be held on November 5, 2024, and is solely to determine the cadence of water billing, in other words whether the city shall continue with monthly water billing or revert to a quarterly structure. This report summarizes the work conducted by OAWU to provide the City Council with information necessary for establishing a quarterly rate structure if the voters choose to revert to quarterly billing.

### Guiding Principles:

In setting rates, several factors are considered and will be referred to throughout the report. The following describes the main guiding principles used for setting the rates in Manzanita whether they are monthly or quarterly:

- The budget is designed to cover the cost of production based on actual usage, supports operations and maintenance of the system, and provides for an adequate reserve.
- Rates ensure that Single Family Residential (SFR) customers, who represent the largest proportion of customers, pay the lowest rates possible.
- There is an equitable system in place for customers who use more water, and that they pay more for that usage but at the most reasonable rate possible to support the system.
- Rates are designed to support water conservation.

### Definitions:

Allowance – amount of water received as part of the base rate charge.

Budget - single monetary line, costs for personnel, materials, debt service, contingency and Capital Improvement Projects.

Base Rate – a monthly charge to all consumers to cover costs associated with fixed expenses.

Consumption – amount of water a user will consume over a given period.

Consumption Rate – a charge per unit of water over the allotted amount of water provided as an allowance.

Cost to Deliver – the cost to deliver a single gallon, or unit of water to the tap of the customer.

## History and Background of Water Rate Changes:

When the Manzanita City Council adopted new water rates in July of 2023, the city had not raised rates, even for inflationary purposes, or conducted a formal water rate study or review of water rate since 2015. As a result, the revenue generated for the water utility was barely keeping pace with actual costs. By Fiscal Year 2021-2022 an urgency to conduct a new rate study to develop new rates that could address the growing gap between revenue and costs became clear and staff initiated the study in 2022.

During this timeframe, the city had completed an update to its water master plan in 2021 which focused on the replacement of aging asbestos water mains. These improvements are necessary to ensure the resiliency and long-term viability of water systems. However, the city did not possess adequate funding to make any substantial progress on these necessary maintenance improvements. Cost increases in material, and supplies and increased staffing costs due to increases in inflation and cost of living all impact the financial viability and health of the water utility. Furthermore, the city did not, as a practice, have a financial reserve in place for the water utility, which is best practice to offset risk associated with potential failures to the system or unanticipated costs.

Maintenance to deliver on the projects identified in the water master plan, and a financial reserve were key factors not included in the city's budgeting process; therefore, these costs were not considered in the rates that customers were paying. Another significant factor, that will be discussed in further detail later in the report, is that the budget did not account for the actual cost of production of the water allowances that were included for all customers in their base rate. Fortunately for the city, most customers used about half of the water that was included in their allowance.

The purpose of this report is to establish quarterly rate options for the City Council to consider if the voters choose to revert to quarterly billing. The same principles and methodology used to determine the monthly rates that were unanimously adopted back in July of 2023 are applied here. The quarterly rate study provides two options for the City Council to consider. One option simply triples the existing monthly rate, and tier structure, and another that provides for the variability that is experienced when the duration between meter readings is considered. This extended duration impacts the predictability of water usage and results in different outcomes. The following section outlines the approach and methodology for establishing rates using historical data, best practices and included recommendations that achieve the guiding principles to establish water rates on a quarterly basis should the need arise.

## Methodology and Approach:

As previously mentioned, one of the key guiding principles of the rate study is to ensure that the rate structure provides sufficient revenue to cover the budget required to produce water and maintain and operate the water system at the lowest possible cost to most customers. The table below summarizes rates for Single Family Residential (SFR) rate payers inside of the city boundary which comprise most of all users. The table illustrates the difference between the 2008, 2015 and 2023 rate structures monthly for SFR customers within the city limits. SFR customers account for 95 percent of all users within the system and 76 percent of that 95 percent are within the city limits. These customers are the focus of the study in terms of finding the lowest and most equitable base rate possible.

Table 1 shows both the base rate and consumption rate for the SFR customers inside of the city limits in 2015 and in 2023 when the new rates were adopted. The table also shows the total annual budget, the allowance allocated to each customer through their base rate, and the cost to deliver these services.

**Table 1 – Base and Consumption Rates for SFR Rate Payers - Inside city limits**

Date:	Base Rate	Consumption Rate	Budget	Allowance	Cost to Deliver <sup>1</sup>
May 1, 2008,	\$34.50	\$1.50 – per unit *	\$0.68 M	6,000 gals.	\$8.13
June 1, 2015,	\$39.50	\$2.50 – per unit *	\$1.06 M	4,000 gals.	\$9.82
Oct 1, 2023,	\$47.56	\$9.50 – per unit **	\$1.68 M	2,000 gals.	\$20.84

<sup>1</sup> – cost to deliver 1,000 gallons of water to the tap.

\* - single tier.

\*\* - multi-tier format, \$9.50 represents tier 1, \$11.00 – tier 2, and \$12.25 – tier 3.

As the data indicates in Table 1 the annual budget increased by approximately \$600K between 2015 and 2024. This is due to increased costs of operations because of inflation, the addition of approximately \$300K in capital improvement project costs.

The U. S. Bureau of Labor Statistics produces the consumer price index for inflationary purposes associated with the cost of living. Separately the bureau looks at the average inflation rate for water and sewer maintenance, which is often higher than overall inflation. Since 2008, the average annual inflation for water and sewer maintenance has been 4.69 percent. Using this inflationary figure, an equivalent purchase in 2023 would be \$68.64, a 98.9 percent increase over the last 16 years. This point compels the idea of routine annual adjustments for inflation which are necessary to keep pace with the cost of goods and services. Using the existing monthly rate of \$47.56 for two units of water and adding another \$19 to achieve a comparative 4 units of water is \$66.46 which is less than the \$68.64 noted above if the city had increased the base rate of \$35.50 by the rate of inflation over the last 16 years. This is important to note because it shows both the impact of inflation on costs, and why rate studies are important to ensure that costs and revenues are aligned.

The other major change in the 2023 rate change was that the allowance was reduced in half. This change was made to reflect actual usage and to deliver on the city’s goal of providing the lowest base rate possible to the majority of SFR customers and encouraging conservation. As noted previously the City’s budget prior to 2023 did not account for the cost of actual production of 4000 gallons of water per customer.

The fiscally responsible approach is for the city to budget for water it expects customers to use. To keep costs low the city has adjusted the base rate using historical data to ensure that the revenues generated provide sufficient resources for the production, operation and maintenance of the system. Therefore, if the city increased the base rate allowance back to 4000 gallons per month (Or 12,000 gallons quarterly) then to budget responsibly the city should increase the base rate to account for the cost of production and delivery of the units that are allocated to customers. Using historical data this would result in the majority of customers’ base rate increasing by 50% for water they do not use. This approach also does

not result in a predictable budgeting process for the city and results in great uncertainty for customers. It is simply unfair to most customers who use less than 2 units of water per month and does not promote conservation.

A key data point in the 2023 study found that water production decreased by 25 percent and total water sold also decreased by 23 percent. The decrease in water production from 108 MG to 81 MG or 25 percent was due to the improvements in the mechanical integrity of the distribution system, the single most expensive component to sustain. The City of Manzanita operates a water system that has less than a ten percent water loss, a goal that is rarely achieved and something that should be both celebrated and maintained. When billing monthly, it is more predictable to estimate water loss which has an impact on setting the water rates. It also reduces waste and potentially higher bills for consumers.

**Table 2: Water Production and Water Sold:**

Years:	Total Average Production	Total Units	Ave. Sold Units
2010-13	108 million gallons	108,000	95,000
2019-22	81 million gallons	81,000	73,500

### **How Water Rates Are Calculated:**

There are several factors that influence how water rates are set. The two key components of the rate include the cost of materials and labor, and the amount of water included in the base rate. The best practice when budgeting for a water fund is to have base rates cover fixed expenditures, which range from 60 – 75 percent, depending on the size of the water system relating to total number of service connections. For this study and the study conducted in 2022-2023 the goal is for the base rate for all rate payers, residential and commercial, to cover the range of percentage of the budget.

As noted earlier, the U. S. Bureau of Labor Statistics produces an index for the rate of inflation for water and sewer costs, which provides a methodology for adjusting water rates on an annual basis. Inflation adjustments to the base rate allows the City’s water system to keep pace with increasing costs in an incremental way, which is necessary to ensure that the water system has sufficient funding for operations and maintenance over time and reduces the impacts on rate payers by accounting for those costs on an incremental basis.

The review of the base rate cost itself, however, does not account for the underlying costs associated with operating and maintaining the water system. The allowance included in the base rate is extremely relevant because the water system must be able to produce not only the amount of water included in the base rate for all users, but the system must also be able to accommodate additional usage, referred to as “consumption” above the base rate allowances. Together the base rate, and estimated consumption rates result in total estimated water usage. The total estimated water usage results in an estimated production of water and thus sets the foundation of the water system budget.

The water fund budget includes personnel services, materials and services, capital improvement projects and debt service. Adopted budget for the fiscal year 22-23 was \$1,687,953 and served as the foundation for this rate study to provide a comparative analysis of quarterly rate structure with the monthly rate rates adopted in 2023. <sup>1</sup>

Table 3 – Capital Project Cost estimates 2023-2026

Project Group A	Total Cost	Capital Construction Fund	Maintenance Fund	3 - Yr Average	
HWY 101 Phase 2	\$554,869	\$332,921	\$221,948		
Pelican Ln	\$220,968	\$132,581	\$88,387		
Winward Ln	\$226,548	\$135,929	\$90,619		
Decommission Reservoir 2#		\$0	\$40,000		
		\$0	\$0		
Total:	\$1,002,385	\$601,431	\$440,954		\$146,984.67
	<b>\$200,477</b>	<b>\$120,286</b>	<b>\$88,191</b>		
	\$1,202,862	\$721,717	\$529,145		\$176,381.60
Project Group B	Total Cost	Capital Construction Fund	Maintenance Fund	3 - Yr Average	
Nehalem Ave	\$268,483	\$161,090	\$107,393		
Sandpiper	\$242,118	\$145,271	\$96,847		
HWY 101 Phase 3	\$363,475	\$218,085	\$145,390		
		\$0	\$0		
Total:	\$874,076	\$524,446	\$349,630	\$ 790,584.40	\$ 263,528.13
	<b>\$174,815.20</b>	<b>\$104,889.12</b>	<b>\$69,926.08</b>		
	\$1,048,891.20	\$629,334.72	\$419,556.48	\$948,701.28	\$316,233.76

The selected capital projects focused on the distribution areas with the highest potential for water loss.

As previously mentioned, prior to the adoption of new water rates in 2023 the base rate included an allowance of four (4) units of water for all customers. The consumption rate (a charge per unit of water above the base rate allowance) was \$2.50 for all customers inside the city limits. For customers outside of the city limits the consumption rate was \$3.25 per unit. This approach is called a uniform rate, whereby there is no change to the cost of an additional unit no matter how much water is being consumed. The 2023 rate study proposed, and the City Council unanimously adopted an “increased block rate” where the rate charged per unit of water increases and the volume of consumption increases. This approach was recommended and accepted to align with the Oregon Water Resources Department rules on water conservation and is applied here for the quarterly rate study.

The 2022-2023 monthly water rate study highlighted that the previous base rates for all users and the uniform consumption rates would have achieved only 66% of the adopted 2022-2023 budget requirements, resulting in a total budget shortfall of \$575,504. Additionally, the allowance included in the base rate far exceeded the actual consumption of the majority residential customers by more than

<sup>1</sup> The water operations budget for fiscal year 2024-2025 is \$1,687.657



50 percent. This meant that the city was selling water for less than it cost to produce and deliver the water and allowing for greater water usage than was budgeted for.

Using the budget of \$1.6M the actual cost to deliver one unit of water is \$20.84. The most notable fact identified in the 22-23 monthly rate study was that the charge for consumption using a uniform rate of \$2.50 (inside) and \$3.25 (outside) per unit was exponentially lower than the \$20.84 delivery costs per unit. The price charged for a unit of water should reflect that delivery cost. To set reasonable rates for most users, who are primarily SFR users, rates can be set in a way that provides for the lowest cost possible for all users while still delivering sufficient revenue to maintain a financially viable water system.

To achieve this, the 2022-2023 monthly rate study proposed a modestly higher base rate for all users, lowered the unit allowance from 4 to 2 units to reflect average usage of SFR users in the city limits, and adjusted the uniform rate for consumption to an increased block rate. This same approach is applied to the quarterly rate analysis to ensure an apples-to-apples comparison and applies the guiding principles of ensuring the lowest base rate possible for single family residential customers.

Key points applied from the monthly rate study to the quarterly study is summarized below:

The average usage for Single Family Residential Customers (inside city limits) is

- **1,600 gallons per month.**
- **The average usage for all customers is 5,700 gallons per month**

If the city maintained a 4,000-gallon (4 units) allowance per month the cost of production / delivery of 4 units would be: 4 units x \$20.84 = \$83.36. This would result in a base rate of \$83.36. The water budget would also need to be adjusted to account for the potential that this full allowance could be used by consumers.

The water budget is based on historical trends including water revenue generated and the amount of water produced. As such, the budget reflects what the actual usage which has historically been approximately half of what had been allocated to customers. The 22-23 monthly water rate study proposed a reduction in the base rate allowance for residential customers to 2,000 gallons (2 units) per month. This approach was unanimously adopted by the City Council because the data show that on average all residential customers inside city limits use 1,600 gallons per month or less than 2 units. Recent data (October 2023-July 2024) shows that 75% of residential customers inside of the city limits used less than 2 units per month.

Therefore, the base rate for residential customers was set at \$47.56 per month, for 2 units of water to achieve a return of 62% of the total water budget. Remaining users apply a meter-multiplier (the larger the meter the higher the cost) to establish a base rate revenue at 69.74 percent. This is in line with the industry standard of achieving 60-75 percent of the budget. The remaining budget is captured through the consumption rate with an industry standard that the combination of the base rate and consumption rate charges can cover 95% of the estimated budget overall. This also takes into consideration that all customers outside of the city limits pay an additional 25% on this base rate.

The total number of service connections for the Manzanita water system is 1,842 and represents all residential and commercial entities. All Single-Family Residential service connections are charged a set base rate, while the commercial service connections are charged according to the size of the meter using a meter multiplier method. The methodology applied to establishing the base rates use a meter ratio approach based on the American Water Works Association (AWWA) meter ratios as it relates to infrastructure replacement costs.

### User Characteristics:

Equitable fees assessed to customers begin with a determination of the type of users. For the City of Manzanita, the classification of customers is categorized as follows:

1,408 – Single Family Residential Users = 76 percent of total users.

355 – Single Family Residential outside residential = 19 percent of users.

Total Residential users = 95 percent.

62 – Classified as commercial (inside). This is commercial users, including multi-unit residential.

05 – Classified as commercial (outside) Water districts

The Quarterly Rate Analysis primary purpose of this study is to develop a quarterly rate structure using the updated methodology from the 2022-2023 monthly rate study adopted by City Council in July 2023.

### Water Rate Structure Criteria:

Key factors used in setting the quarterly rate:

- Average annual water production – (2021-2023) Manzanitas water system produced 81 million gallons – 81K units
- Average annual water consumption – (2021-2023) Manzanita sold 73 million gallons – 73K units
- Unaccounted for water 8K (8 million gallons) (2021-2023)
- Operating budget for a year – the cost to operate and maintain the water system (\$1,687,953 Fiscal Year 2022-2023)
- Impact on customers – Single Family Residential (majority of users) – develop a base rate that reflects the lowest possible rate that provides sufficient revenue to cover costs.
- Average usage per billing cycle for SFR users - informs the base rate allowance
- Average usage per billing cycle for all users – informs the block rate structure
- Allowance of water provided in the billing cycle – based on usage to reflect actual usage as closely as possible.
- The primary objective of a water rate study is to support expenditures with rates that are applied fairly across all types of consumers.
- The base rate for all rate payers should cover up to 75% of the total water budget
- Consumption rates should cover the difference between the base rate up to 95% of the total water budget.

## Existing Water Rates:

The existing monthly rates were primarily developed using data collected as operating averages for a three-year period. Capital improvement planning was a second key component in determining the first steps in applying costs to the water rates. Normal consumption averages by the consumer were another aspect to assist in setting rates and the tiers. When billing reports were evaluated, the realization of the water allowance provided as part of the base rate was out of balance from two perspectives:

- a) the average residential customer was consuming  $\approx$  1,600 gallons each month and
- b) the delivery cost per unit exceeded the base rate charges.

Mentioned earlier in this summary as a key statistic, aligning the allowance of water with actual consumption **provided evidence that 2,000 gallons of water** was an appropriate change. All these assumptions were used to establish a quarterly rate structure. Table 3 below summarizes the two options for consideration for establishing a quarterly rate using a 3-month average over a quarterly billing cycle and the comparative figures from each example. In developing water rates, information is either objective, (total water produced) or subjective, (percentage of budget from base rates).

Table 3- Comparable Options for Quarterly Billing

<i>Table Comparable Options for Monthly vs Quarterly Billing</i>							
		BR	T1	T2	T3	3 Mo Ave	*
	Existing Allow	2	5	10	20		
Existing Rates		\$47.56	\$76.06	\$131.06	\$253.56	\$253.56	96%
	Qrtly Allow	6	15	30	60		
Quarterly Match + Tier		\$142.68	\$228.18	\$393.18	\$760.68	\$253.56	91%
Quarterly Base Rate		\$150.00	\$235.50	\$400.50	\$768.00	\$256.00	95%
Existing rates use the units in each tier to the highest # of units to figure the monthly charge							
Quarterly allowance uses the same current tiered rates (cost per unit) from the original rate study							
* - percentage of budget generated using average figures from 22-23 study and new base rates							

To review a monthly base rate and adjust it to meet a quarterly timeline, the first approach was to simply triple the base rate (1 month x 3) and increase the unit allowance from two (2) units each month to six (6) units per quarter. The 22-23 rate study concluded the average monthly usage for all classifications of consumers was 5.7 units (5700 gallons), which was used to establish the first tier in the increased block allowance structure. If the rate structure is changed to quarterly this eliminates the revenues generated from tier one (2.1-5 units.) Under a quarterly rate structure, tier one now begins at 6.1 units. The result is potential lost revenue that would have been generated from being able to capture consumption usage monthly at a lower cost. Therefore, this lost revenue will need to be found, or the council can decide to take a calculated estimated loss to revenue. The estimated revenue generated by taking this approach achieves only 91% of the budget.

The “Quarterly Base Rate” example is given as an alternative to assure any lost revenues will be recovered. To lessen the potential losses, a two-step increase can be implemented.

- Adjust the base rate from \$47.56 per month to \$50.00, corresponding to \$150.00 per quarter.
- Increase the Tier One unit charge from \$9.50 to \$10.75. The single unknown factor is loss of revenues from Tier 1.
- Tiers 2 and 3 are kept at the same rate, mitigating the impact on large consumers.

Table 4 - Water Service Rate Schedule shows the new water rates in their entirety.

<b>Water Rate Service Schedule - All Users</b>					
<b>22-23 Study - Monthly</b>					
	Residential	Commercial	Outside	In	Out
5/8"- 3/4"	\$47.56	\$57.07	\$68.49	T1	
5/8"- 3/4" out	\$0.00	\$47.56	\$68.49	\$9.50	\$11.40
1"	\$66.58	\$79.90	\$95.88	T2	
1 1/2"	\$85.61	\$102.73	\$123.27	\$11.00	\$13.20
2"	\$137.92	\$165.51	\$198.61	T3	
3"	\$523.16	\$627.79	\$753.34	\$12.25	\$14.70
2" Bulk	\$137.92	\$165.51	\$198.61		
3" Bulk	\$523.16	\$627.79	\$753.34		
<b>Quarterly Match Base Rates from 22-23 Study</b>					
	Residential	Commercial	Outside	In	Out
5/8"- 3/4"	\$142.68	\$171.21	\$205.46	In	Out
5/8"- 3/4" out	\$0.00	\$142.68	\$205.46	T1	
1"	\$199.75	\$239.70	\$287.64	\$9.50	\$11.40
1 1/2"	\$256.82	\$308.19	\$369.82	T2	
2"	\$413.77	\$496.52	\$595.83	\$11.00	\$13.20
3"	\$1,569.47	\$1,883.36	\$2,260.03	T3	
2" Bulk	\$413.77	\$496.52	\$595.83	\$12.25	\$14.70
3" Bulk	\$1,569.47	\$1,883.36	\$2,260.03		
<b>Quarterly Match Base Rate Adjusted</b>					
	Residential	Commercial	Outside	In	Out
5/8"- 3/4"	\$150.00	\$180.00	\$215.73	In	Out
5/8"- 3/4" out	\$0.00	\$0.00	\$215.73	T1	
1"	\$210.00	\$252.00	\$302.02	\$10.75	\$12.26
1 1/2"	\$270.00	\$324.00	\$388.31	T2	
2"	\$435.00	\$522.00	\$625.62	\$11.00	\$13.20
3"	\$1,650.00	\$1,980.00	\$2,373.03	T3	
2" Bulk	\$435.00	\$522.00	\$625.62	\$12.25	\$14.70
3" Bulk	\$1,650.00	\$1,980.00	\$2,373.03		

- Additionally, changes made to the SFR customer will also increase the base rate for both the commercial and accounts outside the city limits. Using industry standards implemented in the 22-23 rate study, meter ratios were initiated originally in 2015 and continued to be implemented as part of the rate structure. The meter ratios (charge to the base rate on larger sized meters to recoup replacement cost) established are from the American Water Works Association, Principles in Water Rates, Fees, and Charges. The adjustment at the SFR level is shown in its entirety through the water service rate schedule in Table 4.

## Recommendations:

The City Council should choose an option to proceed with should the voters elect to revert to quarterly billing. The options are summarized as follows:

- Option 1 - Triple the Base Rates from 22-23 Study – Rates may not meet the adopted 2022-23 budget target of 95% achieving only an estimated 91% of budget.
- Option 2 - Quarterly Match Base Rate Adjusted – Rates meet the projected 2022-2023 budget target of achieving 96% of budget.

Under either option, monthly or quarterly, the city should update rates based on inflation on an annual basis and evaluate water usage and rate structure every four years to ensure that water revenues are matching the necessary expenditures.

Please note the changes made to the SFR customer will also increase the base rate for both the commercial and accounts outside the city limits. Using industry standards implemented in the 22-23 rate study, meter ratios were initiated originally in 2015 and continued to be implemented as part of the rate structure. The meter ratios (charge to the base rate on larger sized meters to recoup replacement cost) established are from the American Water Works Association, Principles in Water Rates, Fees, and Charges. The adjustment at the SFR level is shown in its entirety through the water service rate schedule in the table.

There are various arrangements that can be used to reach an acceptable water rate that meets budgetary requirements. The uniqueness of communities creates challenges that may or may not work from community to community. Whatever the cost associated with providing water from the source to the consumer's tap, usually varies from one water system to another. Water systems, though similar in operational duties, differ more financially due to the diverse circumstances.

One main interest (goal) within the 22-23 study was the equitability of usage for all customers and their charges, respectively. Fairness across the user classification is defined in a manner that low volume consumption should pay a fair share, while large consumers should not receive a volume discount.

The water rate structure designed for the City of Manzanita included water industry standards and universal practices. The current water rates were arranged with consideration on each classification of users, but most notably the SFR user living inside the city limits. The SFR class is the largest group served by water systems. The consideration of the water system level of sustainability was also considered, hence the adjustments in the rate structure.

These two elements in a water rate study hold a higher level of relevancy as talking points prior to accepting any set of rates. The City of Manzanita has implemented a set of rates that are fair for all users as well as fair to the water department. There is no single point of measurement to define success or failure for a water department, but if unaccounted water (water loss) is under ten percent, it is an assessment worth considering.