



SUGAR LAND

2024

WATER  
QUALITY  
REPORT

CITY OF SUGAR LAND  
Public Works

Main System  
PWS 0790005

River Park System  
PWS 0790354

Greatwood System  
PWS 0790296

New Territory System  
PWS 0790253

The City of Sugar Land Public Works Water Utilities Division takes pride in maintaining a tradition of producing superior quality water, vigilantly maintaining water and wastewater infrastructure and providing responsive and efficient customer-oriented service in a cost-effective and innovative manner, emphasizing responsible environmental stewardship and compliance with all regulatory requirements.

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Este reporte incluye informacion importante sobre el agua para tomar.  
Para asistencia en español, favor de llamar al telefono **281-275-2450** o **311**.

# Director's MESSAGE

**O**n behalf of the City of Sugar Land's Public Works Department, I'm pleased to share our 2024 Water Quality Report. This report reflects our continued commitment to delivering safe, high-quality drinking water across the City's four water systems.

I'm proud to report that our drinking water continues to meet – and often exceed – all health-based standards set by the EPA and TCEQ. Thank you to our dedicated and licensed staff, we conduct daily sampling and testing to ensure compliance and maintain the public's trust in our water supply.

Beyond quality testing, our teams work around the clock to operate and maintain critical water and wastewater infrastructure, respond to customer needs, and support long-term system improvements. One major initiative launched in 2023 is the rollout of Advanced Metering Infrastructure (AMI), a modernized metering system that improves water use data accuracy, enhances leak detection, and supports a more sustainable and efficient water future. A customer-facing AMI portal is coming soon, offering residents access to near real-time water use data and greater control over their water consumption.

At the heart of our work is a shared vision: to serve Sugar Land with integrity, innovation, and purpose. We are proud to be **BOLD, LOYAL, ADAPTABLE, ZEALOUS, and EMPOWERED** – the values that drive our mission every day.

We are Sugar Land Water – and we're trail**BLAZ(E)**ing a future that's smarter, stronger, and more resilient.



Katie Clayton, P.E.  
Director of Utilities

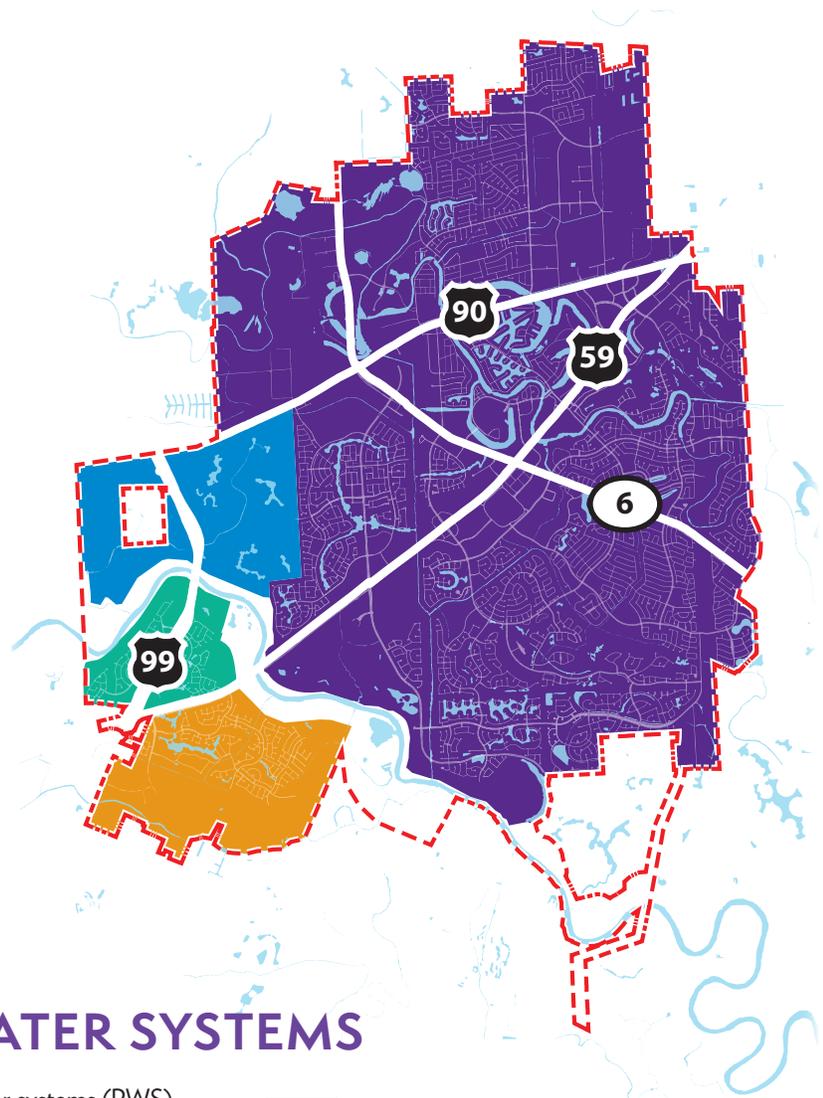
## A MESSAGE TO INDIVIDUALS WITH A COMPROMISED IMMUNE SYSTEM FROM THE EPA

You may be more vulnerable than the general population to certain microbial contaminants, such as **Cryptosporidium**, in drinking water. **Infants; some elderly or immunocompromised persons, such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at 800-426-4791.**

# Water Quality DATA

The TCEQ's mission is to protect the public's health and Texas' natural resources. Like the TCEQ, the City's goal is to have clean air and water and to safely dispose of waste. The TCEQ monitors Sugar Land's water by collecting and analyzing water samples for metals, minerals, volatile and semi-volatile organic compounds, disinfectant byproduct compounds and radiological compounds. In addition to the tests that the TCEQ performs, the agency requires that the City of Sugar Land do testing in-house.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's **Safe Drinking Water Hotline** at **800-426-4791**.



## SUGAR LAND'S PUBLIC WATER SYSTEMS

The City of Sugar Land operates four independent public water systems (PWS) within the corporate limits of the city. The Main System (PWS 0790005) serves the City east of the Brazos River and the River Park System (PWS 0790354) serves the subdivision west of the Brazos River. Greatwood (PWS 0790296) and New Territory (PWS 0790253) Systems serve the Greatwood & New Territory neighborhoods. The four systems are not connected; therefore, water quality data for each system is presented separately in this report.

-  **MAIN SYSTEM**
-  **RIVER PARK SYSTEM**
-  **NEW TERRITORY SYSTEM**
-  **GREATWOOD SYSTEM**
-  **CITY LIMITS**

## DEFINITIONS

The following tables contain scientific terms and measures, some of which may require explanation.

### **ACTION LEVEL (AL)**

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

### **AVERAGE LEVEL OF QUARTERLY DATA (AVG)**

Regulatory compliance with some Maximum Contaminant Levels are based on running annual average of monthly samples.

### **CONSTITUENT**

Federally regulated or monitored analyte.

### **INORGANIC CONTAMINANTS**

Salts and metals which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

### **LEVEL 1 ASSESSMENT**

A study of the water system to identify potential problems and determine, if possible, why total coliform bacteria were found.

### **LEVEL 2 ASSESSMENT**

A very detailed study of the water system to identify potential problems and determine, if possible, why an Escherichia coli (E. coli) maximum contaminant level (MCL) violation has occurred and/or why total coliform bacteria were found on multiple occasions.

### **MAXIMUM CONTAMINANT LEVEL (MCL)**

The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

### **MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)**

The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

### **MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL)**

The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminant.

### **MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG)**

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

### **MICROBIAL CONTAMINANTS**

Viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

### **ORGANIC CHEMICAL CONTAMINANTS**

Synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production; can also come from gas stations, urban storm water runoff and septic systems.

### **PESTICIDES AND HERBICIDES**

These may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

### **RADIOACTIVE CONTAMINANTS**

Naturally occurring or the result of oil and gas production and mining activities.

### **TREATMENT TECHNIQUE (TT)**

A required process intended to reduce the level of a contaminant in drinking water.

### **TTHM**

Total Trihalomethanes

### **TURBIDITY**

A measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

## OPPORTUNITIES FOR PUBLIC COMMENT ON WATER PLANNING AND WATER QUALITY

For more information about this report or participating in public meetings concerning the City of Sugar Land's drinking water, call **281-275-2450** or **311**.

# WATER QUALITY DATA TABLES

An important component of water treatment and distribution is compliance with the many state and federal laws and regulations that govern public water systems. The City’s groundwater treatment plants and the SWTP are monitored daily, and monthly reports are submitted to the TCEQ. The data presented in this report is from the most recent testing done in accordance with the regulations. The EPA and the State of Texas require the City of Sugar Land to monitor for certain contaminants less than once per year because the concentrations do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. Unless otherwise noted, the data presented in this report is from testing done in 2024.

## ABBREVIATIONS

<b>N/A:</b> Not Applicable	<b>ppm:</b> parts per million or milligrams per liter (mg/L)
<b>NTU:</b> Nephelometric Turbidity Units (a measure of turbidity)	<b>ppb:</b> parts per billion, or micrograms per liter (µg/L)
<b>pCi/L:</b> pico Curies per Liter; measure of radioactivity	<b>ppt:</b> parts per trillion, or nanograms per liter (ng/L)

### 1 ppm is equal to:

- One drop of water in a 10 gallon fish tank
- One minute in 2 years
- One penny in \$10,000

### 1 ppb is equal to:

- One drop of water in a 10,000 gallon swimming pool
- One minute in 2,000 years
- One penny in \$10,000,000

### 1 ppt is equal to:

- One drop of water in 20 Olympic-sized swimming pools
- One minute in 2,000,000 years
- One penny in \$10,000,000,000

## MAIN SYSTEM - 0790005

### Bacteria

Contaminant	Year	MCLG	Total Coliform MCL	Highest # of Positive	Fecal Coliform or E Coli MCL	Total # of Positive E Coli or Fecal Coliform Samples	Violation (Y/N)	Likely Source of Contamination
<b>Coliform Bacteria</b>	2024	0	5% of monthly samples are positive	2	Routine and repeat samples are total coliform-positive and either is E. coli-positive	0	No	Naturally present in the environment.

### Copper and Lead

Contaminant	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation (Y/N)	Likely Source of Contamination
<b>Copper</b>	2023	1.3	1.3	0.291	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
<b>Lead</b>	2023	0	15	2.54	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

Synthetic Organic Contaminants including Pesticides and Herbicides

Contaminant	Year	Highest Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Atrazine	2024	0.31	0	0.31	3	3	ppb	No	Runoff from herbicide used on row crops.
Simazine	2024	0.13	0	0.13	4	4	ppb	No	Runoff from herbicide use.
2,4-D	2024	0.2	0.2	0.2	70	70	ppb	No	Runoff from herbicide used on row crops.

Radioactive Contaminants

Contaminant	Year	Highest Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Beta/photon emitters*	2024	7.7	7.7	7.7	0	50*	pCi/L	No	Decay of natural and man-made deposits.

\* EPA considers 50 pCi/L to be the level of concern for beta particles.

Total Organic Carbon

Total organic carbon has no adverse health effects. Total organic carbon provides a medium for the formation of disinfection byproducts when water is disinfected. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAAs) which are reported on elsewhere in this report. The percentage of TOC removal was measured each month, and the system met all TOC removal requirements set.

Constituent	Average	Minimum	Maximum	MCLG	MCL	Unit of Measure	Likely Source of Contamination
TOC- Source Water	5.0	3.7	5.8	n/a	TT	ppm	Naturally present in the environment.
TOC- Drinking Water	2.6	1.3	3.4	n/a	TT	ppm	Naturally present in the environment.
TOC % Removal	47.9	38.0	77.3	n/a	TT	%	n/a

Disinfectants and Disinfection By-Products

Contaminant	Year	Average Level	Minimum Level Detected	Maximum Level Detected	MRDLG	MRDL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>Chloramines (Chlorine Residual, Total)</b>	2024	2.68	0.5	3.98	4	4	ppm	No	Water additive used to control microbes.
<b>Chlorine Dioxide</b>	2024	70	20	200	800	800	ppb	No	Water additive used to control microbes.
Contaminant	Year	Highest Average Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>Haloacetic acids (HAA5)</b>	2024	5.5	0.0	5.2	No Goal for the total	60	ppb	No	By-product of drinking water disinfection.
<b>TTHMs (Total trihalomethanes)</b>	2024	5.6	0.0	7.9	No Goal for the total	80	ppb	No	By-product of drinking water disinfection.
<b>Chlorite</b>	2024	0.34	0.0	0.39	0.8	1	ppm	No	By-product of drinking water disinfection.

Inorganic Contaminants

Contaminant	Year	Highest Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Major Sources in Drinking Water
<b>Barium</b>	2024	0.101	0.0972	0.101	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Fluoride</b>	2024	0.19	0.18	0.19	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Nitrate (as Nitrogen)</b>	2024	2.35	0	2.35	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

### Turbidity

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
<b>Highest single measurement</b>	<b>1.0 NTU</b>	0.09	N	Soil runoff
<b>Lowest monthly % meeting limit</b>	<b>0.3 NTU</b>	100%	N	Soil runoff

### Secondary Constituents and Other Non-Regulated Contaminants

Contaminant	Year	Average Level Detected	Minimum Level Detected	Maximum Level Detected	Unit of Measure	Secondary MCL
<b>Bromodichloromethane</b>	2024	3.9	0	17	ppb	no MCL
<b>Bromoform</b>	2024	0.9	0	2.1	ppb	no MCL
<b>Calcium</b>	2024	37.9	35.8	40	ppm	no MCL
<b>Chloride</b>	2024	65	60	70	ppm	250
<b>Chloroform</b>	2024	3.5	0	18	ppb	no MCL
<b>Chlorodibromomethane</b>	2024	3.5	0	12	ppb	no MCL
<b>Magnesium</b>	2024	7.2	6.8	7.7	ppm	no MCL
<b>Nickel</b>	2024	1.2	1.1	1.2	ppb	100
<b>pH</b>	2024	7.9	7.4	8.5	units	> 7
<b>Potassium</b>	2024	6.4	5.9	6.8	ppm	no MCL
<b>Sodium</b>	2024	57	55	59	ppm	no MCL
<b>Sulfate</b>	2024	28	26	30	ppm	300
<b>Total Alkalinity</b>	2024	130	127	133	ppm	no MCL
<b>Total Dissolved Solids</b>	2024	294	275	312	ppm	1000
<b>Total Hardness as CaCO<sub>3</sub></b>	2024	125	118	131	ppm	no MCL

# RIVER PARK SYSTEM - 0790354

*Water System Interconnect: During 2024 the water system interconnect between Sugar Land's River Park and Greatwood systems was opened. Water produced in Greatwood supplemented the supply to customers in River Park during planned maintenance at the water plant.*

## Copper and Lead

Contaminant	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation (Yes/No)	Likely Source of Contamination
<b>Copper</b>	2024	1.3	1.3	0.102	1	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
<b>Lead</b>	2024	0	15	0.519	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

## Disinfectants and Disinfection By-Products

Contaminant	Year	Average Level	Minimum Level Detected	Maximum Level Detected	MRDLG	MRDL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>Chlorine Residual, Free</b>	2024	1.58	1	2.05	4	4	ppm	No	Water additive used to control microbes.
<b>TTHMs (Total trihalomethanes)</b>	2024	2.4	2.4	2.4	No Goal for the total	80	ppb	No	By-product of drinking water disinfection.

## Inorganic Contaminants

Contaminant	Year	Highest Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>Barium</b>	2022	0.161	0.161	0.161	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Fluoride</b>	2023	0.42	0.42	0.42	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Selenium</b>	2022	3	3	3	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

### Volatile Organic Contaminants

Contaminant	Year	Highest Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Xylenes	2024	0.0006	0	0.0006	10	10	ppm	No	Discharge from petroleum factories; discharge from chemical factories.

### Radioactive Contaminants

Contaminant	Year	Highest Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Uranium	2020	1.2	1.2	1.2	0	30	ppb	No	Erosion of natural deposits.
Combined Radium 226 /228	2020	1.5	1.5	1.5	0	5	pCi/L	No	Erosion of natural deposits.

### Secondary and Non-Regulated Conaminants

Contaminant	Year	Average Level Detected	Minimum Level Detected	Maximum Level Detected	Unit of Measure	Secondary MCL
Calcium	2022	26.8	26.8	26.8	ppm	no MCL
Chloride	2023	44	44	44	ppm	250
Iron	2022	38	38	38	ppb	300
Magnesium	2022	5.6	5.6	5.6	ppm	no MCL
Manganese	2022	6.3	6.3	6.3	ppb	50
pH	2024	8	7.9	8.1	units	> 7
Potassium	2022	1.6	1.6	1.6	ppm	no MCL
Sodium	2022	74.9	74.9	74.9	ppm	no MCL
Sulfate	2023	13	13	13	ppm	300
Total Alkalinity	2023	197	197	197	ppm	no MCL
Total Dissolved Solids	2023	301	301	301	ppm	1000
Total Hardness as CaCO <sub>3</sub>	2022	90	90	90	ppm	no MCL

# NEW TERRITORY SYSTEM - 0790253

## Copper and Lead

Contaminant	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation (Y/N)	Likely Source of Contamination
<b>Copper</b>	2023	1.3	1.3	0.223	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
<b>Lead</b>	2023	0	15	0.229	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

## Inorganic Contaminants

Contaminant	Year	Highest Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>Arsenic</b>	2024	2.6	0	2.6	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics
<b>Barium</b>	2024	0.205	0.194	0.205	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Fluoride</b>	2023	0.54	0.22	0.54	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Nitrate (as Nitrogen)</b>	2024	0.1	0	0.1	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

## Disinfectants and Disinfection By-Products

Contaminant	Year	Average Level	Minimum Level Detected	Maximum Level Detected	MRDLG	MRDL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>Chlorine Residual, Free</b>	2024	1.53	0.96	2.02	4	4	ppm	No	Water additive used to control microbes.
Contaminant	Year	Highest Average Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>TTHMs (Total trihalomethanes)</b>	2024	2.3	0.0	4.3	No Goal for the total	80	ppb	No	By-product of drinking water disinfection.

### Radioactive Contaminants

Contaminant	Year	Highest Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>Beta/photon emitters*</b>	2021	4.5	0	4.5	0	50*	pCi/L	No	Decay of natural and man-made deposits.
<b>Gross Alpha</b> (excluding Radon & Uranium)	2021	4.7	3	4.7	0	15	pCi/L	No	Erosion of natural deposits.
<b>Combined Radium 226 /228</b>	2021	1.5	0	1.5	0	5	pCi/L	No	Erosion of natural deposits.
<b>Uranium</b>	2021	3	0	3	0	30	ppb	No	Erosion of natural deposits.

\* EPA considers 50 pCi/L to be the level of concern for beta particles.

### Secondary Constituents and Other Non-Regulated Contaminants

Contaminant	Year	Average Level Detected	Minimum Level Detected	Maximum Level Detected	Unit of Measure	Secondary MCL
<b>Calcium</b>	2024	53.9	53.8	53.9	ppm	no MCL
<b>Chloride</b>	2023	42	41	43	ppm	250
<b>Iron</b>	2024	145	15	274	ppb	300
<b>Magnesium</b>	2024	8.7	8.7	8.8	ppm	no MCL
<b>Manganese</b>	2024	2.4	0	4.8	ppb	50
<b>pH</b>	2024	7.8	7.5	8.1	units	> 7
<b>Potassium</b>	2024	3.0	2.8	3.3	ppm	no MCL
<b>Sodium</b>	2024	40.2	35.9	44.5	ppm	no MCL
<b>Sulfate</b>	2023	14	13	15	ppm	300
<b>Total Alkalinity</b>	2023	192	183	200	ppm	no MCL
<b>Total Dissolved Solids</b>	2023	309	306	315	ppm	1000
<b>Total Hardness as CaCO<sub>3</sub></b>	2024	171	170	171	ppm	no MCL

# GREATWOOD SYSTEM - 0790296

**Water System Interconnect:** During 2024 the water system interconnect between Sugar Land's Greatwood River Park systems was opened. Water produced in River Park supplemented the supply to customers in Greatwood during planned maintenance at the water plants.

## Copper and Lead

Contaminant	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation (Yes/No)	Likely Source of Contamination
<b>Copper</b>	2022	1.3	1.3	0.167	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
<b>Lead</b>	2022	0	15	1.51	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

## Disinfectants and Disinfection By-Products

Contaminant	Year	Average Level	Minimum Level Detected	Maximum Level Detected	MRDLG	MRDL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>Chlorine Residual, Free</b>	2024	1.56	0.86	2.04	4	4	ppm	No	Water additive used to control microbes.
Contaminant	Year	Highest Average Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>TTHMs (Total trihalomethanes)</b>	2024	3.5	0.0	5.4	No Goal for the total	80	ppb	No	By-product of drinking water disinfection.

## Inorganic Contaminants

Contaminant	Year	Highest Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes No)	Likely Source of Contamination
<b>Arsenic</b>	2024	4.3	2.4	4.3	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
<b>Barium</b>	2024	0.175	0.148	0.175	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Fluoride</b>	2022	0.78	0.61	0.78	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Radioactive Contaminants

Contaminant	Year	Highest Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
<b>Gross Alpha (excluding Radon &amp; Uranium)</b>	2024	3	3	3	0	15	pCi/L	No	Erosion of natural deposits.
<b>Combined Radium 226/228</b>	2024	2.6	2.6	2.6	0	5	pCi/L	No	Erosion of natural deposits.

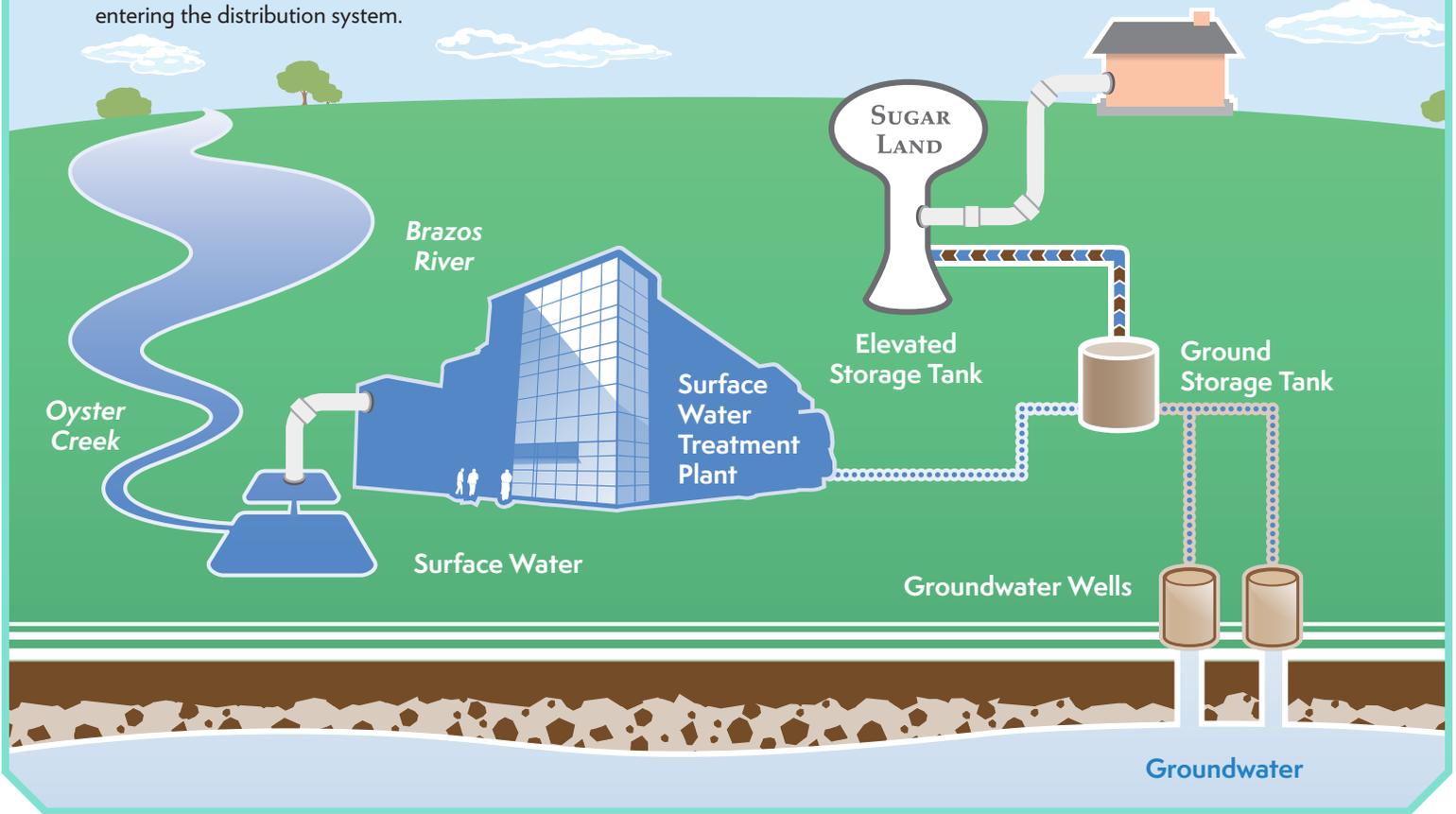
\* EPA considers 50 pCi/L to be the level of concern for beta particles.

Secondary and Other Non-Regulated Contaminants

Contaminant	Year	Average Level Detected	Minimum Level Detected	Maximum Level Detected	Unit of Measure	Secondary MCL
<b>Calcium</b>	2024	32.1	30	34.1	ppm	no MCL
<b>Chloride</b>	2022	60	56	64	ppm	250
<b>Chlorodibromomethane</b>	2024	0.5	0	1	ppb	no MCL
<b>Iron</b>	2024	43	25	61	ppb	300
<b>Magnesium</b>	2024	5.7	5.5	5.9	ppm	no MCL
<b>Manganese</b>	2024	4.1	3.5	4.7	ppb	50
<b>pH</b>	2024	7.8	7.6	8.2	units	> 7
<b>Potassium</b>	2024	1.6	1.6	1.7	ppm	no MCL
<b>Sodium</b>	2024	85.9	66.8	105	ppm	no MCL
<b>Sulfate</b>	2022	10	9	10	ppm	300
<b>Total Alkalinity</b>	2022	216	211	220	ppm	no MCL
<b>Total Dissolved Solids</b>	2022	345	329	360	ppm	1000
<b>Total Hardness as CaCO<sub>3</sub></b>	2024	103.2	97.4	109	ppm	no MCL

# Main System Overview

In the Main System, treated surface water that comes from the Surface Water Treatment Plant is blended with groundwater before entering the distribution system.



## SOURCE WATER ASSESSMENTS

TCEQ completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, call 281-275-2450 or 311.

## PRODUCTION AND DISTRIBUTION PROFILE

Two sources supply the City's Main System: surface water from Oyster Creek and the Brazos River treated at the City's Surface Water Treatment Plant and groundwater wells. The River Park, Greatwood and New Territory systems retrieve water from groundwater wells and treat it in one of the City's groundwater plants. Even though Sugar Land's water is excellent quality, chlorine is added to the River Park, Greatwood and New Territory systems, and chloramine is added to the Main System to protect the finished water against microbial contaminants as it travels through the many miles of pipes and pumps before being delivered to customers. Fluoride may be added to the Main and River Park systems to help prevent tooth decay. Corrosion inhibitors may also be added to reduce corrosion of metal components in the private plumbing systems in homes and buildings.

After the water has been treated to meet federal and state standards, the water is delivered to homes and businesses. The City of Sugar Land is committed to providing high quality water. If you have any questions regarding the data in this report, contact the **Public Works Department** at **281-275-2450** or **311**.

# DISINFECTING SUGAR LAND'S WATER

The City of Sugar Land takes every precaution to ensure Sugar Land residents have safe, clean drinking water. Disinfectants protect the water against microbial contaminants as it travels through the many miles of pipes and pumps. Chlorine is added to the River Park, Greatwood and New Territory Systems, and chloramine is added to the Main System.



## POSSIBLE CONTAMINANTS

Contaminants may be found in drinking water that may cause taste, color or odor problems. These types of problems are not necessarily causes for health concerns. These constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. Secondary constituents are not cause for health concern, but they may affect the appearance and taste of your water. For more information on taste, odor, or color of drinking water, please contact the system's business office. Drinking water (both tap and bottled water) comes from rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over land or through the ground, it may pick up naturally occurring minerals, substances from animals or humans and even radioactive material.

Contaminants that may be present in drinking water include:

- microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- pesticides and herbicides, which might have a variety of sources such as agriculture, urban storm water runoff and residential uses;
- organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems; and
- radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

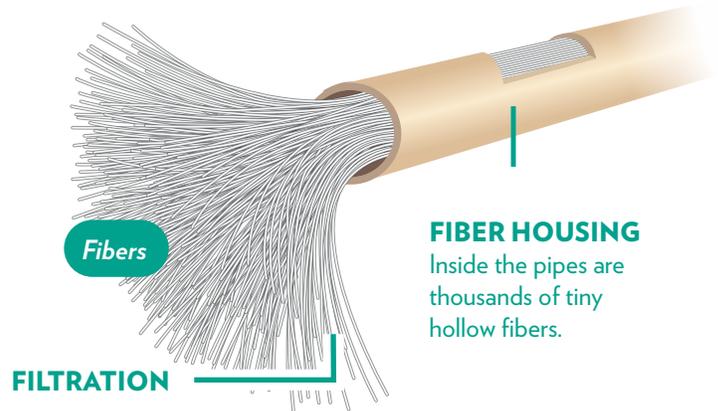
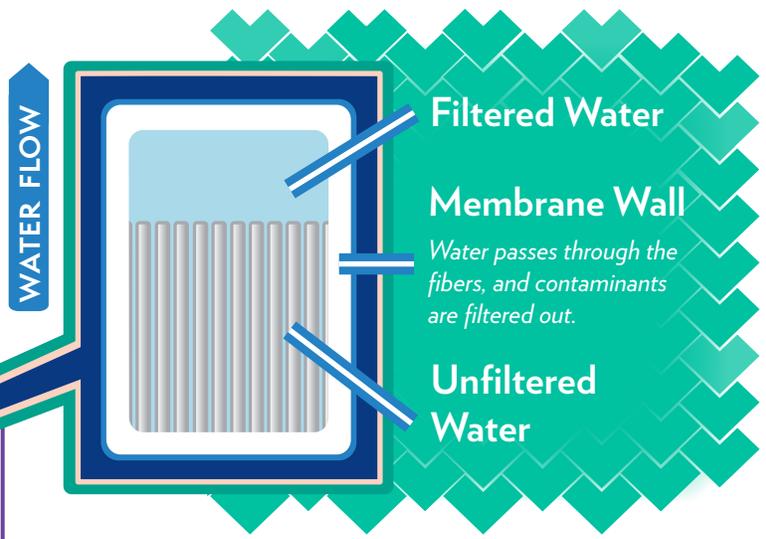
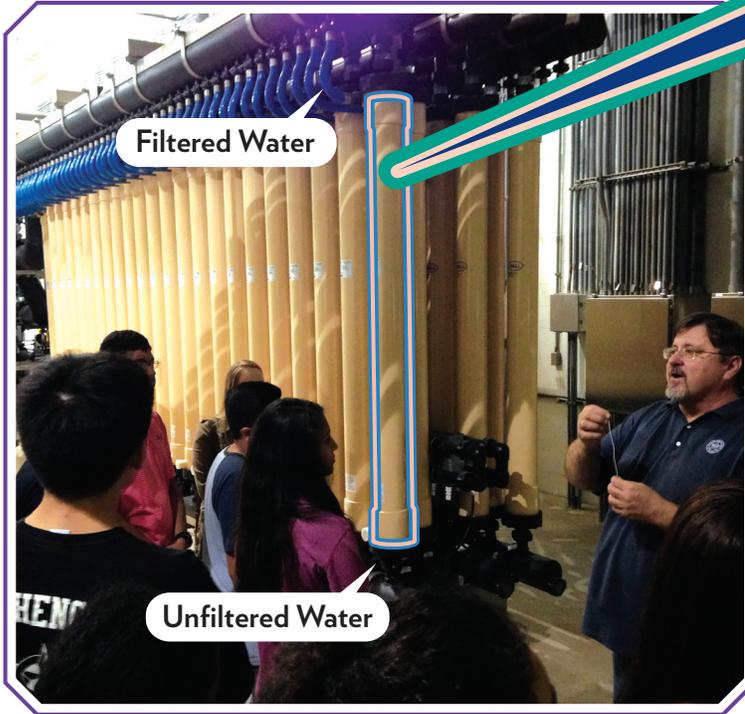


## HEAR FROM OUR TEAM

**John | Surface Water Treatment Plant Manager**

“We make non-drinkable water drinkable, but the variety of skills involved might surprise some people. There are so many things that go into it, like mechanics, hydraulics, electrical, and chemical. My favorite part of my job is serving the community, because it feels meaningful and impactful.”

# Surface Water Filtration Process



**FILTRATION**  
The hollow fibers absorb water, but particles that are larger than 0.1 micron cannot pass through the pores. Bacteria, parasites, sand, silt, clay and other contaminants that are too big to pass through are filtered out.

## Potable Water Production and Distribution Profile

2023	Main System	River Park System	New Territory System	Greatwood System
Population	80,381	3,745	14,532	12,368
Groundwater Source	Chicot and Evangeline Aquifers			
Surface Water Source (Main System only)	Brazos River & Oyster Creek			
Annual Demands (million gallons)	6,158	217	714	728
System capacity (million gallons / day)	62.5	4.0	11.1	9.2
Daily Average Demands (million gallons)	17.5	0.59	1.95	1.99
Daily Average Demand per Capita (gallons)	217	157	134	161
Number of Groundwater Wells	14	2	3	4
Average Well Depth (feet)	1,250	1,342	1,000	1,600
Well Production Capacity (million gallons / day)	51.6	4.0	11.1	9.2
Surface Water Plant Capacity (million gallons / day)	10.85			
Ground Storage (# of tanks)	15	2	6	5
Ground Storage Tank Capacity (million gallons)	15.2	0.7	2.3	1.0
Elevated Storage Tanks	5			
Elevated Storage Tank Capacity (million gallons)	6.2			
Miles of Distribution Lines	458	21.00	57.20	60
Number of Water Meters	28,906	1,431	4,696	4,638

# ADVANCED METERING INFRASTRUCTURE (AMI)

Over the past year, the City of Sugar Land has wrapped up the mass deployment of the new Advanced Metering Infrastructure (AMI) System, which enables remote meter reading for more accurate billing, faster leak detection, and better monitoring of the City's water system. Over 36,000 of the City's 40,000 water meters were updated to fit our AMI system. The City will be replacing the remaining meters over the next year.

As part of AMI, the City will be releasing a customer portal, which will provide residents with hourly water usage data, leak alerts, and direct communication from the City's Utilities Department. The portal is slated for completion by the end of June 2025.

## HOW DO I STAY INFORMED ABOUT AMI?

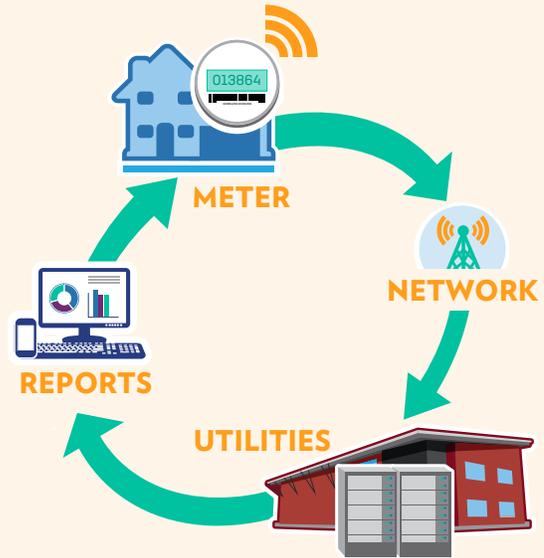
General communication will be sent using social media, the City's website, and HOA newsletters. Sign up to receive regular updates as the AMI project moves forward. For more information, visit [www.SugarLandTX.gov/AMI](http://www.SugarLandTX.gov/AMI).



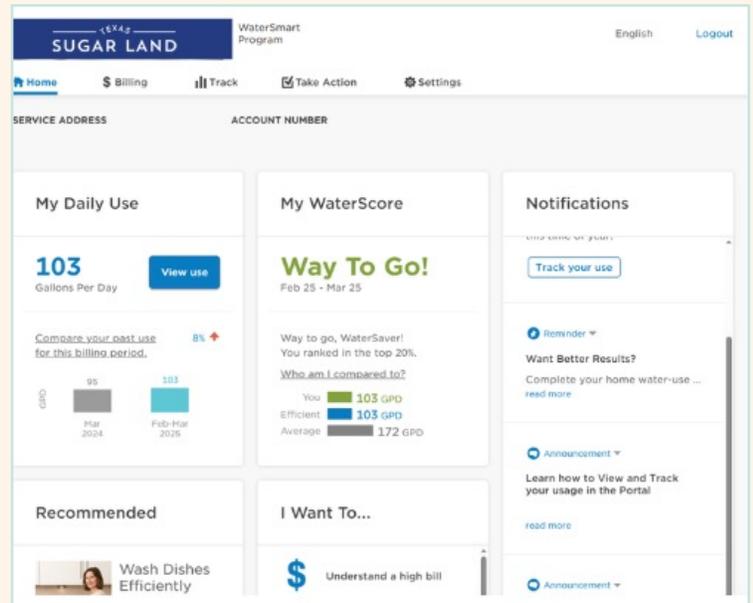
## HEAR FROM OUR TEAM

**Edgar | Water Quality Technician**

"I'd like people to know how much of an impact my job has in protecting our community. Our water quality is monitored 24/7. We collect water quality samples every single day in all weather conditions, including hurricanes and ice storms."



*From Meter to Monitor: How AMI Smart Meters Bring Water Data to Your Fingertips in Real Time!*



*A Sneak Peek at Your New Smart Customer Portal-Insight, Control, and Conservation at Your Fingertips!*



## WATER LOSS

Each year the City is required to prepare and submit a water-loss audit to the Texas Water Development Board and report the system’s water loss to our customers. A water-loss audit is a tool used by water utilities to assess the volume of water produced compared to the volumes of water sold to customers and used to maintain water quality. Water loss cannot be avoided, as line breaks, undetected leaks and line flushing occur throughout any water delivery system.

In addition to the percentage of water loss, the City uses the Infrastructure Leakage Index (ILI) as a benchmark of leakage. The ILI is a methodology developed by the International Water Association and adopted in 2002 by the American Water Works Association as a performance indicator for systems with more than 3,300 connections. The ILI is the ratio of real (actual) water loss versus unavoidable leakage or unavoidable real losses (UARL). We’ve observed a higher-than-expected water loss percentage, which is attributed to data inconsistencies with the interconnect meter between Riverpark and Greatwood. Staff are currently addressing the issue.

Water System Name	Water Loss % (Gals Produced)	ILI
City Main	9% (5.4 billion)	1.77
Greatwood	4% (620 million)	0.29
New Territory	13% (713 million)	3.06
River Park	37% (277 million)	Not a valid indicator

See chart for water loss results for 2024 by water system.

City staff strives to minimize water loss through timely response to all water calls, short leak repair protocols, routine system maintenance, a robust meter replacement program and documenting water used for system maintenance and water quality.

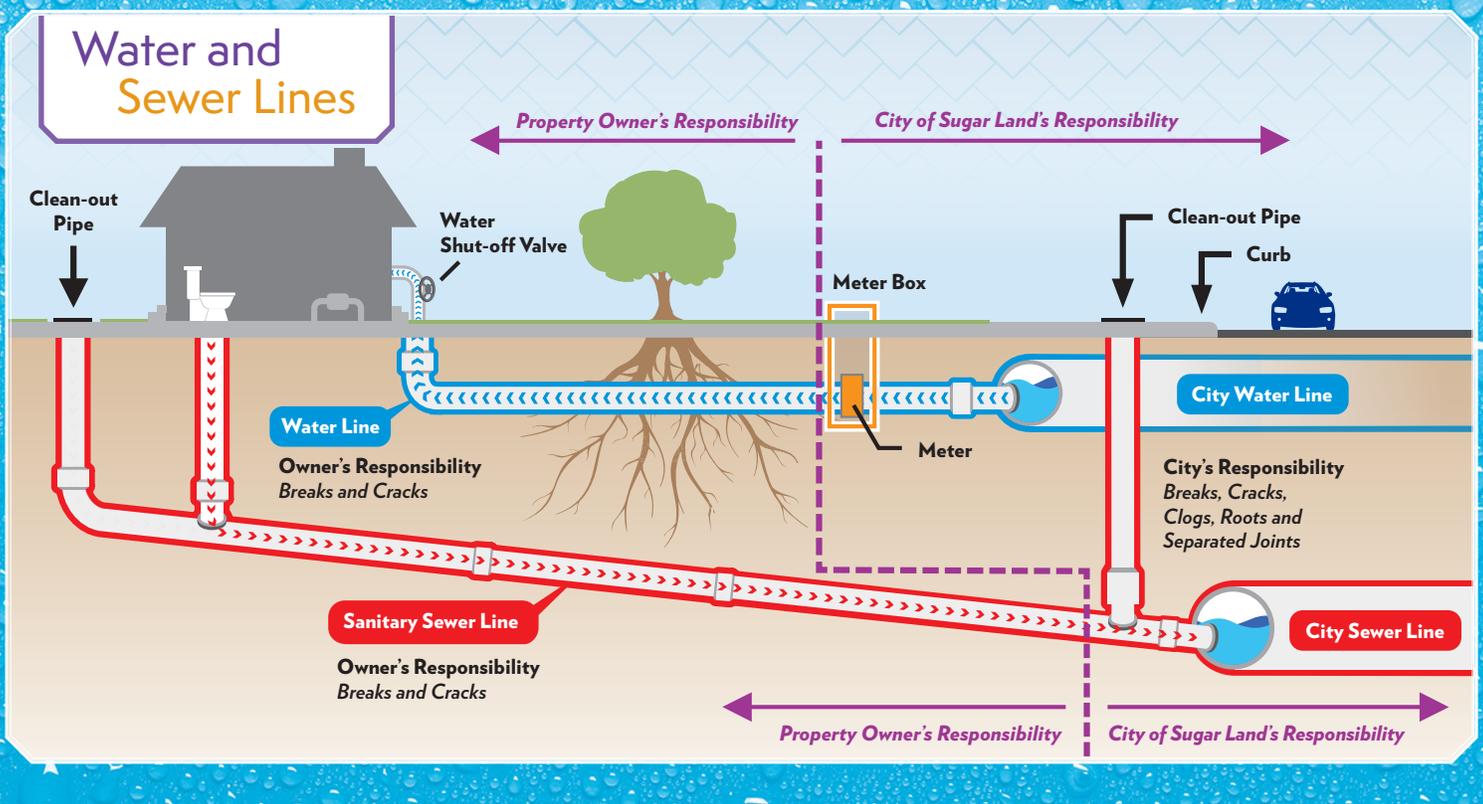
If you see a water leak along a roadway or in a yard, please report it to the Public Works Department Call 24/7: 281-275-2450 or 311.



## HEAR FROM OUR TEAM

**Willie | Crew Chief**

“My job is not just dealing with wastewater. I deal with electrical work, pump maintenance and a lot of physical work. I like the electrical work because I can apply it in my everyday life and at home.”



## LEAD IN DRINKING WATER

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Sugar Land is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

The City of Sugar Land has completed an inventory of service line materials, including both the customer-owned and city-owned portions of the service lines. Sugar Land has no lead water service lines in its inventory. However, a small number of service lines have been identified as “galvanized requiring replacement” (GRR) because they have galvanized pipe between the meter and the building, and the history of this line is unclear. These galvanized pipes could have absorbed lead if they were ever downstream of lead pipe. The complete inventory of all service lines in Sugar Land is available for the public to review using the interactive web map on the city’s website at [www.SugarLandTX.gov/LeadServiceMap](http://www.SugarLandTX.gov/LeadServiceMap).

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

You may find information about how Sugar Land is keeping lead out of our customer’s water on the city’s website at [www.SugarLandTX.gov/WaterQuality](http://www.SugarLandTX.gov/WaterQuality).



