



This annual Drinking Water Quality Report provides information on your District's drinking water. The United States Environmental Protection Agency (EPA) requires that all drinking water suppliers in the country provide a water quality report to their customers annually.

*En Espanol*

*Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (281) 290-3107.*

**Public Participation Opportunities**

The Board of Directors of the District meet at 6:30 PM on the third Wednesday of each month.

You may mail comments to:

Greenwood Utility District

Attn: Board of Directors

406 W. Grand Parkway S, Suite 260, Katy, Texas 77494

Or Call: (281) 290-6500

## Our Drinking Water Meets All Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the following pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

### SPECIAL NOTICE

**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 providers. 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.**

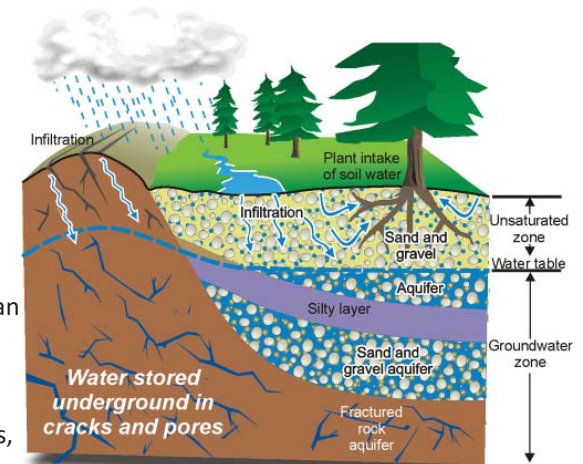
### Where Do We Get Our Water?

Our drinking water is obtained from groundwater and surface water sources. Our water comes from the Evangeline aquifer, Lake Houston and the Brazos River. A Source Water Susceptibility Assessment for your drinking water sources is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww2.tceq.texas.gov/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.



## Water Sources

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, organic chemical contaminants, and radioactive contaminants.



### All Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. 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 (1-800-426-4791).



### Secondary Constituents

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

# Greenwood Utility District Drinking Water Quality Report Results

PWSID: 1010554

## About the Tables

The following tables list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants. All contaminants detected in your water are below state and federal allowed levels. The State of Texas allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

### For More Information:

**You may call (281)290-3107 to speak to a District representative about your Water Quality Report. You may also call the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1(800) 426-4791.**

Additional information about the tables: Greenwood UD purchases water from the City of Houston. It also receives groundwater from Parkway UD at various times during the reporting period. This report contains water quality data for Greenwood UD, Parkway UD and the City of Houston's East Purification Water Plant 1 & 3, and the City of Houston's Northeast Purification Water Plant. Sample analysis is not required on Turbidity or Organic Contaminants for Greenwood UD or Parkway UD. In these instances results are listed for the City of Houston only. In addition the Disinfection By-Products, Lead and Copper and Disinfectant Residuals results are only listed for Greenwood UD as these samples were collected within the District's boundaries.

### Required Additional Health Information for Arsenic:

Because the highest reported arsenic level on this report is between 5 ppb and 10 ppb, the following information is required by EPA: *While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.*

## Drinking Water Definitions and Units Description

- NA: Not Applicable
- ND: Not Detected
- NR: Not Reported
- pCi/L: picocuries per liter (a measure of radioactivity)
- ppm: parts per million, or milligrams per liter (mg/L)
- ppb: parts per billion, or micrograms per liter (ug/L)
- MNR: Monitoring not required, but recommended
- MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to maximum contaminant level goals as feasible using the best available treatment technology.
- MCLG: Maximum Contaminant Level Goal: 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.
- MRDL: Maximum Residual Disinfection Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- MRDLG: Maximum Residual Disinfection Level Goal: 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 contaminants.
- AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- NTU: Nephelometric Turbidity Units ( a measure of turbidity)
- Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- Level 2 Assessment: A Level 2 assessment is 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.



## REGULATED INORGANIC CONTAMINANTS

YEAR	Contaminant (Unit of Measure)	Parkway UD	Greenwood UD	City of Houston	Range of Detected Levels	Violation	MCL	MCLG	Source of Contaminant
2014-2018	Arsenic (ppb)	2.7	5.0	2.9	ND - 5.0	No	10	0	Erosion of natural deposits
2017-2018	Barium (ppm)	0.0615	0.0515	0.0551	0.0424 - 0.0615	No	2	2	Erosion of natural deposits
2017-2018	Cyanide (ppb)	ND	60	50	ND - 60	No	200	200	Discharge from steel/metal factories
2017-2018	Fluoride (ppm)	0.32	0.18	0.58	0.11 - 0.58	No	4	4	Erosion of natural deposits
2018	Nitrate (ppm)	0.74	0.70	0.78	0.17 - 0.78	No	10	10	Erosion of natural deposits
2013 - 2014	Nitrite (ppm)	0.03	0.03	0.02	ND - 0.32	No	1	1	Erosion of natural deposits
2014	Alpha emitters (pCi/L)	ND	4.8	ND	ND - 4.8	No	15	0	Erosion of natural deposits
2014 - 2017	Beta emitter (pCi/L)	4.8	4.7	4.8	4.7 - 4.8	No	50	0	Erosion of natural and man made deposits
2014	Combined Radium (pCi/L)	ND	0.6	ND	ND - 0.6	No	5	0	Erosion of natural deposits
2014	Uranium (ug/L)	ND	3.1	ND	ND - 3.1	No	30	0	Erosion of natural deposits



## Greenwood Utility District Drinking Water Quality Report Results

PWSID: 1010554

### DISINFECTION RESIDUAL LEVELS

YEAR	Contaminant (Unit of Measure)	Highest Average Level Detected	Range of detected levels	Violation	MRDL	MRDLG	Source of Contaminant
2018	Chloramines & Free Chlorine (ppm)	2.76	0.60 - 4.10	No	4	4	Disinfectant used to control microbes

### UNREGULATED CONTAMINANTS

*Additional information concerning Unregulated Contaminants*

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

YEAR	Contaminant (Unit of Measure)	Parkway UD	Greenwood UD	City of Houston	Range of Detected Levels
2018	Chloroform (ppb)	31	10	25	8.4 - 31
2018	Bromodichloromethane (ppb)	13	6.1	11	2.0 - 13
2018	Dibromochloromethane (ppb)	4.2	2.0	2.5	ND - 4.2

### DISINFECTION BY-PRODUCT RESULTS

YEAR	Contaminant (Unit of Measure)	Average Level Detected	Range of detected levels	Violation	MCL	Source of Contaminant
2018	Total Haloacetic Acids (ppb)	20.5	11.6 - 30.4	No	60	Byproduct of drinking water disinfection
2018	Total Trihalomethanes (ppb)	28.93	21.1 - 45.1	No	80	Byproduct of drinking water disinfection

### LEAD AND COPPER

YEAR	Contaminant (Unit of Measure)	90th Percentile	No. of site exceeding Action level	Violation	Action Level	Source of Contaminant
2018	Lead (ppb)	ND	0	No	15	Corrosion of household plumbing
2018	Copper (ppm)	0.013	0	No	1.3	Corrosion of household plumbing

In the water loss audit submitted to the Texas Water Development Board for the time period of January - December 2018, our system lost an estimated 17,227,286 gallons of water. If you have any questions about the water loss audit please call (281) 290-3107.

### REGULATED ORGANIC CONTAMINANTS

YEAR	Contaminant (Unit of Measure)	Highest Level Detected	Range of detected levels	Violation	MCL	MCLG	Source of Contaminant
2018	Atrazine (ppb)	0.32	0.14 - 0.32	No	3	3	Runoff from herbicide used on row crops
2017	Di(2-ethylhexyl) phthalate (ppb)	0.61	ND - 0.61	No	6	0	Discharge from rubber and chemical factories
2014	Hexachlorocyclopentadiene (ppb)	0.24	ND - 0.24	No	50	50	Discharge from chemical factories
2018	Simazine (ppb)	0.14	ND - 0.14	No	4	4	Runoff from herbicide used on row crops

### TURBIDITY

YEAR	Contaminant (Unit of Measure)	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Source of Contaminant
2018	Turbidity (NTU)	0.48	97	0.3	Soil runoff

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

### *Required Additional Health Information for Lead*

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. This water supply is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water 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 or at <http://www.epa.gov/safewater/lead>.