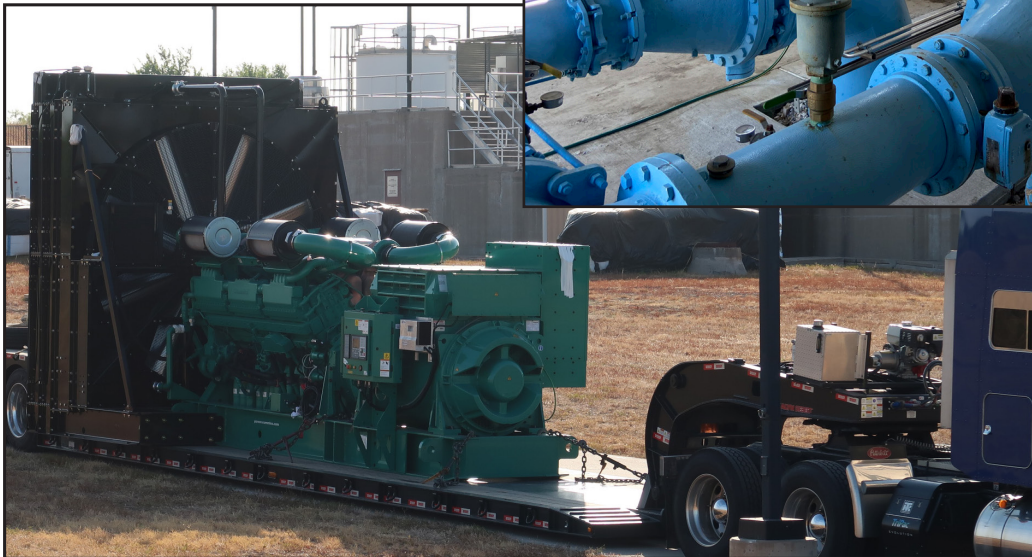


Water & Sewer Fund



Fiscal Year 2024



Recommended Budget & Rates



Report:
Proposed Fiscal Year 2024 Water and Sewer Fund Budget
and 2024 Rate Recommendations

This report includes information about why the utility's water and wastewater budgets are increasing and the Water Director's rate recommendations to the City Council. Fort Worth Water Utility is seeking retail rate increases for water and wastewater services for the first time in four years.

The final rate-setting authority lies with the City Council. Direction provided during the City Council's budget workshops could change the proposed rates included in this report.

The Water Utility is funded solely by its rates and fees; no property tax or sales tax revenue is received. The rate and fee revenue must be adequate to meet operations and maintenance, debt service and capital requirements, established cash reserve or fund balance targets, and legal debt service coverage requirements.

The Water Utility's balanced FY2024 proposed budget is \$59,392,417 or 11.5 percent more than the FY2023 budget. The factors contributing to the proposed rate increases are detailed later in the report.

The proposed rate changes vary by customer class. For residential customers, monthly water use will impact the amount of the increase experienced. The proposed rates result in a \$2.18 monthly increase in the average residential monthly bill for combined water and wastewater service.

A copy of this report has been placed in each community library and is posted on the Water Utility's website at www.fortworthtexas.gov/water. All citizens and water customers are invited to provide written comments.

Please send written comments to:

Mr. Chris Harder, Water Director
Fort Worth Water
200 Texas St.
Fort Worth, Texas 76102
E-mail: wpe@FortWorthTexas.gov

Comments must be received on or before noon on Friday, September 8, 2023. The City Council may act on the recommendations as early as Tuesday, September 12, 2023.

Questions may be directed to Mary Gugliuzza, media relations and communications coordinator with Fort Worth Water at 817-392-8253 or wpe@FortWorthTexas.gov.

Table of Contents

	Page
Principles & Goals for Water & Wastewater Rate Structures	2
Water Terminology/Glossary.....	3-4
FY2024 Proposed Budget Information	5
Cost Drivers/Other Factors	6-8
Cost-of-service study results	8
Recommendations	9
Impact of Recommendations on Water Rates	10
Impact of Recommendations on Wastewater Rates	11
Stakeholder Group Process & Members.....	12

Exhibits

Exhibit A: Sample Residential Bill	13
Exhibit B: Bill Comparisons & Rate Affordability Index	14

Overall principles

- The rates for each customer class (Residential, Commercial, Industrial, and Irrigation) should be based on the actual cost of providing service to that class. This ensures each customer class pays its fair share of the cost of providing water and wastewater service. (The exception to this is the rate for gas well drilling which is a market rate, benchmarked with the rates charged by other water providers for this use.)
- Aligning all customer classes to the cost of service is our goal; however, any cost increase should be achieved by avoiding excessive rate increases for any particular class of customers.
- No class increase should exceed twice the system increase.
- Maintain stable rates.
- Community values and policy considerations should also guide rate design.

Goals for water and wastewater rate structures

Equity — The rates must be fair for all customer classes.

Financial integrity — The rates must ensure the water and wastewater utility is in a sound financial position.

Legal/conservation — The rates must meet all legal requirements, including requirements that the utility meets conservation guidelines established by the Texas Water Development Board.

Realism — The rates must be practical to implement.

Revenue stability — As much as possible, the rates must provide stable revenue from year to year.

Responsible to society — The rates should consider any societal needs unique to Fort Worth.

Understandable — The rates shouldn't be so complex that they are difficult to explain to customers and don't provide the desired pricing signals.

Water terminology/glossary

The following definitions will help in understanding the terms used in this report.

Administrative Services Fee – Fee paid by non-General Fund departments to the General Fund for administrative and other indirect services provided, such as legal, financial, and human resources.

BOD (Biochemical Oxygen Demand) – A characteristic of wastewater that can make it more expensive to process at the water reclamation facility. Industries that have wastewater with a high BOD level are classified as having “high-strength” wastewater.

Cubic Feet (cf) – The unit of measurement the Fort Worth Water Utility uses to measure water use. CCF =100 cubic feet; 1 CCF = 748.1 gallons

Fiscal Year (FY) – The annual budget period. For the City of Fort Worth, the fiscal year starts Oct. 1 and ends the following Sept. 30.

MGD – million gallons per day

Payment in Lieu of Taxes (PILOT) – The PILOT is paid to the General Fund to offset the ad valorem taxes lost because of the non-profit status of the Water and Sewer system. PILOT is calculated by applying the current property tax rate to the net book value of the plants and property allocated to the retail portion of the Water and Sewer system: $(\text{Plant assets} - \text{Accumulated Depreciation} + \text{Work in Progress}) \times \text{Current Tax Rate}$

Rate Classes – Different types of customers place different demands on water and wastewater systems, and these demands have long-term effects on the system. Retail customers are grouped into “classes” based on similar usage characteristics. Costs are then allocated to each class based on its impact on the system. Fort Worth has five retail water customer classes and three retail wastewater customer classes.

- **Residential Class** – Individual customers who buy water and wastewater services for their homes. (Water and Wastewater)
- **Commercial Class** – Customers who buy water for their business; water is generally not used in a manufacturing process. (Water)
- **Industrial Class** – Customers who use water in the manufacturing process. (Water)
- **Irrigation Class** – Customers who buy water for use on landscapes through a dedicated water meter. (Water)
- **Gas Well Drillers** – Customers who purchase water for use in hydraulic fracturing. (Water)

- **Commercial and Industrial Non-Monitored Customers** – Customers whose use of wastewater services generally does not have an abnormal impact on the solids content of the wastewater system, such as office buildings, apartments, and schools. (Wastewater)
- **Commercial and Industrial Monitored Customers** – Wastewater customers in the non-residential customer classes (i.e., restaurants and industrial plants), whose wastewater is monitored for BOD and TSS strength. These businesses pay a wastewater surcharge based on their wastewater “strength” (the amount of BOD or TSS in the sewage).

Retail Customers – Customers who are served and billed directly by the utility to meet their use requirements.

Street Rental – Street Rental fees are paid on revenue derived from pipelines in the public rights-of-way, similar to franchise fees paid by outside/for-profit utilities. Street Rental fees are calculated using 5 percent of all gross service revenues for water, wastewater, and reclaimed water.

TSS (Total Suspended Solids) – A characteristic of wastewater that can make it more expensive to process at the water reclamation facility. Industries that have wastewater with a high TSS level are classified as having “high-strength” wastewater.

Volume – Three-dimensional measurement of a liquid/water

Wastewater – Sewage before it is treated

Water – Treated or potable water that is fit for human consumption

Wholesale Customers – Customers who purchase water to resell within their own municipality or service area.

Winter Quarter Average (WQA) – The method for calculating wastewater volumes for residential accounts. Because residences are not metered for wastewater service, each customer’s three months of winter water usage (December, January, and February) are averaged to set a baseline volume for domestic service. That calculated volume is used for billing purposes for the remainder of the year.

Proposed Water & Sewer Fund Budget

The water utility's balanced FY2024 proposed budget totals \$574,843,877. It is \$59,392,417 or 11.5 percent more than the FY2023 budget. The chart below illustrates how the expenses are allocated.

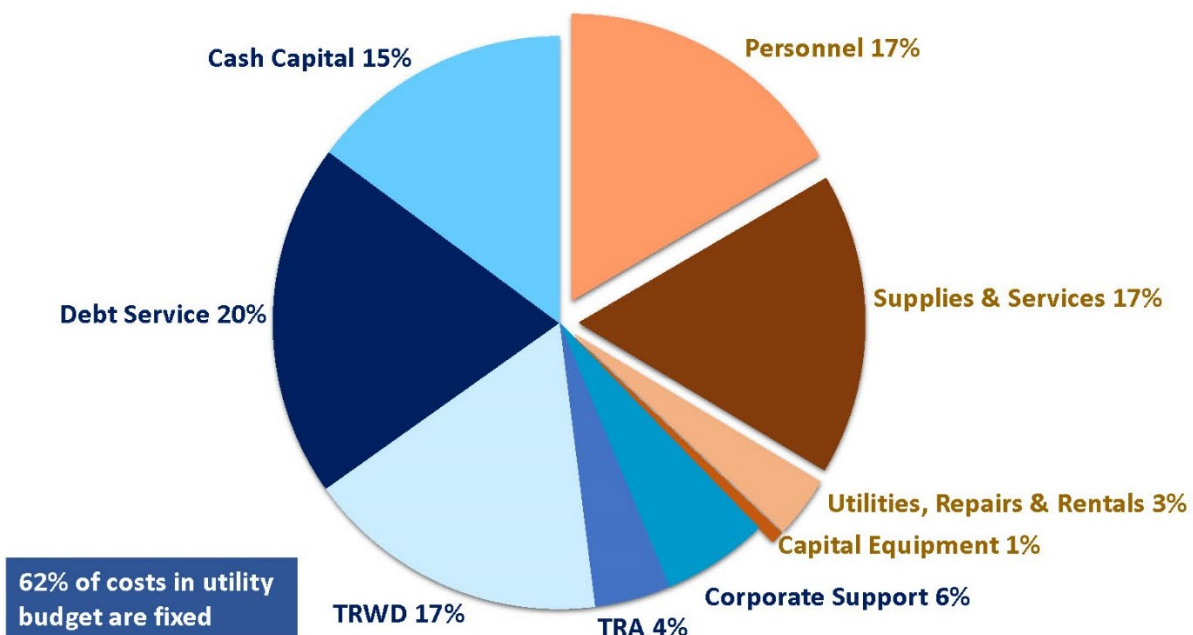
The utility had three objectives as it assembled its proposed budget:

- Keep pace with growth and capital investment;
- Fund corporate decisions and partner agency increases; and
- Address inflation and supply chain issues.

The FY2024 increase is driven primarily by:

- the City Council-adopted capital improvement plan, which requires increases to both debt service and pay-go cash financing;
- implementing the City Council-approved pension reform plan, staff retention strategies and the city manager's proposed pay-for-performance compensation plan;
- personnel costs to fund new positions to address new regulatory requirements, growth, and complexity in the water and wastewater systems; and
- additional contractual services for raw water and wastewater treatment provided by third-party vendors, facility and equipment repair and maintenance, and required transfers to the General Fund.

FY 2024 Proposed Expenses by Category



Factors affecting the Fiscal Year 2024 budget

Capital Improvement Projects

A significant factor in the increased budget is the capital improvement plan, which includes increases in both debt service payments and pay-go cash financing. Utilities are infrastructure intensive. The cost to build new pipelines and facilities or replace or upgrade existing ones is significant. Fort Worth Water's capital improvement plan (CIP) calls for spending more than \$1.5 billion over the next five years. The plan is updated and approved annually by the City Council. These increases are necessary to keep pace with growth, maintain aging infrastructure and fund capital investment in the regional system.

In the proposed FY2024 budget, the capital expense portion of the budget is increasing by \$24.8 million. The debt principal and interest payments on existing and planned bonds are increasing by about \$14.4 million or 14.3 percent. Though the utility has very good bond ratings, interest rates and project costs are increasing.

The cash-financed portion, or pay-go cash, proposed increase is \$10.4 million or 14 percent. Cash financing is used for the rehabilitation and replacement of existing water and wastewater pipelines. A key reason for the increase in this area is to accelerate the replacement of cast iron water lines. There are more than 800 miles of cast iron water mains in Fort Worth, and more than 80 percent of main breaks each year are in the cast iron water lines.

TRWD/TRA Contractual Obligations

The utility is experiencing increases in contractual obligations relating to raw water purchases from Tarrant Regional Water District (TRWD) and the treatment of wastewater for a small portion of the city by the Trinity River Authority of Texas (TRA).

TRWD provides all the raw water that becomes Fort Worth drinking water. The raw water rate is increasing by 4.9 percent for an increase of \$7,882,606. The primary reasons are TRWD's need for a new operations and maintenance facility and to design the Cedar Creek Wetlands water supply project.

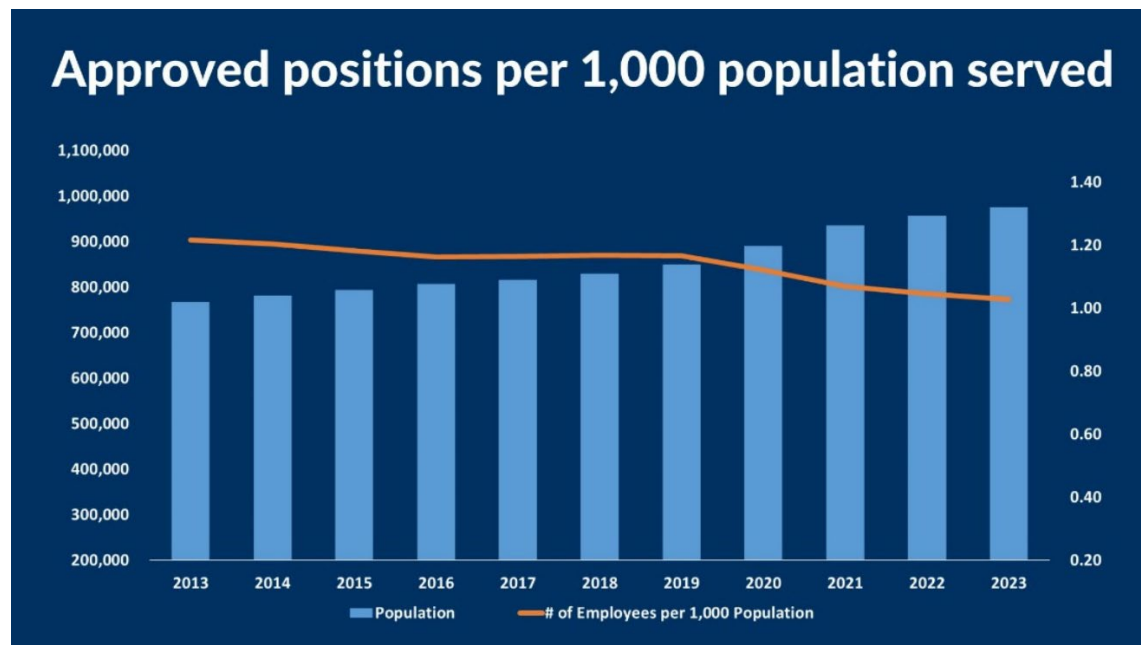
Fort Worth contracts with the TRA to treat wastewater for two areas of the city. The wastewater flow for the far northern parts of Fort Worth is treated at the TRA Denton Creek facility. The flows for areas east of the Village Creek Water Reclamation Facility are treated at the TRA Central Wastewater Treatment Plant. The payment to TRA is increasing by \$7,950,985 because of planned improvements and expansions at the two facilities. Rates for its Denton Creek treatment plant are increasing 58 percent and rates for the Central treatment plant are increasing 14 percent.

Personnel costs

Almost \$5 million of the budget increase is for implementing the City Council-approved pension reform plan, staff retention strategies, the city manager's pay-for-performance compensation plan, and six new staff positions.

The utility is seeking to add six positions to address growth, overall complexity in the water and wastewater systems operations, and new regulatory requirements. These new positions are partially offset by the additional revenue generated from their services.

The table below illustrates the number of authorized positions per 1,000 in the population served. The number does not include the populations of the cities that obtain wholesale water and wastewater services from Fort Worth. For the past decade, the number of positions serving each 1,000 in the population has steadily declined to the FY2023 ratio of 1.03 positions. As the population of the service area increases, this downward trend will continue unless additional staffing needs are addressed.



Other Contractual Obligations

To maintain its treatment facilities and pipelines, the utility is entering into additional ongoing contracts with outside vendors for facility and equipment maintenance. There are also additional contracts for small-diameter pipe repairs and paving by third-party vendors. These contracts supplement the work of in-house staff to get the repairs done promptly. Overall, this category is increasing by 18.1 percent or \$5,333,044.

Allocations/Corporate Support

As an enterprise fund, the water and sewer utility pays the General Fund for street rental, payment in lieu of taxes (PILOT), and IT support and administrative services, such as legal and human resources.

Transfers to the General Fund are up \$4.4 million or 10.1 percent. Because street rental is a calculation of gross service revenues, the transfer increases as the revenues increase. The amounts for IT support and administrative services are provided by the city's IT and FW Lab Departments.

Cost-of-service study results

A cost-of-service study determines how much it costs a utility to serve each customer class. Rates for each customer class should recover the amount of money it takes to serve those customers. The exception is the gas well drilling rate which is based on rates for this market. The cost of service may change from year to year because the characteristics of each class can change as new customers come into the system and others leave the system. The study can show some customer classes pay more than it costs to provide service to them, while others do not cover the cost of providing service to them.

Water cost of service

Customer Class	Revenue at Current Rates	Revenue at Proposed Rates	Indicated % Change	Change In Dollars
Residential	\$129,303,810	\$135,431,36	4.74%	\$6,127,555
Commercial	\$59,748,746	\$60,937,119	1.99%	\$1,188,374
Industrial	\$12,808,266	\$13,142,432	2.61%	\$334,166
Irrigation	\$25,980,241	\$26,268,854	1.11%	\$288,613
Gas Well Drillers	\$24,724	\$26,319	6.45%	\$1,595
Total	\$227,865,787	\$235,806,091	3.48%	\$7,940,304

Wastewater cost of service

Customer Class	Revenue at Current Rates	Revenue at Proposed Rates	Indicated % Change	Change in Dollars
Residential	\$101,749,324	\$103,543,393	1.76%	\$1,794,069
Non-Monitored Commercial & Industrial	\$63,773,349	\$67,285,119	5.51%	\$3,511,770
Monitored Commercial & Industrial:	\$17,350,966	\$17,334,695	-0.09%	(\$16,271)
Total	\$182,873,639	\$188,163,206	2.89%	\$5,289,568

Recommendations - Water Rates

- Move the volume rates for the residential, commercial, and industrial classes to the cost of service.
- No change to the irrigation rate because the class is at the cost of service.
- Minimize the impact on low-income customers by having the first tier of residential rates act as a “lifeline” rate for domestic uses, such as bathing and cooking. This results in the first-tier rates being below the cost of service.

Recommendations – Wastewater Rates

- Set monthly volume rates at the cost of service, resulting in an increase for the residential and non-monitored commercial and industrial classes. The impact to the monitored class is an increase in the volume and TSS rates, but a reduction in the BOD rate.

Recommendation – Water & Wastewater Rates

- Adjust the monthly service charges to maintain the revenue stability plan of keeping the fixed/variable revenue ratio at 30/70 for water and 20/80 percent for sewer service.

Recovering a higher percentage of revenue from the fixed monthly service charge reduces the utility’s dependence on more volatile, volume sales-based revenues.

Over a period of five years, the utility increased revenue from the fixed charge for both water and sewer services to lessen dependence on weather conditions and improve stability in revenue collection and cash flow, based on a utility industry trend.

Retail rates have not changed since 2020 but costs and water usage/sewer flows have. Staff reviewed the revenue recovery from the fixed monthly service charges to ensure that established fixed vs. variable revenue recovery goals remain in place.

Impact of Recommendations on Water Rates

Based on the recommendations, the average residential water bill would increase by \$1.76 per month under the proposed rates. There is a recommended change to both volume rates and the monthly service charge. *(See Exhibit A for more information on the impacts on average, efficient, and large users.)*

Water Volume Rates			
Customer Class	Monthly Volume	Current Rate	Proposed Rate
Residential	first 6 CCF	\$2.19/CCF	\$2.27/CCF
	>6 to 18 CCF	\$3.07/CCF	\$3.18/CCF
	>18 to 30 CCF	\$3.92/CCF	\$4.07/CCF
	> 30 CCF	\$4.73/CCF	\$4.95/CCF
Commercial	All Volumes	\$2.69/CCF	\$2.70/CCF
Industrial	All Volumes	\$2.61/CCF	\$2.67/CCF
Irrigation	First 100 CCF	\$3.01/CCF	\$3.01/CCF
	> 100 CCF	\$3.90/CCF	\$3.90/CCF
Gas Well Drilling	All Volumes	\$5.85/CCF	\$5.85/CCF

Rates are per 100 cubic feet. CCF = one hundred cubic feet = 748.1 gallons

Monthly Water Service Charge		
Water Meter Size	Current Rate	Proposed Rate
5/8" x 3/4"	\$12.10	\$12.90
3/4" x 3/4"	\$12.35	\$13.15
1"	\$25.55	\$27.25
1 1/2"	\$48.00	\$51.15
2"	\$75.00	\$79.90
3"	\$198.40	\$211.35
4"	\$339.80	\$362.00
6"	\$721.45	\$768.50
8"	\$1,260.20	\$1,342.40
10"	\$1,888.75	\$2,012.00

Impact of Recommendations on Wastewater Rates

Based on the recommendations, the average residential wastewater bill would increase by 42 cents per month under the proposed rates. *(See Exhibit A for more information on the impacts on average, efficient, and large users.)*

Customer Class	Current Rate	Proposed Rate
Residential	\$4.17/CCF	\$4.19/CCF
Non-monitored Commercial and Industrial	\$4.06/CCF	\$4.17/CCF
Monitored Commercial and Industrial		
Volume	\$2.36/CCF	\$2.49/CCF
BOD	\$0.2738	\$0.2593
TSS	\$0.1841	\$0.1871

Volume rates are per 100 cubic feet. CCF = one hundred cubic feet = 748.1 gallons

Monthly Wastewater Service Charge		
Water Meter Size	Current Rate	Proposed Rate
5/8" x 3/4"	\$6.85	\$7.15
3/4" x 3/4"	\$7.15	\$7.44
1"	\$12.60	\$13.16
1 1/2"	\$22.25	\$35.75
2"	\$33.75	\$57.20
3"	\$86.65	\$107.25
4"	\$147.20	\$178.75
6"	\$310.60	\$357.50
8"	\$541.30	\$572.00
10"	\$810.40	\$822.25
12"	\$1,013.00	\$1,537.25

Stakeholder group process and members

The water utility wants to ensure that the interests of all customers are represented during the rate structuring process. Customer input is sought to ensure cost-of-service equity in the rate assessment process.

The stakeholder group reviews the water utility's cost studies, portions of its budget, and projections for the future before forming its recommendations.

The Retail Rate Structure Stakeholder Group met three times – May 25, June 8, and June 22. The group is comprised of representatives from the various retail customer classes. Members are to be a representative cross-section of the utility's customers. Individuals are recommended to the Water Director and volunteer their time to serve.

<u>Name</u>	<u>Customer Class</u> <u>Water</u>	<u>Customer Class</u> <u>Wastewater</u>	<u>Company</u>
Rich Gonzales	Industrial	Monitored	MolsonCoors LLC
Lee Mathewson	Industrial	Monitored	Lockheed Martin
Daniel Ruddock	Industrial	Monitored	Alcon
Megan Lilli	Commercial/ Irrigation	Non-monitored	Texas Health Resources
Nicholas Konen	Commercial/ Irrigation	Non-monitored	Hillwood Properties
Thomas Ames	Residential	Residential	
Russell Fuller	Residential	Residential	North Fort Worth Alliance
Daniel Haase	Residential	Residential	Central Meadowbrook Neighborhood Association

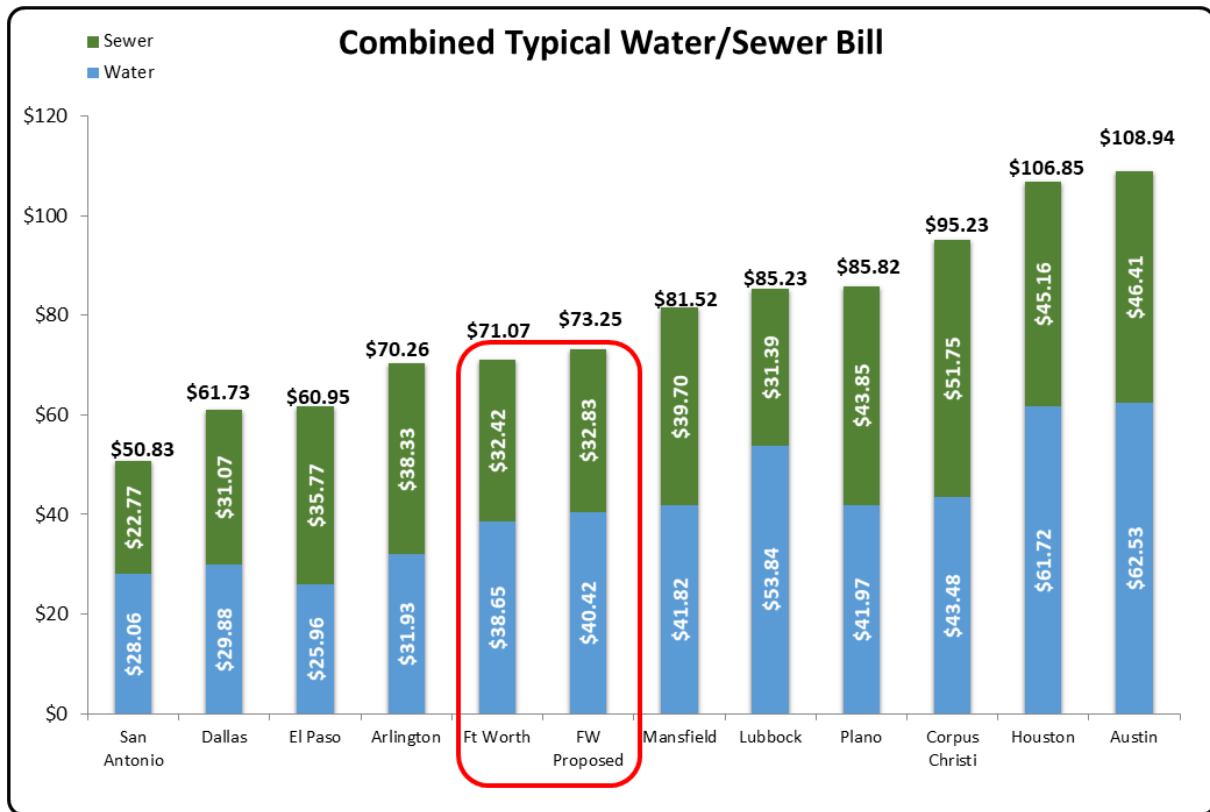
Impact on Residential Bills

The following shows the difference in the monthly residential bill at current rates and proposed rates for certain quantities of water use.

WATER		Average User		Efficient User		Large User	
CCF per Month		10.37 CCF		5.0 CCF		45.0 CCF	
Meter Size		5/8" x 3/4"		5/8" x 3/4"		1"	
		<u>2023</u>	<u>2024</u>	<u>2023</u>	<u>2024</u>	<u>2023</u>	<u>2024</u>
Service Fee		\$12.10	\$12.90	\$12.10	\$12.90	\$25.55	\$27.25
Volume Fee		\$26.56	\$27.52	\$10.95	\$11.35	\$167.97	\$174.87
Subtotal		\$38.66	\$40.42	\$23.05	\$24.25	\$193.52	\$202.12
Monthly Change		\$1.76		\$1.20		\$8.60	
Annual Change		\$21.12		\$14.40		\$103.20	
SEWER		Average User		Efficient User		Large User	
CCF per Month		6.13 CCF		3.00 CCF		30.00 CCF	
Meter Size		5/8" x 3/4"		5/8" x 3/4"		1"	
		<u>2023</u>	<u>2024</u>	<u>2023</u>	<u>2024</u>	<u>2023</u>	<u>2024</u>
Service Fee		\$6.85	\$7.15	\$6.85	\$7.15	\$12.60	\$13.16
Volume Fee		\$25.56	\$25.68	\$12.51	\$12.57	\$125.10	\$125.70
Subtotal		\$32.41	\$32.83	\$19.36	\$19.72	\$137.70	\$138.86
Monthly Change		\$0.42		\$0.36		\$1.16	
Annual Change		\$5.04		\$4.32		\$13.92	
Combined Monthly Bill		\$71.07	\$73.25	\$42.41	\$43.97	\$331.22	\$340.98
Combined Monthly Increase		\$2.18		\$1.56		\$9.76	
Annual Increase		\$26.16		\$18.72		\$117.12	

Rate Comparison

The following chart compares the cost of water and wastewater for an average customer in Fort Worth to what that cost would be in other communities. Only existing 2023 rates are available for other communities, while both the actual 2023 and recommended 2024 rates are shown for Fort Worth.



Rate Affordability

Rate Affordability is an industry index established by the U.S. Environmental Protection Agency. It measures how the average water and wastewater bills compare to the median household income to show costs as a percent of income.

You can see that even with the recommended residential rate increases, Fort Worth remains at the lower end of the “affordable” range.

