

Recommendations of the 2024 Informal Water & Wastewater Retail Rate Structure Stakeholder Group



Photo: Adding treatment capacity to the Eagle Mountain Water Treatment Plant is one of many projects in the proposed 2025-2029 Water and Wastewater Capital Improvement Plan.

August 13, 2024



**Report:
Proposed Fiscal Year 2025 Water and Sewer Fund Budget
and 2025 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. The Fort Worth Water Utility is seeking retail rate increases for water and wastewater services.

The utility held four meetings with the Retail Rate Structure Stakeholder's group to receive input and feedback on its proposed rates and the impact to each customer class.

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 FY2025 proposed budget is \$42,119,221 or 7 percent more than the FY2024 budget. The factors contributing to the proposed budget and rate increases are detailed in this 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 \$1.71 monthly increase in the average residential monthly bill for combined water and wastewater service.

A copy of this report 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
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Fort Worth, Texas 76102
E-mail: wpe@FortWorthTexas.gov**

Comments must be received on or before noon on Friday, August 24, 2024. The City Council may act on the recommendations as early as Tuesday, August 27, 2024.

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

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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.
- Small annual rate increases are preferable to sporadic large rate increases.

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.

Proposed Water & Sewer Fund budget

The water utility’s balanced FY2025 proposed budget totals \$616,963,098. It is \$42,119,221 or 7 percent more than the FY2024 budget. The chart below illustrates how the expenses are allocated.

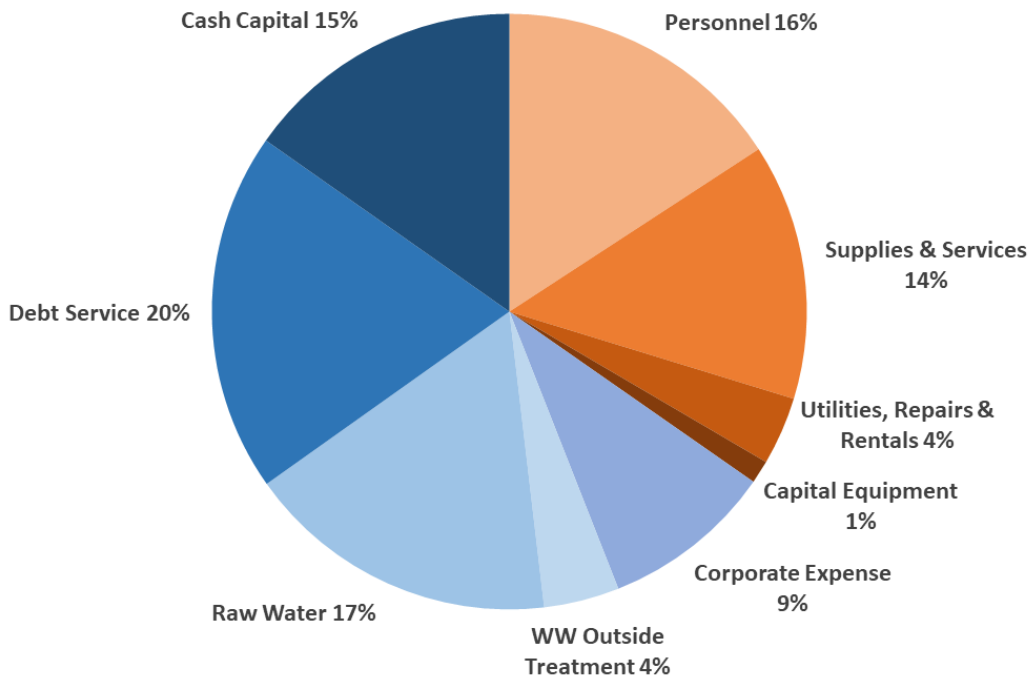
The utility had three objectives as it assembled its proposed budget:

- Keep pace with growth and capital investment;
- Meet regulatory requirements; and
- Fund corporate decisions and partner agency increases.

The FY2025 increase is driven primarily by:

- the City Council-adopted capital improvement plan, which requires increases to debt service, pay-go cash financing and capital equipment;
- meeting new regulatory requirements related to lead and PFAS compounds;
- implementing 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 costs for contractual services for raw water and wastewater treatment provided by partner agencies.

FY 2025 proposed expenses by category



Factors affecting the Fiscal Year 2025 budget

Capital improvement projects

Utilities are infrastructure intensive. A significant factor in the increased budget is the capital improvement plan, which includes increases in both debt service payments, pay-go cash financing and capital equipment purchases.

The cost to build new pipelines and facilities or replace or upgrade existing ones is significant. Fort Worth Water's recommended capital improvement plan (CIP) calls for spending more than \$2 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.

The capital expense portion of the budget is increasing by \$17.9 million. Though the utility has very good bond ratings, interest rates and project costs are increasing. The debt principal and interest payments on existing and planned bonds are increasing by \$5.8 million.



Major projects in Fiscal Year 2025 include expanding the capacity of the Eagle Mountain Water Treatment Plant, replacing 12 primary clarifiers at the Village Creek Water Reclamation Facility, replacing service lines as required by the Lead and Copper Rule Revisions and continuing design of the new Mary's Creek Water Reclamation Facility.

The cash-financed portion, or pay-go cash, proposed increase is \$8.1 million. 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 about 700 miles of cast iron water mains in Fort Worth, and more than 85 percent of main breaks each year are in the cast iron water lines.

The capital equipment increase is for replacing aging mechanical equipment such as vehicles, valves, pumps, compressors and laboratory analysis equipment.

Regulatory requirements

New regulations related to the Lead and Copper Rule Revisions take effect this October. In April 2024, EPA adopted standards for per- and polyfluoroalkyl substances (PFAS) that take effect in a few years, but require the utility to take actions to be ready.

The proposed budget includes an additional \$1.1 million, mostly for PFAS related increases, including professional services for outside legal counsel and contract lab analysis for testing.

Allocations/corporate support

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

Transfers to these funds are up \$5.4 million. 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 FWLab departments.

Personnel costs

Just over \$5 million of the budget increase is for staff retention strategies and benefit costs, the city manager's pay-for-performance compensation plan, and 13 new staff positions.

The utility is seeking to add 13 positions at a cost of about \$1.16 million. The new positions are needed to meet increased regulatory requirements, address growth and capital investment needs, and improve plant operations.

TRWD/TRA obligations

The utility is experiencing increases in contractual obligations relating to raw water purchases from Tarrant Regional Water District (TRWD). These costs are increasing by \$6.5 million in the coming budget year.

TRWD provides all the raw water that becomes Fort Worth drinking water. TRWD is raising its rate by 3.35% primarily to fund the design of its Cedar Creek Wetlands water supply project.

The payment to the Trinity River Authority of Texas is increasing by about \$600,000 because of its capital improvements at its treatment facilities. 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.

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	Cost Responsibility	Surplus/ (Deficit)	Indicated % Change
Residential	\$143,514,075	\$148,465,379	(\$4,951,304)	3.5%
Commercial	\$62,588,919	\$64,452,405	(\$1,863,486)	3.0%
Industrial	\$13,362,080	\$13,849,415	(\$487,335)	3.6%
Irrigation	\$28,654,830	\$29,478,312	(\$823,482)	2.9%
Gas Well Drillers	\$23,704	\$8,024	\$15,680	-66.2%
Total	\$248,143,608	\$256,253,535	(\$8,109,927)	3.3%

Wastewater cost of service

Customer Class	Revenue at Current Rates	Cost Responsibility	Surplus/ (Deficit)	Indicated % Change
Residential	\$106,747,721	\$109,375,218	(\$2,627,497)	2.5%
Non-Monitored Commercial & Industrial	\$70,670,636	\$70,580,874	\$89,763	-0.1%
Monitored Commercial & Industrial	\$18,611,541	\$20,487,096	(\$1,875,554)	10.1%
Total	\$196,029,899	\$200,443,187	\$4,413,288	2.3%

Recommendations – 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.

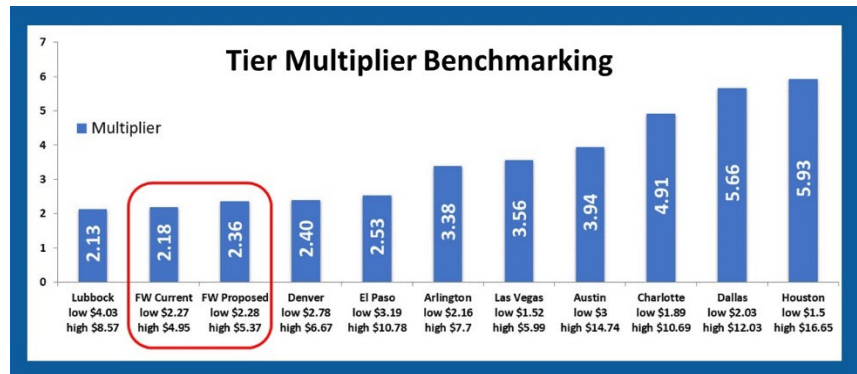
Recovering a certain percentage of revenue from the fixed monthly service charge reduces the utility’s dependence on more volatile, volume-sales revenues.

Staff reviewed the revenue recovery from the fixed monthly service charges to ensure that established fixed vs. variable revenue recovery goals remain in place.

Recommendations - water rates

- No change to the tier structure for residential and irrigation classes.
- Move the volume rates for the residential, commercial, industrial and irrigation classes to the cost of service.
- Increased fixed rates (monthly service charge) to match 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.
- Minimize increase to residential tiers 1 and 2; place bulk of increase in tiers 3 and 4 for highest water users to send a pricing signal on high water use and further encourage efficient water use.

The utility benchmarked the multiplier between lowest and highest residential rate tiers for Fort Worth and other water utilities across the state and country. Fort Worth’s ratio is among the lowest and will remain among the lowest, even if the proposed rate changes are adopted.



Recommendation – wastewater rates

- Set monthly volume rates at the cost of service, resulting in an increase for all classes.

Impact of recommendations on water rates

Based on the recommendations, the average residential water bill would increase 95-cents 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 residential users.)*

Water Volume Rates			
Customer Class	Monthly Volume	Current Rate	Recommended Rate
Residential	first 6 CCF	\$2.27/CCF	\$2.28/CCF
	>6 to 18 CCF	\$3.18/CCF	\$3.19/CCF
	>18 to 30 CCF	\$4.07/CCF	\$4.29/CCF
	> 30 CCF	\$4.95/CCF	\$5.37/CCF
Commercial	All volumes	\$2.70/CCF	\$2.74/CCF
Industrial	All volumes	\$2.67/CCF	\$2.74/CCF
Irrigation	First 100 CCF	\$3.01/CCF	\$3.01/CCF
	> 100 CCF	\$3.90/CCF	\$4.03/CCF
Gas Well Drilling	All Volumes	\$5.85/CCF	\$5.85/CCF
Volume rates are per 100 cubic feet. CCF = one hundred cubic feet = 748.1 gallons			

Water Monthly Service Charge		
Water Meter Size	Current Rate	Recommended Rate
5/8" x 3/4"	\$12.90	\$13.75
3/4" x 3/4"	\$13.15	\$14.00
1"	\$27.25	\$29.05
1 1/2"	\$51.15	\$54.50
2"	\$79.90	\$85.10
3"	\$211.35	\$225.10
4"	\$362.00	\$385.55
6"	\$768.50	\$818.45
8"	\$1,342.40	\$1,429.65
10"	\$2,012.00	\$2,142.80

Impact of recommendations on wastewater rates

Based on the recommendations, the average residential wastewater bill would increase by 76 cents per month under the proposed rates. *(See Exhibit A for more information on the impacts on average, efficient, and large residential users.)*

Wastewater Volume Rates		
Customer Class	Current Rate	Recommended Rate
Residential	\$4.19/CCF	\$4.26/CCF
Non-monitored Commercial and Industrial	\$4.17/CCF	\$4.19/CCF
Monitored Commercial and Industrial		
Volume	\$2.49/CCF	\$2.65/CCF
BOD	\$0.2593/lb.	\$0.2697/lb.
TSS	\$0.1871/lb.	\$0.1978/lb.
Volume rates are per 100 cubic feet. CCF = one hundred cubic feet = 748.1 gallons		

Wastewater Monthly Service Charge		
Water Meter Size	Current Rate	Recommended Rate
5/8" x 3/4"	\$7.15	\$7.50
3/4" x 3/4"	\$7.44	\$7.80
1"	\$13.16	\$13.80
1 1/2"	\$35.75	\$37.50
2"	\$57.20	\$60.00
3"	\$107.25	\$112.50
4"	\$178.75	\$187.50
6"	\$357.50	\$375.00
8"	\$572.00	\$600.00
10"	\$822.25	\$862.50
12"	\$1,537.25	\$1,612.50

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 four times – May 23, June 6, June 17 and June 27. 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.

Name	Customer Class Water	Customer Class Wastewater	Company
Janeth Rodriguez	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

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)/Hundred Cubic Feet (CCF)– The unit of measurement the Fort Worth Water Utility uses to measure water use. 1 CF = 7.481 gallons; 1 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:
(Plant assets - Accumulated Depreciation + Work in Progress) x 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.

Impact on residential bills

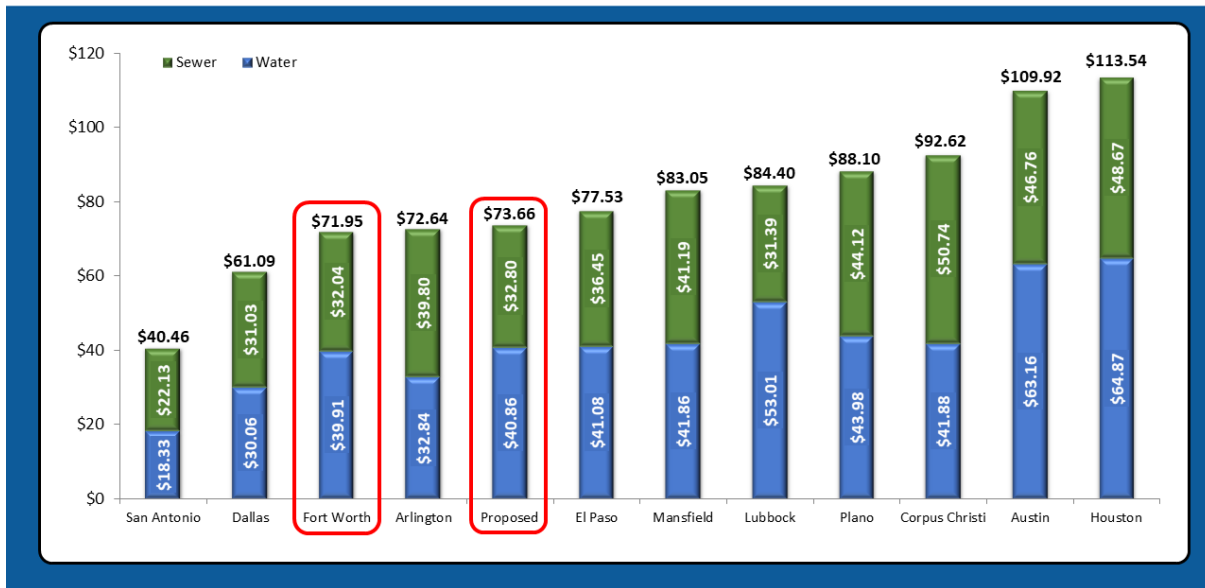
The following chart shows the difference in the monthly residential bill at current rates and proposed rates for certain quantities of water use.

Water						
	Average User		Efficient User		Large User	
CCF per Month	10.21 CCF		5.0 CCF		45.0 CCF	
Meter Size	5/8" x 3/4"		5/8" x 3/4"		1"	
	<u>2024</u>	<u>2025</u>	<u>2024</u>	<u>2025</u>	<u>2024</u>	<u>2025</u>
Service Fee	\$12.90	\$13.75	\$12.90	\$13.75	\$27.25	\$29.05
Volume Fee	\$27.01	\$27.11	\$11.35	\$11.40	\$174.87	\$183.99
Subtotal	\$39.91	\$40.86	\$24.25	\$25.15	\$202.12	\$213.04
Monthly Change	\$0.95		\$0.90		\$10.92	
Annual Change	\$11.40		\$10.80		\$131.04	
Wastewater						
	Average User		Efficient User		Large User	
CCF per Month	5.94 CCF		3.00 CCF		30.00 CCF	
Meter Size	5/8" x 3/4"		5/8" x 3/4"		1"	
	<u>2024</u>	<u>2025</u>	<u>2024</u>	<u>2025</u>	<u>2024</u>	<u>2025</u>
Service Fee	\$7.15	\$7.50	\$7.15	\$7.50	\$13.16	\$13.80
Volume Fee	\$24.89	\$25.30	\$12.57	\$12.78	\$125.70	\$127.80
Subtotal	\$32.04	\$32.80	\$19.72	\$20.28	\$138.86	\$141.60
Monthly Change	\$0.76		\$0.56		\$2.74	
Annual Change	\$9.12		\$6.72		\$32.88	
Combined Water & Wastewater						
	Average User		Efficient User		Large User	
Combined Monthly Bill	\$71.95	\$73.66	\$43.97	\$45.43	\$340.98	\$354.64
Combined Monthly Increase	\$1.71		\$1.46		\$13.66	
Annual Increase	\$20.52		\$17.52		\$163.92	

Rate comparison

The following chart compares the cost of water and wastewater for an average residential customer in Fort Worth to what that cost would be in other communities. Only existing 2024 rates are available for other communities, while both the actual 2024 and recommended 2025 rates are shown for Fort Worth.

Typical Combined Water/Wastewater Bill



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.

