

Working together to build a strong community

FORT WORTH WATER





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Message from the Director



Stemming water loss became a priority initiative and in 2020, we began the Utility Water Loss Management Plan that uses acoustical testing to find leaking pipes, services, and fittings in the delivery system.

Chris HarderDirector, Fort Worth Water

Fiscal year 2020 was a challenge.

Who would have ever imagined we would be in the thick of a pandemic that slowed commerce and economies worldwide. Our work continued and Fort Worth Water provided exceptional water and wastewater services throughout.

When the pandemic set in in mid-March 2020, the utility sent only a small portion of our employees home to work. The remaining men and women reported to work every day.

We ensured their safety by issuing personal protective equipment and routinely taking other precautionary measures. Constant communications with all our employees was critical. During this time, the utility took a hard look at our continuity of operations plan and developing new procedures to respond to related city directives. The utility completed an all hazards risk assessment required under the America's Water Infrastructure Act. Our emergency response plan was also certified.

Despite the pandemic, we also forged ahead with our priority initiatives, including meter exchanges under MyH2O, transitioning to a new bill payment platform that provides enhanced security and multiple payment avenues, and entering into a new biosolids program. In 2020, Fort Worth Water was also awarded a draft discharge permit for the planned Mary's Creek Water Reclamation Facility.

Stemming water loss became a priority initiative and in 2020, we began the Utility Water Loss Management Plan that uses acoustical testing to find leaking pipes, services and fittings in the delivery system.

In addition, the utility set out a path for a strategic asset management plan and launched a Smart Repair Program that offers no-cost plumbing repair assistance to qualifying low-income homeowners.

As you can see, the pandemic did not hold us down. Instead, the water utility persevered, accomplishing several of our priority initiatives and setting the path forward on others and well along the way to success in fiscal year 2021.



Meet the Team



- 1 Laura Wilson
 Water Deputy Director
- 2 Chris Harder Water Director
- (3) **Travis Andrews**Assistant Director of Field Operations
- (4) **Kara Shuror**Water Deputy Director
- (5) **Jan Hale**Assistant Director of Business Services

- (6) **Tony Sholola**Assistant Director of Capitol Improvement Projects
- 7 Charly Angadicheril
 Assistant Director of Plant Operations
- 8 Jerry Pressley
 Assistant Director of Customer Care
- Mary Gugliuzza
 Media Relations and Communications Coordinator
- (10) Wendy Chi-Babulal
 Assistant Director of Strategic Operations



By the Numbers

Fort Worth Water Metrics

Fort Worth Water is committed to providing safe, clean and affordable water to



1.3m People and 33 surrounding communities

In 2020, Fort Worth daily pumped an average

187.3m

gallons of water

And treated 191.8m

gallons of water

Fort Worth Water has the daily capacity to treat

500m

gallons of drinking water

166m

gallons of wastewater

The utility maintains

3,752 miles of pipes

for water distribution

3,301 miles of pipes

for wastewater collection



Department Facts in Brief

Water System	FY2020	FY2019
Fort Worth population (est.)**	873,130	848,860
Active water accounts on September 30*	271,449	260,369
Wholesale water population served	423,117	416,670
Daily Use Per Capita (inside city):		
Average day (gallons/capita/day)	148	140
Maximum day (gallons/capita/day)	381	448
Maximum day pumpage (MG)*	332.90	382.90
Average day pumpage (MG)*	129.30	119.60
Water pumped to customers (MG)*	68,354.19	64,050.90
Water sold to wholesale customers (MG)	21,155.80	20,384.90
Rainfall-Inches (Fiscal year)	45.27	48.20
Permitted water treatment capacity (MGD)	500	500
Wastewater System		
Active wastewater accounts on September 30	258,303	249,354
Wholesale wastewater population served	344,594	340,020
Wastewater Treated (MGD)***		
Average daily flow	111.52	132.13
Maximum daily flow	284.77	238.28
Total wastewater treated (MG)***	40.815.42	48,227.08
Permitted wastewater treatment capacity (MGD)		
Annual average flow	166	166
Two-hour peak flow	369	369
Reclaimed Water System		
Total annual volume (MG)	469.77	541.28

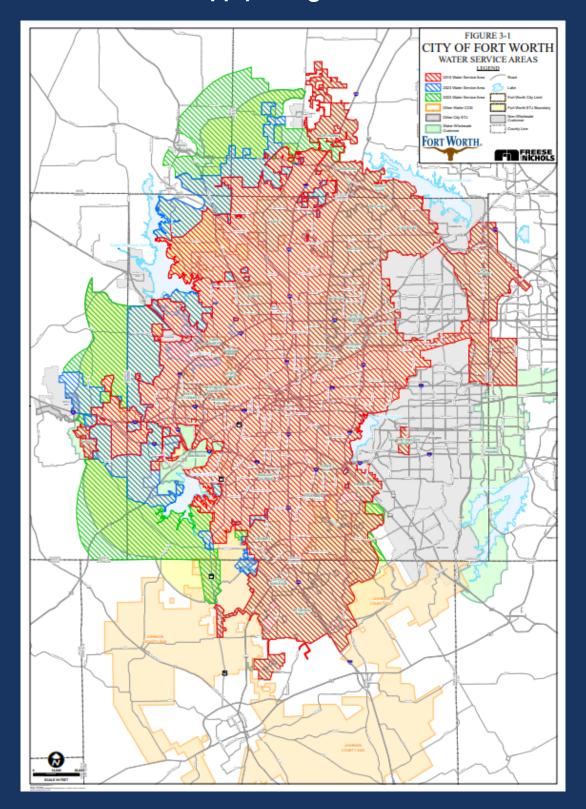
 $^{^*\,} Includes\, Wholesale\, Customers$

 $^{\ ^{**}\,} Source: North\, Central\, Texas\, Council\, of\, Governments$

 $[\]ensuremath{^{***}}\xspace$ Wasterwater Treated Includes Discharged and Reclaimed

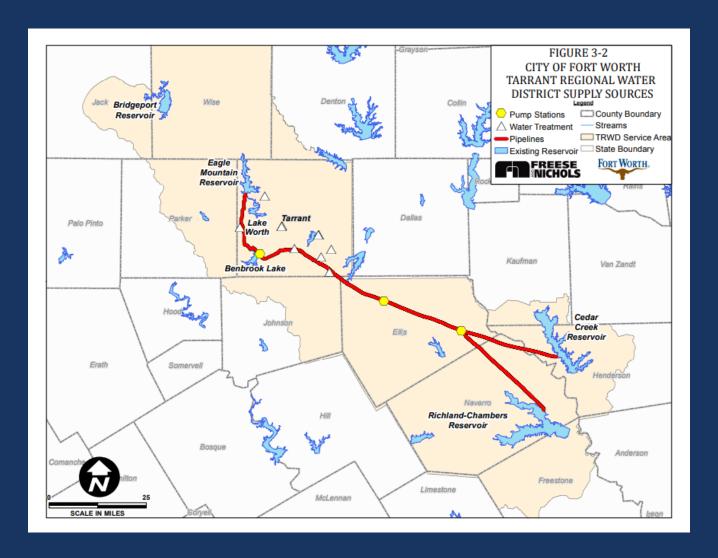


Fort Worth Water Supply + Region





Fort Worth Water Supply + Region

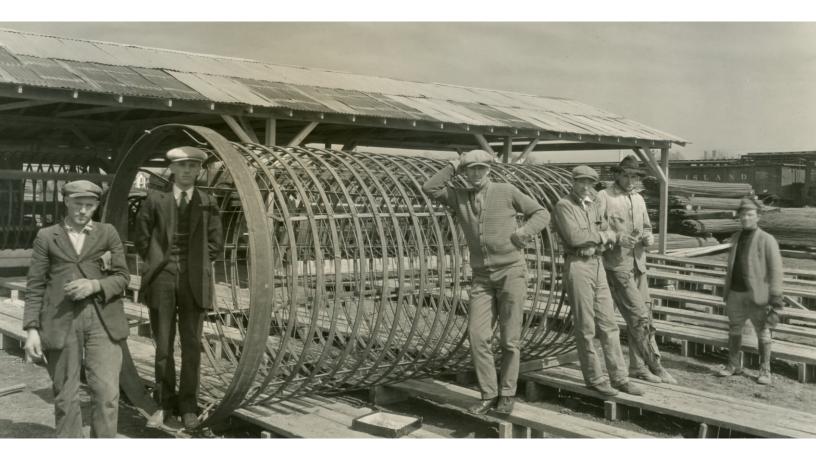




Back to the Basics

Fort Worth Water History

In 1884, Fort Worth marked the start of the city's water services when it bought a two-year-old private water system consisting of six miles of pipe that pumped water from the Trinity River.



Since then, Fort Worth Water has grown alongside the city, strategically adding five water treatment plants – the last in 2012 - a water reclamation facility with a second in the planning stage, 25 pumping stations, 15 reservoirs and 13 elevated water tanks. It maintains more than 7,000 miles of pipes for distribution and collection.

Fort Worth purchases raw water from the Tarrant Regional Water District, but also collects supply from the city-owned Lake Worth, completed in 1914.

The city began metering its water in 1902, installing 1,092 meters. Today, the utility has more than

272,000 meters. Technology is important to Fort Worth Water. In 2016, the utility began installing remote read water meters under a program called MyH $_2$ O. The utility will begin offering customers a portal where they can view their daily water usage, among other features.

 ${
m MyH_2O}$ is designed to improve customer communications and promote water conservation. Fort Worth adopted a water conservation ordinance in 2014, but continually looks for ways to stem water loss.



Conservation

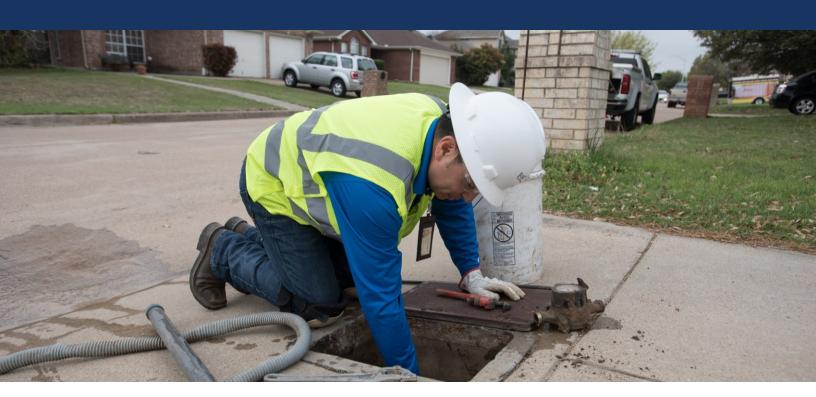


Substantial progress was made in 2020 with the MyH₂O program.

Meters were installed and smart points activated in seven additional billing cycles, bringing the number of meters citywide to more than 100,000 that were being remotely read in 2020.

AquaMetric, the company helping Fort Worth Water install the new meters, has since doubled its installer crews and is slated to complete installations in 2021. The utility has more than 272,000 residential and commercial meters.

Efforts to reach customers regarding the new meters changed in 2020. We were able to host inperson open houses for three billing cycles before the pandemic closed city facilities in March 2020. We quickly regrouped, created a virtual open house that runs on the City's webpage and Fort Worth Water's YouTube account. The 26-minute video reenacts the open house and includes presentations on the customer portal, meters and conservation.



Other virtual question and answer sessions were held for a few billing cycles in 2020. In addition, a new mailer was designed that provides customers with three money-saving tips they can start before the new meter is installed.

It's expected that the much-anticipated customer portal will begin a rollout and registrations in the fall of 2021.



Backflow Program

Water distribution systems should ensure one-way flow of drinking water from treatment plants to homes and businesses. Preventing backflow and cross-connection is an essential part of providing clean, safe water to Fort Worth water customers.

Water flows through the system because of pressure in the pipes. Backflow happens when water flows the wrong direction, from a loss of pressure on the supply side or by pressure increases on the customer side. Causes include water line breaks, repairs or shut-offs.

Cross-connections are points of physical connection between drinking water supply and contamination

hazards. Common cross-connections include submerging garden hoses into buckets, pools, spas, tubs or sinks; attaching garden hoses to chemical sprayers; connecting private wells and irrigation systems to water supply lines, and floods.

The Fort Worth Water backflow group is responsible for ensuring compliance with backflow testing to protect against potential contamination of the water supply. Using a new tracking and records system of the tens of thousands of backflow preventers citywide, 25 percent more tests were completed and compliance rates for yearly testing nearly doubled since March 2020.



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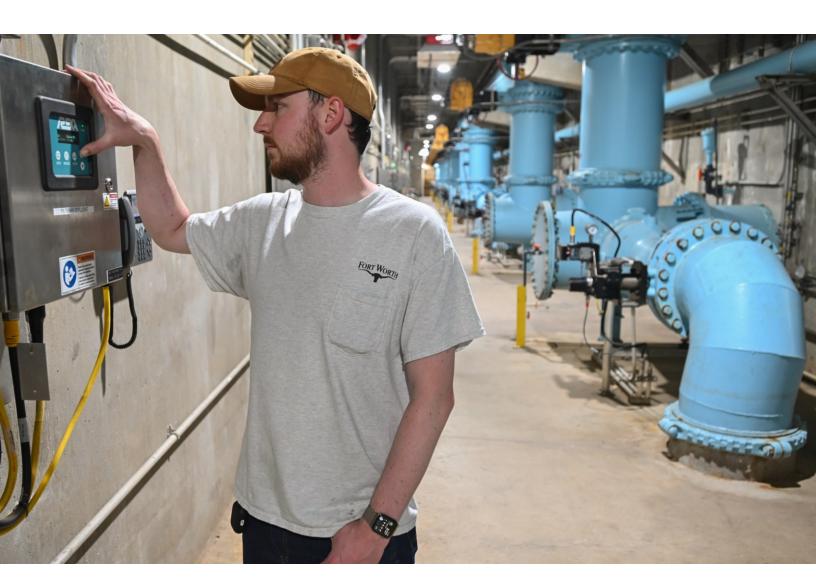


As water employees, there are things we can do to prevent backflow/cross-connection contamination and disruption to our water supply:

Educate all employees on the causes and potential dangers of backflow/cross-connection. Learn more at TCEQ or contact conservation manager Micah Reed at micah.reed@fortworthtexas.gov about Fort Worth Water's backflow program.

Observe possible hazards while on the job. Field personnel should note and report auxiliary water sources, extensive plumbing or irrigation work or pressure issues at facilities, businesses and residences. TCEQ provides a comprehensive list of common cross-connection hazards to help identify potential issues.

Explain the benefits of installing and maintaining backflow and cross-connection protection to protect and reduce risks from health hazards to the city's water supply.





Smart Repair

A water conservation minor leak repair program



The SmartRepair Program offers no-cost repair of minor plumbing leaks for eligible low-income homeowners, reducing wasted water and lowering high water bills to keep essential water service accessible and affordable for all residents.

At one drip per second, household leaks can waste up to 10,000 gallons of water per year.

This is the equivalent of 220 showers or baths, 270 loads of laundry, or 4,000 toilet flushes.

This non-emergency repair program is for minor repairs, including leaking or running toilets, dripping faucets, hose bibs, pipe joints, some broken pipes, and installation of low-flow replacement fixtures when required.

Eligible Repairs include:

- Leaking or running toilets (repair or replace with SmartFlush program toilet, if eligible)
- Leaking hose bibs and faucets
- Broken pipes (with exceptions)
- Leaking wall connection shut-off valves only for washing machines, icemakers, water heaters (this program does not cover appliance repair)
- Repair or replacement of kitchen and bathroom fixtures. Replacement fixtures will be WaterSense®-labeled for efficient water use

Ineligible Repairs include:

- Emergency repairs
- Hot water heaters
- Plumbing involving gas, including hot water heaters
- Sewer or wastewater work, including backups or clogs
- Garbage disposals and other water-using appliances
- Repairs behind walls, under the house, or under the ground
- Structural repairs to flooring or walls

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This program does repair or replace water heaters, water or wastewater main lines or gas main lines. Homeowners with these and other home-related repair issues may qualify for the Neighborhood Services Priority Repair Program.

Fort Worth Water funds the SmartRepair Program on an annual basis. Repairs will be offered until funding is depleted each year. Funds will be distributed on a first-come, first-served basis as applicants are fully qualified for the program.



Program Requirements



The home must have an active Fort Worth Water account.



The home must have identified current water leak(s).



The home must be owner occupied AND be valued under \$300,000, as verified through the Tarrant Appraisal District.



Homeowners can qualify for up to \$3,000 in total repairs over two visits in their lifetime (only once in a 12-month period).



Multifamily or rental units will not qualify, as property owners (landlords) are responsible for making needed repairs per City of Fort Worth Ordinance.



Income must be at or below 200% of federal poverty guidelines for the household.



Financial Stewardship

To ensure ongoing, timely, cost effective and reliable service to our customers, key strides were made to secure the financial viability of the utility. In order to make certain Fort Worth will be the sole provider of sewer services in areas around the city (and its extraterritorial jurisdiction or ETJ), the utility submitted a Certificate of Convenience and Necessity, CCN, application to the Texas Commission on Environmental Quality. The CCN establishes the right to serve customers within a defined boundary. This established boundary will protect the infrastructure Fort Worth Water has already invested into these areas. The utility also responded to the growth of Fort Worth by acquiring two additional wholesale water customers, Willow Park and Hudson Oaks. In taking on additional customers, infrastructure needs to meet the water

and wastewater needs of the communities move into clearer focus.

Infrastructure strategy and performance saw large investments with key projects in 2020. The utility continues to progress with the implementation of a critically needed asset management policy and has started on the strategy plan. The policy laid the foundation for how Fort Worth Water will align its actions with the City of Fort Worth's vision and values for city assets. In conjunction with this plan, the utility made investments into key infrastructure projects to increase area performance. These projects allow Fort Worth Water to focus on the long-term lifecycle of our system while meeting the demand of a growing city.



The year laid the foundation for many innovative projects going into 2021, benefiting the utility, customers and community partners. What follows is the 2020 Financial Report of information and analysis. This information supports the Annual Report and highlights additional actions which help Fort Worth deliver water, done right, every time.

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Our Tiered Rates

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.

Water Volume Rates

Customer Class	Monthly Volume	Inside city limits rate	Outside city limits rate
	First 6 CCF	\$2.19/CCF	\$2.74/CCF
Residential	>6 to 18 CCF	\$3.07/CCF	\$3.84/CCF
Residential	>18 to 30 CCF	\$3.92/CCF	\$4.90/CCF
	>30 CCF	\$4.73/CCF	\$5.91/CCF
Irrigation	> First 100 CCF	\$3.01/CCF	\$3.76/CCF
	>100 CCF	\$3.90/CCF	\$4.88/CCF
Commercial	All volumes	\$2.69/CCF	\$3.36/CCF
Industrial	All volumes	\$2.61/CCF	\$3.26/CCF
Gas Well Drilling	All volumes	\$5.85/CCF	\$7.31/CCF

Monthly Service Charge

This charge is based on the size of the water meter.

Meter Size	Inside City Limits	Outside City Limits
5/8-inch x 3/4-inch	\$12.10	\$15.13
3/4-inch x 3/4-inch	\$12.35	\$15.44
1-inch	\$25.55	\$31.94
1 1/2-inch	\$48.00	\$60.00
2-inch	\$75.00	\$93.75
3-inch	\$198.40	\$248.00
4-inch	\$339.80	\$424.75
6-inch	\$721.45	\$901.81
8-inch	\$1,260.20	\$1,575.25
10-inch	\$1,888.75	\$2,360.94



Wastewater Volume Rates

Customer Class	Inside city limits rate	Outside city limits rate
Residential	\$4.17/CCF	\$5.21/CCF
Non-monitored Commercial and Industrial	\$4.06/CCF	\$5.08/CCF
Monitored Commercial and Industrial - volume	\$2.36/CCF	\$2.95/CCF
Monitored Commercial and Industrial - BOD	\$0.2738/lb.	\$0.3423/lb.
Monitored Commercial and Industrial - TSS	\$0.1841/lb.	\$0.2301/lb.

Wastewater Monthly Service Charge

This charge is based on the size of the water meter.

Meter Size	Inside City Limits	Outside City Limits
5/8-inch x 3/4-inch	\$6.85	\$8.56
3/4-inch x 3/4-inch	\$7.15	\$8.94
1-inch	\$12.60	\$15.75
1 1/2-inch	\$22.25	\$27.81
2-inch	\$33.75	\$42.19
3-inch	\$86.65	\$108.31
4-inch	\$147.20	\$184.00
6-inch	\$310.60	\$388.25
8-inch	\$541.30	\$676.63
10-inch	\$810.40	\$1,013.00
12-inch	\$1,013.00	\$1,266.25

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Where Does Your \$1 Go:

Distribution of Expenses



FY2020 Water and sewer cost distribution

(\$1.00=\$475,588,798.87)

Category	Spend
1 Debt Service	19.40¢
2 System Renewal	13.19¢
3 Raw Water	18.24¢
4 Sewer Treatment	13.84¢
5 Water Treatment	8.45¢
6 Customer Service	9.43¢
7 Collection System	7.62¢
8 Distribution	8.41¢
9 Pumping	1.41¢
10 Reclaimed Distribution	0.02¢



Financial Statement

City of Fort Worth, Texas

Statement Of Revenues, Expenses, and Changes In Net Position Proprietary Funds for The Year Ended September 30, 2020 (In 000's)

W	at	er	an	Ы	Se	We	r

	water and Sewer
Operating Revenues	
Charges for Services	477,948
Other	940
Total Operating Revenues	478,888
Operating Expenses	
Personnel Services*	(40,490)
Supplies and Materials	26,517
Contractual Services	152,900
Landfill Closure and Postclosure Cost	-
Depreciation	78,834
Total Operating Expenses	217,761
Operating Income (Loss)	261,127
Non Operating Revenues (Expenses)	
Investment Income	14,535
Gain (Loss) on Sale Of Property and Equipment	(829)
Interest and Service Charges	(27,292)
Gas Leases and Royalties	530
Total Nonoperating Revenues (Expenses)	(13,056)
Income (Loss) Before Transfers	
and Contributions	248,071
Transfers In	3,070
Transfers Out	(28,786)
Capital Contributions	75,240
Capital Contributions - Impact Fees	32,658
Changes in Net Position	330,253

Source: 2020 Annual Comprehensive Financial Report

Total Net Position (Deficit), Begging of Year

Total Net Position, End of Year

2,181,137 2,511,390



Awards

City of Fort Worth Environmental Excellence Awards

Innovation Awards

Water Use & Process Improvement

Recognizes projects and programs that provide overall improvement of current operating technologies with reduction in discharge to the sewer **Example:** Water savings achieved by the utilization of closed loops

Winner: The Fort Worth Brewery (Molson Coors Beverage Company)

Water Conservation

Recognizes businesses that have employed innovative techniques promoting water conservation such as rainwater harvesting, cooling tower upgrades, water efficient operations and other innovative approaches

Winner: Novak Hair Studios

Honorable Mention: Rent Historic Fort Worth

Stormwater

Recognizes high-performing entities or innovative projects that exceed regulatory requirements in ways that are effective and cost-efficient to eliminate, reduce and control stormwater pollution in order to protect the City of Fort Worth surface water quality

Winner: Tarrant Regional Water District

Land Redevelopment

Recognizes an above and beyond approach to land redevelopment by implementation of sustainability efforts, land or building reuse, green remediation technologies, and alternative and renewable energy utilization

Winner: The University of North Texas-Health

Science Center at Fort Worth

Honorable Mention: NT Window, Inc.

Solid Waste Reduction and Recycling

Recognizes innovation and creativity in the design and implementation of ways to reduce waste, increase re-use, recycling

Winner: Novak Hair Studios

Honorable Mention: The Fort Worth Brewery

(Molson Coors Beverage Company)

Honorable Mention: Lundquist Hair Design

Recognition Awards

Fort Worth Friendly Landscapes

Businesses can apply for this award for recognition of commercial properties that exhibit attention to low-water use or drought tolerant plants, drip irrigation techniques, or other water conservation principles in their landscape. Properties will receive an on-site assessment of the property and, if selected, a plaque to recognize their efforts.

Winner: Tarrant Regional Water District

SmartWater

This program evaluates end uses of water and provides recommendations to reduce consumption and costs. The assessment covers water use from irrigation, cooling towers, metering, process water, laundries, rinsing, kitchen, outdoor fountains and more.

Winner: Tarrant County Community College



HSC COMMUNITY GARDEN



















THE UNIVERSITY of NORTH TEXAS HEALTH SCIENCE CENTER at FORT WORTH



Novak Hair Studios



The Fort Worth Brewery (Molson Coors Beverage Company)



Highlight #'s



449,075 Total # of customer calls



~90,000

Total # of e-bill customers

facebook

Spanish

19,000 1,700 629,000

Engagements

New Followers

Reach

English

25,500 **Engagements** 6,800

918,000

New Followers Reach



Spanish

105,000 400 240

Engagements

New Followers

Reach

English

2,150

1,260,000

New Followers Engagements Reach



1,100

740

Engagements

New Followers

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

Water Customer Service 817-392-4477 7 a.m. - 7 p.m. Monday to Friday 24 Hour Emergencies Select Option 1







