

Northwest Harris County MUD No. 5
406 W. Grand Parkway S., Suite 260
Katy, Texas 77494

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NORTHWEST HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 5

2023

Annual Drinking Water Quality Report

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 5:00 PM on the third Thursday of each month.

You may mail comments to:

Northwest Harris County Municipal Utility District No. 5
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.

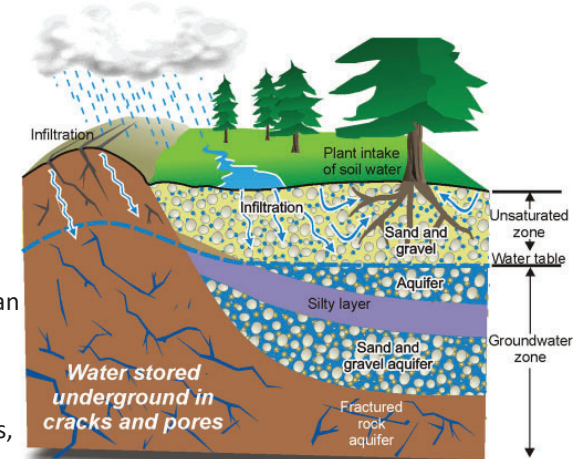
Where Do We Get Our Water?

Our drinking water is obtained from groundwater and surface water sources. Our water comes from the Evangeline and Jasper aquifers. The surface water comes from Lake Houston. 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 are based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. The information contained in the assessment will allow us to focus our source water protections strategies. This source water assessment information is available on Texas Drinking Water Watch at dww2.tceq.texas.gov/DWW/. For more information on source water assessments and protection efforts at our system, please contact us at 281-290-3107.



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

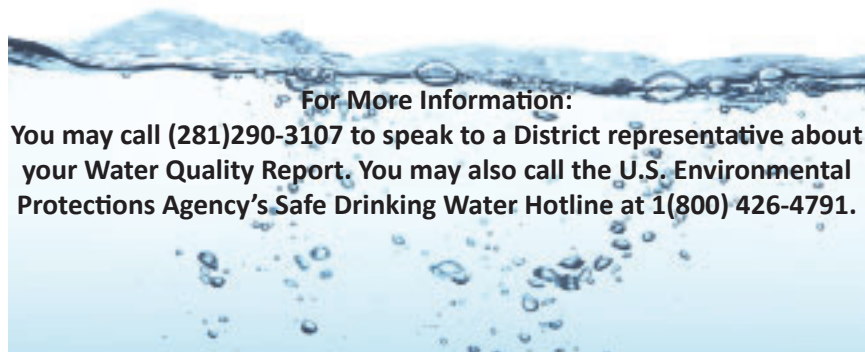
Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health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

Northwest Harris County Municipal Utility District No. 5 Drinking Water Quality Report Results

PWSID: 1010884

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.

In the water loss audit submitted to the Texas Water Development Board for the time period of January - December 2023, our system lost an estimated 65,686,435 gallons of water. If you have any questions about the water loss audit please call 281-290-3107.

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)
 ppt: parts per trillion, or nanograms per liter (ng/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.



LEAD AND COPPER

YEAR	Contaminant (Unit of Measure)	90th Percentile	No. of site exceeding Action Level	Violation	Action Level	Source of Contaminant
2023	Lead (ppb)	ND	0	No	15	Corrosion of household plumbing
2023	Copper (ppm)	0.128	0	No	1.3	Corrosion of household plumbing

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>.

DISINFECTION BY-PRODUCT RESULTS

YEAR	Contaminant (Unit of Measure)	Average Level Detected	Range of detected levels	Violation	MCL	Source of Contaminant
2023	Total Haloacetic Acids (ppb)	2.4	ND - 8.8	No	60	Byproduct of drinking water disinfection
2023	Total Trihalomethanes (ppb)	23.5	2.6 - 34.1	No	80	Byproduct of drinking water disinfection

Northwest Harris County Municipal Utility District No. 5 Drinking Water Quality Report Results

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REGULATED INORGANIC CONTAMINANTS

YEAR	Contaminant (Unit of Measure)	Highest Level Detected (Groundwater)	Highest Level Detected (Surface Water)	Range of Detected Levels	Violation	MCL	MCLG	Source of Contaminant
2022-2023	Arsenic (ppb)	6.7	ND	ND - 6.7	No	10	10	Erosion of natural deposits
2022-2023	Barium (ppm)	0.352	0.0420	0.0420 - 0.352	No	2	2	Erosion of natural deposits
2019-2020	Chromium (ppb)	11.4	ND	ND - 11.4	No	100	100	Erosion of natural deposits
2022-2023	Cyanide (ppb)	ND	40	ND - 40	No	200	200	Erosion of natural deposits
2023	Fluoride (ppm)	3.44	ND	ND - 3.44	No	4	4	Erosion of natural deposits
2023	Nitrate (ppm)	ND	0.45	ND - 0.45	No	10	10	Erosion of natural deposits
2017-2021	Nitrite (ppm)	0.01	ND	ND - 0.01	No	1	1	Erosion of natural deposits
2022-2023	Selenium (ppb)	6.4	ND	ND - 6.4	No	50	50	Erosion of natural deposits
2017-2023	Beta Emitters (pCi/L)	6.8	ND	ND - 6.8	No	50	0	Erosion of natural and man made deposits
2017-2023	Alpha Emitters (pCi/L)	3.4	ND	ND - 3.4	No	5	0	Erosion of natural deposits

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.

Mandatory Health Language for Fluoride Secondary Constituent Level Exceedance

The Texas Commission on Environmental Quality (TCEQ) has notified the Northwest Harris County Municipal Utility District No. 5, PWSID: 1010884, that the drinking water being supplied to customers has exceeded the Secondary Constituent Level (SCL) of 2.0 mg/L for fluoride.

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community water system Northwest Harris County Municipal Utility District No. 5, has a fluoride concentration of 3.44 mg/L.

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternate sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/L of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/L because of this cosmetic dental problem.

For more information, please call Municipal District Services, the contract operator for Northwest Harris County Municipal Utility District No. 5 at 281-290-6500. Some home water treatment units are also available to remove fluoride from drinking water. This notice is being sent to you by Northwest Harris County Municipal Utility District 5, State Water System ID#: TX1010884. Date Distributed: Before or by July 1, 2024.

Northwest Harris County Municipal Utility District No. 5 Drinking Water Quality Report Results

PWSID: 1010884

Northwest Harris County MUD 5 participated in gathering data under the EPA's Fifth Unregulated Contaminant Monitoring Rule (UCMR5). Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. As our customers, you have a right to know that these data are available. UCMR results and occurrence data can be viewed by the public at <https://www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule>. Under UCMR5, public water systems nationwide will be monitoring for 29 per- and polyfluoroalkyl substances (PFAS) and lithium in drinking water. During 2023, Northwest Harris County MUD 5 monitored for these compounds and the results are noted in the tables below.

UNREGULATED CONTAMINANTS - UCMR5

YEAR	Contaminant (Unit of Measure)	Average Level Detected at Entry Point	Range of all Detected Levels
2023	Perfluorohexanoic Acid (PFHxA) (ppt)	0.67	ND - 6.0
2023	Perfluoropentanoic Acid (PFPeA) (ppt)	1.32	ND - 11.9
2023	Perfluorobutanoic Acid (PFBA) (ppt)	2.13	ND - 19.2
2023	Lithium (ppb)	57.47	ND - 87.4

TURBIDITY

YEAR	Contaminant (Unit of Measure)	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Source of Contaminant
2023	Turbidity (NTU)	0.27	100	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.

UNREGULATED CONTAMINANTS - UCMR4

YEAR	Contaminant (Unit of Measure)	Highest Level Detected in Groundwater	Highest Level Detected in Surface Water	Range of Detected Levels
2023	Bromodichloromethane (ppb)	3.0	3.0	ND - 3.0
2023	Bromoform (ppb)	6.8	ND	ND - 6.8
2023	Chloroform (ppb)	1.2	18	ND - 1.2
2023	Dibromochloromethane (ppb)	7.4	ND	ND - 7.4
2020	1,2,3-Trichloropropane (ppb)	0.06	ND	ND - 0.06
2018-2019	Manganese (ppb)	9.0	NA	1.0 - 9.0
2018-2019	Germanium (ppb)	0.8	NA	ND - 0.8
2018-2019	HAA5 (ppb)	18.61	NA	0.544 - 18.61
2018-2019	HAA6Br (ppb)	19.07	NA	ND - 19.07
2018-2019	HAA9 (ppb)	28.29	NA	0.556 - 28.29

Unregulated contaminants are those for which 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. Any unregulated contaminants detected are reported in the following table. For additional information and data, visit <https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule>, or call the Safe Drinking Water Hotline at (800) 426-4791.

DISINFECTION RESIDUAL LEVELS

YEAR	Contaminant (Unit of Measure)	Highest Average Level Detected	Range of detected levels	Violation	MRDL	MRDLG	Source of Contaminant
2023	Free Chlorine (ppm)	2.52	0.68 - 4.00	No	4	4	Disinfectant used to control microbes

REGULATED ORGANIC CONTAMINANTS

YEAR	Contaminant (Unit of Measure)	Highest Level Detected (Groundwater)	Highest Level Detected (Surface Water)	Range of Detected Levels	Violation	MCL	MCLG	Source of Contaminant
2020-2023	Atrazine (ppb)	0.28	0.29	ND - 0.29	No	3	3	Runoff from herbicide used on row crops
2022	Xylenes (ppb)	0.0005	ND	ND - 0.0005	No	10	10	Discharge from chemical factories
2021	Ethylbenzene (ppb)	0.7	ND	ND - 0.7	No	700	700	Discharge from petroleum refineries
2020-2023	Simazine (ppb)	0.20	0.15	ND - 0.20	No	4	4	Runoff from herbicide used on row crops