

Encouraging Customer and Utility Stewardship

FORT WORTH WATER







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Cover Photo: Shown is a section of the North Holly Water Treatment Plant with Fort Worth's New City Hall in the background.



DIRECTOR'S MESSAGE

Good stewardship involves trustworthy and responsible management of something of value.

Being good stewards of the Utility is one of our top priorities.

Chris Harder Water Director

Within Fort Worth Water, we are responsible for physical assets, such as pipes, treatment plants, storage tanks, pump stations and meters. Our assets are maintained through predictive, preventive and reactive maintenance programs, with costs associated with that work tracked on the individual asset through a maintenance management system.

When an asset reaches the end of its useful life, rehabilitation or replacement of the asset is necessary. The Utility has invested time and effort into improving our asset management program. The program includes performing condition assessments, developing asset risk models, and prioritizing rehabilitation and replacement dollars on those assets with the highest risk ratings.

Another component of stewardship involves resources. Water is a precious commodity in Fort Worth and North Texas. We want to ensure we are good stewards of this resource by prioritizing leak reduction programs, conservation efforts, and water reuse opportunities.

Our customers play an important part in being good stewards of our water resources. Over the last few years, we have developed tools customers can use to make informed decisions. Tens of thousands of our customers are using MyH2O, the web portal to track their usage on an hourly basis. Having this information has helped them develop strategies to reduce their water usage.

We also send notices to customers who show continuous usage to check for leaks. Many customers have thanked us for this. We offer a toilet rebate program that replaces older, water guzzling flushers with low-flow toilets. We can provide irrigation audits that help customers better understand their irrigation systems and how to better control how they are used.

We are regularly developing new ways our customers can conserve water and will be rolling out more opportunities in the upcoming year.

The last component is financial stewardship. We strive to provide water and wastewater services to our ratepayers at the best value possible. We closely monitor costs, strive to improve operating efficiency and leverage technology to improve performance.

We hope you enjoy this 2023 Annual Report, which documents our historical performance as well as future goals and initiatives.



WATER UTILITY MISSION, VISION AND GOALS



Clean Water Done Right Every Time

The Water Utility enables the Fort Worth community to thrive with clean water done right every time. The Utility is responsible for providing drinking water, wastewater and reclaimed water service that keeps the community healthy and protects the environment.

🔘 Vision

Exceed Expectations

To be the premier water utility focused on exceeding customer expectations through value-driven innovative services.

📱 Goals

Performance Excellence, Meeting Long-Term Community Needs

Fort Worth Water's strategic plan is structured around the **Effective Utility Management framework** designed by the American Water Works Association, the Environmental Protection Agency, and nine other association partners representing the U.S. water and wastewater sector.

The program is designed to **help water and wastewater utility managers** make informed decisions and practical, systematic changes to achieve excellence in utility performance in the face of everyday challenges and plan for long-term needs of the Utility.

The **goal is to improve** in product quality, customer satisfaction, employee and leadership development, operational optimization, financial viability, infrastructure strategy and performance, enterprise resiliency, community sustainability, water resource sustainability, and stakeholder understanding and support.

Fort Worth has four key focus areas to help in its strategic efforts:



The Workforce

Recruit, retain and develop the Utility's workforce throughout their career.



Data Analytics & Technology

Use data to optimize operations and better inform decisions.



Equity & Affordability

Maintain cost through efficient operations and ensure equitable access through infrastructure investment.



Stewardship

Provide best value while protecting, restoring and enhancing the natural environment.

UTILITY HISTORY

1873

Fort Worth incorporates.

Fort Worth.

1878-1882

Artesian wells provide service to Fort Worth. Wells continued to provide service until Lake Worth finalized and filled in 1914.

• 1882

Captain B.B. Paddock creates a private water company to build a private water system.

• 1884

City of Fort Worth buys the private system.

9 1911-1914

Construction of Lake Worth begins in order to serve as the City's water supply. Lake filled in 1914. North Holly sand filtration plant and laboratory placed into service in 1912.

• 1892

Holly Pump Station built.



A new modern wastewater treatment plant, Village Creek Water Reclamation Facility, opened in east Fort Worth. The Riverside wastewater treatment plant closed in 1979.

The Utility's fiscal year 2023 budget represents

25% of the City's overall operating budget

The Utility employs a staff of approximately

1,000

2023

Emergency Preparedness Plan backup generators delivered to Westside Water Treatment Plant.

1924

The Riverside Sewage plant was Fort Worth's first wastewater treatment plant.

Tarrant County Water Control and Improvement District No. 1 (Tarrant Regional Water District) formed by State legislative action - begins working on plans for Bridgeport and Eagle Mountain Reservoirs.

• 1932

Bridgeport Reservoir put into service.

• 1934

Eagle Mountain Reservoir put into service.

1948

1952

1972

Lake Benbrook Dam completed.

A third drinking water treatment

1992

The Eagle Mountain Water Treatment plant begins operations.

Holly Filtration plant undergoes major expansion. A year later, Trinity River flood impacts plant. Plans call for new South Holly Plant with improved flood protection,

which started operation in 1956.





GOVERNANCE STRUCTURE

The Fort Worth Water Utility is an Enterprise Fund of the City of Fort Worth. It receives no tax dollars and operates on its revenues and fees.

The Utility is owned and operated by the City of Fort Worth. Under its Council-Manager form of government, the mayor and city council oversee general administration, make policy and set the budget and rates.

The city manager, appointed by the City Council, carries out the daily administrative functions, including the Water Utility.

The water director oversees the executive management staff, which oversees the Utility's operations. Water and wastewater divisions include strategic operations, field operations, customer care, plant operations, management services and capital delivery.







MANAGEMENT TEAM



1 Mary Gugliuzza Media Relations and Communications Coordinator

- 2 Laura Wilson Water Deputy Director
- **3 Wendy Chi** Assistant Director of Strategic Operations
- 4 Jerry Pressley Assistant Director of Customer Care
- 5 Shannon Dunne Assistant Director of Plant Operations

- 6 Roy Teal Assistant Director of Field Operations
- 7 Chris Harder Water Director
- 8 Tony Sholola Assistant Director of Capital Delivery
- 9 Shane Zondor Assistant Director of Management Services
- **10** Jan Hale Water Deputy Director



CUSTOMER SERVICE AREAS

Retail, Wholesale Service areas of our customer cities





YEAR-END OPERATIONAL PERFORMANCE

BG = billion gallons MG = million gallons





YEAR-END FINANCIAL PERFORMANCE

Revenues and Expenses

Fort Worth Water strives to keep water rates low through operational efficiencies and sound financial management. Water and wastewater rate increases were approved by the City Council in September 2023. New wholesale rates went into effect Oct. 1, the start of the City's fiscal year 2024. New retail rates took effect Jan. 1, 2024. The fiscal year runs through Sept. 30.

The Water Utility is funded solely by the rates and fees it assesses and collects. No property tax dollars are used to fund water and wastewater operations. Rates are per 100 cubic feet, or CCF. One CCF equals 748.1 gallons.

Water and wastewater rates have two components -

- a volume charge and fixed monthly service charge based on water meter size.

The following is a summary of revenues and expenses for fiscal year 2023.

Operating revenues include the sale of treated water and account setup fees. Non-operating revenues are interest earned and transfers in from other departments. Non-operating expenses include debt service payments. Operating expenses include the cost to buy and treat water.

For more details visit the City's website at <u>https://www.fortworthtexas.gov/departments/t</u><u>he-fwlab/budget/fy2023</u>





\$27.6 M Reserve Contribution Includes water, reclaimed

Includes water, reclaimed water and wastewater



Wastewater collection system



BY THE NUMBERS



Fort Worth Water provides clean & affordable water to

1.4M people

The Utility maintains **3,978 miles** of pipes for water distribution

3,858 miles of pipes for wastewater collection

11.5 miles of pipe for reclaimed water



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Fort Worth Water has the capacity to daily treat

512M gallons of drinking water **166M** gallons of wastewater

The Utility operates

- 5 drinking water treatment plants
- 21 booster pump stations
- 30 storage tanks





CAPITAL IMPROVEMENT PLAN AND PROGRESS

A. Capital Investment Trends

The Utility is responsible for providing safe and reliable water and wastewater services, and as such, it needs a strong capital improvement plan.

A capital improvement plan is spelled out in fiveyear increments and expands to complete projects that fulfill the Utility's master plans, those that are required to meet regulatory requirements, growth, and infrastructure requirements and initiatives.

Financial planning designed to minimize interest costs determines how these water and wastewater projects will be funded. The Utility spent \$327M on projects in fiscal year 2023, with even more annual investments in capital planned for the future.

Several critical capital projects began construction in 2023, including backup power facilities for two treatment plants and key pump stations, wastewater treatment improvements at the Village Creek Water Reclamation Facility, water transmission mains and sewer collection line extensions to growth corridors, and additional elevated storage tanks system resiliency.

Replacing all cast iron water pipes is a high priority. Of the existing pipes used in the water system, approximately 25% are cast iron. However, the majority of the water main breaks and leaks occur on cast iron pipe. The performance of cast iron pipe further degrades as water temperatures drop, which generally occurs during winter storm events.

Beginning in fiscal year 2021, Fort Worth Water set out a goal to replace 20 miles of cast iron pipe per year. At that rate, complete replacement of the cast iron pipe inventory may take several decades. We are currently focusing on the highest risk pipelines, which include large diameter cast iron transmission mains. Besides capital project replacement, we also work to partner with infill developers to ensure that existing cast iron pipe is replaced in the vicinity of redevelopment. Going forward, we plan to use every opportunity that becomes available to replace cast iron pipe.



Bond Rating

The Standard and Poor's, Moody's and Fitch ratings are at AA+, Aa1, and AA, respectively. All outlooks are stable. Bond ratings are an assessment of credit worthiness and can affect the City's ability to borrow money.



C. Funding Strategies

Finding Outside Funds When Available

The Utility issues bonds and collects impact fees to help pay for growth-related water and wastewater infrastructure. To help minimize debt payments, the Utility regularly seeks low-cost debt funding through various federally subsidized water loan programs.

The Utility received low-interest loans from the Texas Water Development Board for the MyH2O program and the Biosolids facility, for example.

Looking ahead to the Mary's Creek Water Reclamation Facility, the Utility will pursue a lowinterest loan from the Texas Water Development Board and a loan from the WIFIA program, a federal credit program administered by the EPA and established by the Water Infrastructure Finance and Innovation Act of 2014.

Fort Worth is also applying for a \$30 million grant from the U.S. Bureau of Reclamation through the WaterSMART Title XVI WIIN Act. Under this program, funding can be used for the planning, design and construction of water recycling and reuse projects.

We will also seek Federal Emergency Management Agency grants when available.

Rate Increase History

The Utility's largest source of revenue is the rates paid by our customers. Rates are based on the cost to provide water and wastewater services and are developed using industry standards. The Utility strives to maintain equitable and affordable rates. For the fourth time in five years, the Utility concluded 2023 without a rate increase. With continued increasing costs in such things as raw water, chemicals, and employee salaries, a rate increase was approved and became effective on Jan. 1, 2024.





KEY PRIORITIES



Customer Focus

Fort Worth Water has achieved significant improvement in customer satisfaction, according to the 2023 J.D. Power Survey of water utilities nationwide.

Fort Worth's customer service ranking improved from the same time period in 2022, and well exceeded its 2021 score.

Fort Worth Water customers praised the Utility for the variety of ways they can pay, as well as the ease of paying their water bill.

Customers also lauded the Utility's swift response time, representatives' courtesy, knowledge, and concern for their calls, attributes that placed Fort Worth above similar-sized utilities.

In February 2023 results from our biennial customer service survey performed by ETC Institute, 87 percent of customers surveyed said their interactions with Fort Worth Water were excellent or good. When it comes to customer service staff, 86 percent said the representative was professional and courteous.



"We are grateful for the recognition. We will always strive to improve while continuing to treat our customers with the utmost respect and care."

- Peggy Miller Customer Relations Manager

S Equity & Affordability

As economic conditions fluctuated in 2023, the Utility took steps to educate customers about bill payment assistance programs. The Utility also changed policy regarding water shut offs.

Customers delinquent on their water bills received letters about possible financial aid available to them through Texas Utility Help and the City's Neighborhood Services Department's Community Action Partners. Fort Worth partners with Texas Utility Help to provide bill assistance with funding through the limited federal Low-Income Household Water Assistance Program, or LIHWAP.

Through these programs, in 2023 the Utility helped 6,145 customers with their water bills, totaling \$2.38 million.

Fort Worth Water is proactive about keeping customers from being without water service, particularly over a weekend, because of delayed payments. Moreover, water is never shut off during periods of excessive heat. In 2023, shut offs were suspended for more than two months because of high temperatures.

For example, in an effort to give customers additional time to pay delinquent accounts, beginning Oct. 1, 2023, water shut offs now occur Monday through Thursday only. This means water is not shut off on Fridays, minimizing the potential for customers going all weekend without water service.

Earlier in the year, the Utility had revised its Friday shut off practice to complete all Friday shut offs by noon, and began giving customers until 7 p.m. to request their water service be restored. This gives customers some additional time to make a payment, particularly customers arriving home from work late Friday afternoon.



Emergency Preparedness

Winter preparedness is a year-round commitment for Fort Worth Water.

Employees have worked to ensure the Utility is doing everything it can to prevent outages like the City saw during the deep freeze of February 2021.

In 2022, the Texas Commission on Environmental Quality accepted Fort Worth's required emergency preparedness plan, which includes how we are winterizing our water treatment plants and reclamation facility to ensure the Utility can continue providing services during extended power outages.

The 2021 storm caused power failures to Eagle Mountain, Westside, and the North and South Holly water treatment plants.

Almost immediately, the Utility implemented a

series of projects to minimize the effects of power failures and/or freezing temperatures at those facilities. That year the Utility had contracts to design and construct emergency backup power facilities at the Westside Water Treatment Plant, buy additional emergency generators and build weatherproof enclosures to cover pump stations at Westside and Eagle Mountain.

In 2023, contracts focused on emergency backup power at four large critical booster pump stations, and at North and South Holly water treatment plants.

To date, the City Council has appropriated more than \$70 million toward implementing the plan. Approximately \$80 million in projects are identified to meet our emergency preparedness plan.

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Water Supply & Conservation

Our Advanced Metering Infrastructure program, AMI, has proven invaluable to the Utility in providing near real-time customer consumption data.

By looking at hourly reads, it's easy to see when water is continuously running at a property. Until the MyH2O portal was available, customers couldn't see their usage and might be unaware of a leak.

Throughout 2023, our Water Conservation division sent more than 72,000 letters to customers whose water meter readings showed continuous water usage for 72 consecutive hours. One drip every second can waste up to 10,000 gallons of water a year, or about 4,000 toilet flushes.

"Our goal is to help reduce water waste, and at the same time our customers can reduce their monthly water consumption costs."

- Micah Reed Water Conservation Manager



S Workforce

The fluctuating local job market had the Utility focusing on programs and policies designed to attract employees and keep them onboard. Fort Worth Water saw a vacancy peak of 15% mid-year.

New initiatives included career ladders for some plant operations positions, as well as monetary incentives for obtaining state operating licenses.

Shane Zondor, assistant director of management services, said career ladders were offered to water systems mechanics and technicians in plant operations. The program may be expanded to other divisions. Career ladders formalize a path for career growth and progression.

"Job requirement goals were established, and if those requirements are met, the employee moves up. Prior to the change, employees waited for coworkers to leave or retire before positions opened up for advancement." Initial response has been favorable.

"This gives employees a light at the end of the tunnel," Zondor said. "They know exactly what to do to progress. It's no longer an unclear picture."

Additionally, Fort Worth Water expanded its pay incentive program to promote professional development and expertise among its employees. The measure enables Utility employees who pursue Texas Commission on Environmental Quality licenses that are relevant to their respective positions to earn a monthly bonus.

Certain roles require specialized licenses and are not mandatory for all employees.

The incentive is an investment in employee knowledge and expertise, and guarantees highquality water service to the community.

- Shane Zondor Assistant Director Of Management Services

MAJOR INITIATIVES



In a last big push in the fourth quarter of 2023, the Utility moved nearly 50,000 residential customers still using our older online payment site to the MyH20 portal.



The work was done to complete the goal of having a one-stop shop for customers: the MyH20 portal. The portal launched in mid-2022 when the last of the remote read meters were exchanged. Additionally, about 8,500 business and commercial customers were also provided the opportunity to register on MyH20. The commercial portal allows these customers to manage multiple accounts under one login.

All customers can see an hourly breakdown of water usage within 24 hours, which can provide an early alert to potential leaks.

At the end of 2023, 162,436 of the Utility's more than 275,000 residential and commercial customers were on the portal.

Mary's Creek Water Reclamation Facility

Fort Worth Water engineers working on the future Mary's Creek Water Reclamation Facility in west Fort Worth spent the year focusing on process design.

This work guides how the plant will be built and the processes used in meeting discharge permit limits, processing biosolids, and the technologies used to meet treatment requirements.

Fort Worth Water has been issued the final discharge permit for the facility from the Texas Commission on Environmental Quality. Receiving the permit was the last regulatory step in bringing the project to fruition.

The facility will serve the growing needs of far west Fort Worth as well as complement the Village Creek Water Reclamation Facility on the east side by relieving some of the demand on that facility. The new facility will expand the reclaimed water program to the west side.

In October 2023, the City Council approved additional appropriations to continue the project. The Utility expects to begin construction in late fall 2025 and for the facility to become operational in 2028.

Work also began on the selection of key pieces of equipment, including the preselection packages for membrane bioreactor technology. Equipment packages will go out for bid in 2024.

Health, Safety & Regulatory

Potable water quality is highly regulated by the Environmental Protection Agency under the Safe Drinking Water Act. In 2023, future EPA regulations related to PFAS, commonly referred to as "forever chemicals," and Lead and Copper Rule revisions moved closer to adoption and implementation.

In March 2023, the EPA proposed regulatory limits for six PFAS compounds. The agency wants to regulate PFOA and PFOS at 4 parts per trillion.

The Utility is committed to meeting the EPA's regulations by monitoring the City's drinking water quality and purchased testing equipment that can detect these contaminants to 2 parts per trillion, below the EPA's proposed level. Initial testing began in July.

By December, Council approved a \$1.3 million contract with a firm to conduct systematic sampling and testing at various stages of the water treatment process. This will help the Utility determine the best treatment strategy for the reliable and economical removal of PFAS.

Under the proposed rules, public water systems would be required to monitor for PFAS, notify the

public of the levels, and reduce the levels if they exceed the limits. The EPA's proposed legislation could go into effect in 2024.

In preparation for Lead and Copper Rule Revisions compliance, the Water Utility earlier surveyed more than 290,000 service lines, noting pipe material on the public- and private-owned service. The data was formatted for TCEQ and a template submitted to the agency to make sure it was acceptable. A final inventory of service lines is due to the TCEQ in October 2024.





Reducing Water Loss

Fort Worth Water is studying whether district metering areas could be a cost-effective way to help reduce water loss in the water distribution system. Millions of gallons of water and the revenue that goes with it are lost annually to leaks and breaks.

A district metering area has defined boundaries, and water loss is determined by measuring the amount of water going into the area compared against the metered consumption by our customers.

Large, industrial-sized meters with remote readers are installed on certain pipes. They can provide near-instant notification for large and small main breaks, as well as in helping detect water pressure issues.

In the past two years, Fort Worth Water evaluated its distribution system to prioritize areas where district metering could be implemented without significant expense or system modification, with three areas being initially installed. Going forward, we anticipate additional DMAs will be added, based on a prioritization criterion that includes a benefit cost analysis.

In June 2020, the concept of district metering areas was outlined in the Utility's five-year Real Water Loss Management Plan. Strategic Operations took over the planning in 2021 in collaboration with the MyH2O meter exchange program. MyH2O provides impressive water consumption data and the ability for customers to limit their water use.

In the meantime, the Utility continues to use acoustical leak surveys and other means to proactively find leaks. The Utility has made great strides in quantifying water loss associated with breaks and leaks.





EMPLOYEE SPOTLIGHT



Lila Rodriguez, Quality Improvement Specialist, competes on the Women's Pipe Tapping team. Through a North Side High School co-op program, Lila Rodriguez joined Fort Worth Water in 2002 working as a temporary employee during her senior year.

She would go to school between 8 a.m. and noon and work from 1 p.m. to 5 p.m. She was hired full-time in 2003.

Rodriguez has worked her way up from her entry level position and currently is a valued member of the employee training team in Customer Relations. She has become a subject matter expert in all software projects for the Utility and has created training material for the customer service area.

She was instrumental in the production and successful launch of the MyH2O portal. She also runs reports for her area and serves as a trainer.

Rodriguez, a five-year member of the Women's Pipe Tapping Team, credits the co-op program with guiding her on a fulfilling career path.

A strong commitment to the safety of the public water system in Fort Worth led some Fort Worth Water employees to achieve the highest level of certification available in Texas as a water operator and a wastewater operator.

The employees earning the highest dual certification are (l-r) Adam Farguson, assistant water superintendent in field operations; Farida Goderya, senior project manager in capital delivery; Erik Irwin, assistant water superintendent and the Westside Water Treatment Plant manager; and, Laura Wilson, deputy water director.

According to the Texas Commission on Environmental Quality, which oversees licensing, of the 28,000 certified operators in Texas, 406 water professionals had dual Class A certification in 2023.

Fort Worth requires field and treatment employees to be licensed in their respective area by the TCEQ. The licensing process is extensive, requiring education and work experience before being allowed to test for and receive licenses.



Fort Worth requires field and treatment employees to be licensed in their respective area by the TCEQ.

















FORT WORTH.

Water Utility **Administrative Office**

Fort Worth City Hall, 200 Texas Street, 2nd floor Fort Worth, TX 76102 www.FortWorthTexas.gov/water



@FortWorthWater @FortWorthAgua



@FWWater @FWAgua





Water Customer Service

7 a.m. - 7 p.m. Monday to Friday

24 Hour Emergencies (Select Option 1)

817-392-4477