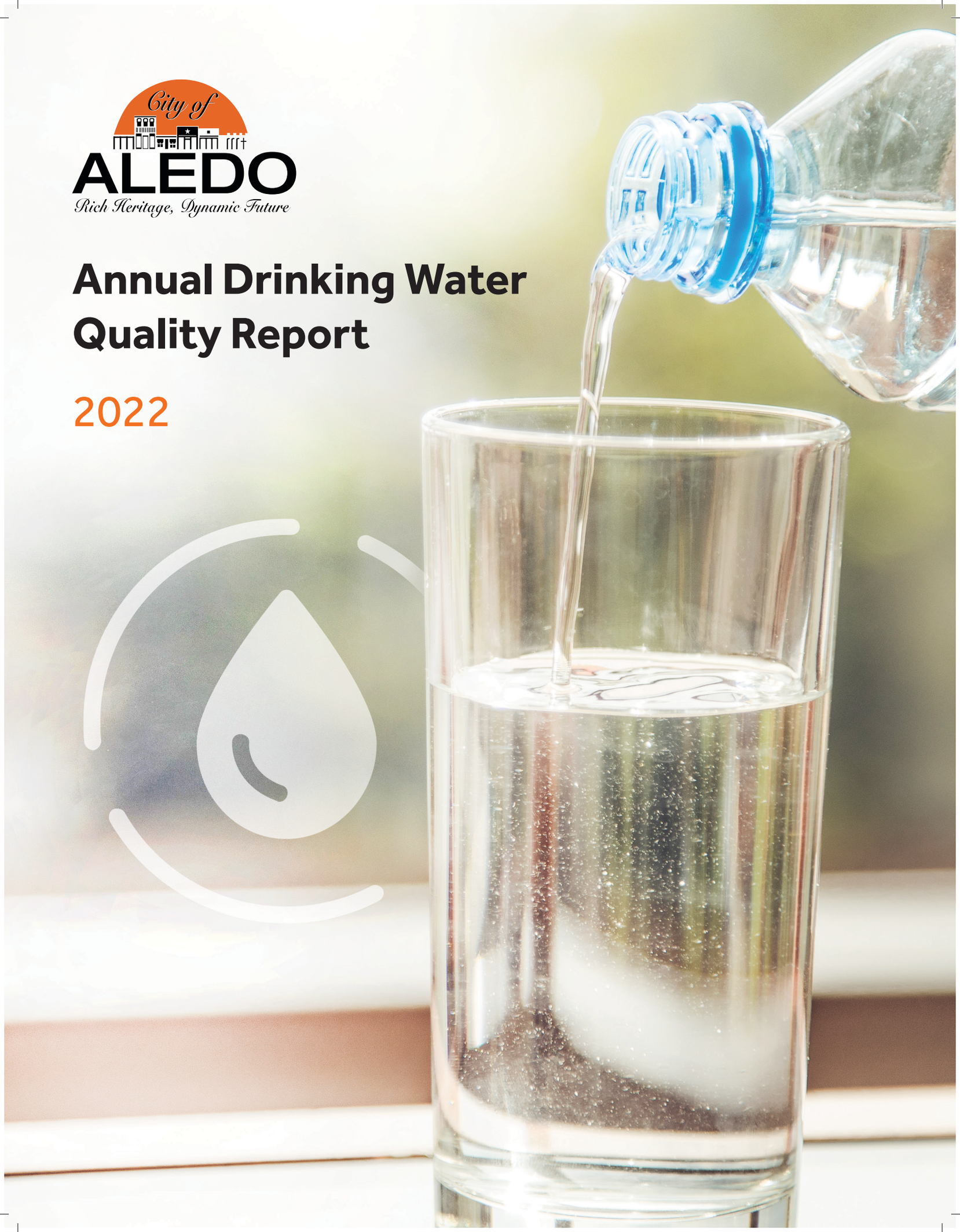
City of ALEDO

Rich Heritage, Dynamic Future

Annual Drinking Water Quality Report

2022



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 immune compromised 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 disoders can be particularly at risk for infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines and appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

Auditing Water Loss is a Conservation Tool

Last session, the Texas Legislature passed an annual requirement starting this year to file water loss reports and notify customers of the results. Many variables influence water loss, including meter inaccuracy, data discrepancies, unauthorized consumption, reported breaks and leaks, and unreported losses. In the water loss audit submitted to the Texas Water Development Board for calendar year 2022, the Aledo System lost an estimated 4.5m gallons of water mainly due to a major water leak on the north side of the city, flushing, fighting fires, and unauthorized use of fire hydrants.

Our Drinking Water is Regulated

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 attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Source of Drinking Water

The sources of drinking water (both tap water 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 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 may come from 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste inforrne en español, favor de llamar al tel.

(817) 441-7016 – para hablar con una persona bilingüe en español.

Where do we get our drinking water?

Our drinking water is obtained from surface and ground water sources. Surface water is supplied by the City of Fort Worth (Lake Worth, Eagle Mountain Lake, Lake Bridgeport, Richland Chambers Reservoir, Cedar Creek Reservoir, Lake Benbrook, and the Clear Fork Trinity River). Aledo's ground water sources are through the Trinity and Paluxy Aquifers. As water travels over the land or through the ground, it dissolves naturally occurring mineral and radioactive materials. Water can also pick up substances resulting from animal waste or human activity. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at www.tceq.texas.gov and search "source water assessment viewer".

ALL drinking water may contain contaminants

When drinking water meets federal standards, there may not be any health 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 (I-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 concerns, therefore secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

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.

Abbreviations

- **NTU** - Nephelometric Turbidity Units
- **MFL** - million fibers per liter (a measure of asbestos)
- **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
- **ppt** - parts per trillion, or nanograms per liter
- **ppq** - parts per quadrillion, or picograms per liter

Definitions

- **Maximum Contaminant Level Goal or MCLG:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum residual disinfectant level goal or 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 contaminants.
- **Maximum residual disinfectant level or MRDL:** 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.
- **mrem:** millirems per year (a measure of radiation absorbed by the body)
- **ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
- **N/A:** not applicable.
- **Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- **Ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

2022 Regulated Contaminants Detected

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2022	6	0-6	No goal for the total	60	ppb	No	By-product of drinking water chlorination.
Total Trihalomethanes (TThm)	2022	14	0-13.5	No goal for the total	80	ppb	No	By-product of drinking water chlorination.

Inorganic Contaminants	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2022	1.2	0-1.2	0	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronic production wastes.
Barium	2022	0.047	0.03-0.047	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	2022	1.1	0-1.1	100	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	2022	1.37	0.664-1.37	4	4.0	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrite (measured as Nitrogen)	2022	1	0.0819-0.506	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2021	1.5	0-1.5	0	5	pCi/L	No	Erosion of natural deposits.
Xylenes	2022	0.00139	0-0.00139	10	10	ppm	No	Discharge from pertroleum factories; discharge from chemical factories.

Lead and Copper

Lead and Copper	Collection Date	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2020	1.3	1.3	0.129	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.

Disinfectant Residual Table

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Units	Violation	Likely Source of Contamination
Chloramines	2021	2.23	0.50	4.00	0.5	4.0	ppm	No	Water additive used to control microbes

Violations

Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	04/01/2022	06/30/2022	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

E. coli

Fecal coliforms and E.coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITOR GWR TRIGGERED/ ADDITIONAL, MAJOR	03/29/2018	10/06/2022	We failed to collect follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected.

Source Water Name		Type of Water	Report Status	Location
1P-Front ST/PS1	Front ST	GW	Not Active	Paluxy
2P - Queen ST/ PS 2	Queen ST	GW	Not Active	Paluxy
4P-Rolling Hills	Rolling Hills	GW	Emergency	Paluxy
6P-FM 5	200 FM 5	GW	Emergency	Paluxy
6T-FM 5	200 FM 5	GW	Active	Trinity
7P - N. Meadow LN	N. Meadow Ln	GW	Emergency	Paluxy
7T-N. Meadow LN	N. Meadow Ln	GW	Active	Trinity
8T -1100 N. Bailey Ranch	1100 N Bailey Ranch RD	GW	Active	Trinity
OPEN 1/C WITH CITY OF FORT WORTH	SWP FROM TX1840001	SW	Active	Surface Water

Fort Worth Interconnect
Drinking Water Quality Test Results

Compound	Measure	Year	Violation	MCL	Your water	Public Health Goal	Common Sources of Substance
Turbidity	NTU	2022	No	TT = 1 TT = Lowest monthly % of samples <0.3 NTU	0.7 99.9%	N/A	Soil runoff (Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.)

Compound	Year	Violation	MCL	Your water	Range	Public Health Goal	Common Sources of Substance
Total Coliforms (Including fecal coliform & E. coli)	2022	No	TT = 5% of monthly samples are positive	2.4%	0 to 2.4%	0	Coliforms are naturally present in the environment as well as feces; fecal coliforms and E. coli only come from human and animal fecal waste.

Compound	Measure	Year	Violation	MCL	Your water	Range	Public Health Goal	Common Sources of Substance
Beta/photon emitters	pCi/L	2021	No	50	7	7 to 7	0	Decay of natural and man-made deposits
Uranium	ppb	2021	No	30	1.1	1. 1 to 1. 1		Erosion of natural deposits
Arsenic	ppb	2022	No	10	1.7	0 to 1.7	0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Atrazine	ppb	2022	No	3	0.1	0 to 0.1	3	Runoff from herbicide used on row crops
Barium	ppm	2022	No	2	0.08	0.04 to 0.08	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	ppb	2022	No	100	2.8	0 to 2.8	100	Erosion of natural deposits; discharge from steel and pulp mills
Cyanide	ppb	2022	No	200	51	0 to 51	200	Discharge from plastic and fertilizer factories; discharge from steel and metal factories
Fluoride	ppm	2022	No	4	0.64	0.18 to 0.64	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	ppm	2022	No	10	0.57	0.13 to 0.57	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Bromate	ppb	2022	No	10	5.81	0 to 137	0	By-product of drinking water disinfection
Haloacetic Acids	ppb	2022	N/A	60	7.98	2.2 to 7.4	N/A	By-product of drinking water disinfection
Total Trihalomethanes	ppb	2022	N/A	80	13.9	0 to 17.3	N/A	By-product of drinking water disinfection

Compound	Measure	Year	Violation	MRDL	Your water	Range	Public Health Goal	Common Sources of Substance
Chloramines	ppm	2022	No	4	3.4	1.4 to 4.3	4	Water additive used to control microbes

Compound	MCL	Year	Violation	High	Low	Average	Public Health Goal	Common Sources of Substance
Total Organic Carbon	TT = % removal	2022	No	1	1	1	N/A	Naturally occurring

It is used to determine disinfection by-product precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors. A removal ratio of 1 in Specific Ultra Violet Absorbance calculations is considered passing.

Corrosion Control

To meet the requirements of the Lead and Copper Rule, Fort Worth achieves corrosion control through pH adjustment.

Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The following items are all disinfection by-products that are not regulated individually, but as two groups – Total Trihalomethanes and Haloacetic Acids. The chart on the previous page lists the group levels.

Compound	Measure	Year	MRDL	Public Health Goal	Average	Range of Detects	Common Sources of Substance
Bromoform	ppb	2022	Not regulated	0	0.62	0 to 3.24	By-products of drinking water disinfection; regulated as a group called Total Trihalomethanes
Bromodichloromethane	ppb	2022	Not regulated	0	2.93	3.41 to 5.43	
Chloroform	ppb	2022	Not regulated	70	2.45	3.74 to 5.71	
Dibromochloromethane	ppb	2022	Not regulated	60	2.41	1.96 to 5.90	
Dibromoacetic Acid	ppb	2022	Not regulated	N/A	1.24	1.40 to 2.90	By-products of drinking water disinfection; regulated as a group called Haloacetic Acids
Dichloroacetic Acid	ppb	2022	Not regulated	0	3.47	4.50 to 5.60	
Monobromoacetic Acid	ppb	2022	Not regulated	N/A	0	0 to 0	
Monochloroacetic Acid	ppb	2022	Not regulated	70	0.02	0 to 1	
Trichloroacetic Acid	ppb	2022	Not regulated	20	0	0 to 0	

Secondary Constituents

These items do not relate to public health but rather to the aesthetic effects. These items are often important to industry.

Compound	Measure	Your Water
Bicarbonate	ppm	87.6 to 144
Calcium	ppm	33.6 to 51.9
Chloride	ppm	20.9 to 47.0
Conductivity	µmhos/cm	310 to 475
pH	units	8.1 to 8.5
Magnesium	ppm	3.95 to 10
Sodium	ppm	25 to 35
Sulfate	ppm	26.0 to 41.6
Total Alkalinity as $CaCO_3$	ppm	90.4 to 144
Total Dissolved Solids	ppm	161 to 278
Total Hardness as $CaCO_3$	ppm	100 to 171
Total Hardness in Grains	grains/gallon	6 to 10

Microorganism testing shows low detections in raw water

Tarrant Regional Water District monitors the raw water at all intake sites for Cryptosporidium, Giardia Lamblia and viruses. The source is human and animal fecal waste in the watershed.

The 2023 sampling showed occasional low level detections of Cryptosporidium, Giardia lamblia and viruses in some but not all of the water supply sources. These are either deactivated or removed through disinfection and/ or filtration.

Abbreviations used in tables

- **MCL:** Maximum Contaminant Level - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs 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 risk to health. MCLGs allow for a margin of safety.
- **MRDL:** Maximum Residual Disinfectant 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 Disinfectant 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.
- **N/A** - not applicable/does not apply
- **NTU** - Nephelometric Turbidity Unit; a measure of water turbidity or clarity
- **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 (µg/L)
- **ppt** - Parts per trillion or nanograms per liter (ng/L)
- **TT:** Treatment Technique - a required process intended to reduce the level of a contaminant in drinking water

TCEQ Assesses Raw Water Supplies for Susceptibility

Fort Worth uses surface water from Lake Worth, Eagle Mountain Lake, Lake Bridgeport, Richland Chambers Reservoir, Cedar Creek Reservoir, Lake Benbrook and the Clear Fork Trinity River.

Fort Worth owns Lake Worth. The U.S. Army Corps of Engineers is responsible for Benbrook Lake. The other four lakes are owned and operated by Tarrant Regional Water District.

The Texas Commission on Environmental Quality completed an assessment of Fort Worth's source waters. TCEQ classified the risk to our source waters as high for most contaminants.

High susceptibility means there are activities near the source water or watershed that make it very likely that chemical constituents may come into contact with the source water. It does not mean that there are any health risks present.

Tarrant Regional Water District, from which Fort Worth purchases its water, received the assessment reports.

For more information on source water assessments and protection efforts at our system, contact Stacy Walters at 817-392-8203. Further details about the source-water assessments are available in the Texas Commission on Environmental Quality's Drinking Water Watch database at http://dww2.tceq.texas.gov/DWW /] SP /SWAP.jsp ?tinwsys_is_nu m ber=5802 &ti nwsys_ st_code=TX&wsnumber=TX2200012%20%20%20 &DWWState=TX.

EPA Collects Data to Decide Future Regulations

Water utilities in the United States monitor for more than 100 contaminants and must meet numerous regulations for water safety and quality. But should other contaminants be regulated? The 1996 Safe Drinking Water Act amendments require that once every five years EPA issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems. Monitoring for these contaminants helps EPA decide whether the contaminants should have a standard set to protect public health.

UCMR testing provides scientifically valid data on the occurrence of these contaminants in drinking water. Health research is necessary to know whether these contaminants pose a health risk. For the Fifth Unregulated Contaminant Rule, (UCMR5), public water systems must sample 30 contaminants for four consecutive quarters from 2023 to 2025. Fort Worth's sampling occurs from January 2023 through January 2024. Fort Worth Water is posting the sampling results on its website at www.fortworthtexas.gov/departments/water/drinking-water/ucmr.

Additional Information: www.epa.gov/dwucmr

What is Being Tested in UCMR 5

In UCMR 5, EPA selected 29 per- and polyfluoralkyl substances (PFAS) and one metal/pharmaceutical — lithium. PFAS are a group of synthetic chemicals used in a wide range of consumer products and industrial applications. These include non-stick cookware, water-repellent clothing, stain-resistant fabrics and carpets, cosmetics, firefighting foams, electroplating, and products that resist grease, water, and oil. PFAS are found in the blood of people and animals and in water, air, fish, and soil at locations across the United States and the world. Lithium is a naturally occurring metal that may concentrate in brine waters. Lithium salts are used as pharmaceuticals, in electrochemical cells, batteries and organic syntheses.

Reporting UCMR 5 Results

Fort Worth started its UCMR 5 sampling in January 2023. They sampled at the distribution entry point for each treatment plant, except North Holly. North Holly was down at the time so its fourth quarter of sampling will occur in January 2024.

According to federal regulations, water systems must notify their customers of the results within 12 months of receiving the results and in the annual water quality reports. The 12-month time frame applies to the individual quarterly results.

Fort Worth plans to include the results of the January 2023 UCMR 5 sampling in the annual water quality report it is now preparing, however they have not yet received the data. As soon as they receive it, we will send to you.

If we do not include the results in this report, it would require a special mailing to customers to meet the 12-month notification requirement.

From Code of Federal Regulations:

www.ecfr.gov/current/title-40/chapter-I/ subchapter-D /part-141/subpart-Q/ section-141.207

§ 141.207 Special notice of the availability of unregulated contaminant monitoring results.

- When is the special notice to be given? The owner or operator of a community water system or non-transient, non community water system required to monitor under §141.40 must notify persons served by the system of the availability of the results of such sampling no later than 12 months after the monitoring results are known.
- What is the form and manner of the special notice? The form and manner of the public notice must follow the requirements for a Tier 3 public notice prescribed in §§141.204(c), (d)(1), and (d)(3). The notice must also identify a person and provide the telephone number to contact for information on the monitoring results.