2021 Annual Drinking Water Quality Report

Crowley purchased 100 percent of treated surface water from the City of Fort Worth in 2021. The surface water sources include: Lakes, Rivers, Reservoirs, and Aquifers. Fort Worth source water is obtained from Lake Worth, Eagle Mountain Lake, Lake Bridgeport, Richland Chambers Reservoir, Cedar Creek Reservoir, Lake Benbrook and Clear Fork Trinity River.

Annual Water Quality Report for the period of January 1 to December 31, 2021

For more information regarding this report, contact the Crowley Water Utility Manager at 817-297-2201, ext. 3210.

Este reporte incluye informacion importante sobre el agua potable. Para asistencia en español, favor de llamar al teléfono 817-297-2201.

Source Water Assessment

TCEQ accesses 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 https://dww2.tceq.texas.gov/DWW/JSP/WaterSystemDetail.jsp?tinwsys_is_number=5814&tinwsys_st_code=TX&wsnumber=TX2200034%20%20%20&DWWState=TX

Public Participation Opportunities Public participation at advisory board and council meetings is welcome and encouraged. City Council meets the first and third Thursday of each month at 7 p.m. at Crowley City Hall (201 E. Main Street). Upcoming meeting dates are available online at www.ci.crowley.tx.us.

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; persons 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 Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 800-426-4791 or email www.epa.gov/ground-water-and-drinking-water

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. 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 Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 800-426-4791

CITY OF FORT WORTH

2021 Drinking Water Analysis Results

Compound	Measure	MCLG	MCL	Your water	Range	Violation	Common Source
Beta/photon Emitters	pCi/L	0	50	7	7 to 7	No	Decay of natural and man-made deposits
Uranium	ppb	0	30	1.1	1.1 to 1.1	No	Erosion of natural deposits
Arsenic	ppb	0	10	1.5	0 to 1.5	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Atrazine	ppb	3	3	0.1	0 to 0.2	No	Runoff from herbicide used on row crops
Barium	ppm	2	2	0.07	0.05 to 0.07	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	ppb	100	100	1.8	0 to 1.8	No	Erosion of natural deposits; discharge from steel and pulp mills
Cyanide	ppb	200	200	197	66.2 to 197	No	Discharge from plastic and fertilizer factories; discharge from steel and metal factories
Fluoride	ppm	4	4	0.68	0.18 to 0.68	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	ppm	10	10	0.66	0.13 to 0.66	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Bromate	ppb	0	10	4.23	0 to 13.6	No	By-product of drinking water disinfection
Haloacetic Acids	ppb	n/a	60	12.4	2.6 to 15.9	No	By-product of drinking water disinfection
Total Trihalomethanes	ppb	n/a	80	22.4	1.05 to 22.3	No	By-product of drinking water disinfection

Contaminant	High	Low	Average	MCL	MCLG	Common Sources of Substance
Total Organic Carbon	1	1	1	TT=% removal	N/A	Naturally occurring

Used to determine disinfection byproduct precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors. **A removal ratio of 1 in SUVA calculations is considered passing.**

Compound	Measure	MCL	MCLG	Fort Worth Water	Violation	Common Sources
Turbidity	NTU	TT=1 TT=Lowest monthly % of samples $\leq$0.3 NTU	N/A	0.7 99.3%	No	Soil runoff

Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of filtration.

Compound	Measure	MRDL	Fort Worth Water	Range	Violation	Unit of Measure	Sources of Drinking Water
Chloramine	ppm	4	3.4	0.6 to 4.6	No	ppm	Water Additive used to control microbes

CITY OF CROWLEY
PWS ID #2200034
Water Quality Test Results

Collection Date	Disinfection By-Products	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Unit of Measure	Violation	Common Sources of Substance
2021	Haloacetic Acids (HAA5)	6	1.8-6.3	60	NA	ppb	NO	Byproduct of drinking water disinfection.
*The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year								
2021	Total Trihalomethanes (TTHM)	8	4.59-11	80	NA	ppb	NO	Byproduct of drinking water disinfection.
*The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year								
Collection Date	**Inorganic Contaminants**	**Highest Level Detected**	**Range of Levels Detected**	**MCL**	**MCLG**	**Unit of Measure**	**Violation**	**Common Sources of Substance**
2021	Nitrate (measured as Nitrogen)	1	0.23-0.614	10	10	ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

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	99.9 to 138
Calcium	ppm	37.8 to 58.5
Chloride	ppm	13.7 to 36.7
Conductivity	µmhos/cm	296 to 470
pH	units	7.8 to 8.3
Magnesium	ppm	2.91 to 9.10
Sodium	ppm	15 to 29.9
Sulfate	ppm	22.6 to 40.8
Total Alkalinity as $CaCo_3$	ppm	99.9 to 142
Total Dissolved Solids	ppm	149 to 249
Total Hardness as $CaCO_3$	ppm	107 to 183
Total Hardness in Grains	grains/gallon	6 to 11

Coliform Bacteria/E. coli

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system.

When found coliforms indicate the need to look for potential problems in water treatment or distribution. If this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

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

Maximum Contaminant Level	Total Coliform MCL	Highest No. of Positive	Fecal Coliform or E. Coli MCL	Total Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive Monthly Sample	1	Presence in 5% or more of monthly samples	0	No	Naturally present in the environment

Lead and Copper

Date Sampled	Contaminant	MCLG	The 90th Percentile	Number of Sites over AL	Action Level (AL)	Unit of Measure	Violation	Common Sources of Substance
9/11/20	Lead	0	2.2	1	15	ppb	NO	Corrosion of household plumbing systems; erosion of natural deposits.
9/11/20	Copper	1.3	0.214	0	1.3	ppm	NO	

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 Crowley 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 at 800-426-4791 or www.epa.gov/safewater/lead.

Definitions and Abbreviations

Scientific Terms and Measures, some of which may require explanation.

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 if a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the 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.

ppb: Parts per billion or micrograms per liter (µg/L).

ppm: Parts per million or milligrams per liter (mg/L).

TT: Treatment Technique – a required process intended to reduce the level of a contaminant in drinking water.

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 were found.

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 Escherichia coli (E. coli) maximum contaminant level (MCL) violation has occurred and/or why total coliform bacteria were found on Multiple occasions.

Microorganism testing shows low detections in raw water

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

The 2021 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.

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 previous page lists the group levels.

Compound	Measure	MRDL	MRDLG	Average	Range of Detects	Common Sources of Substance
Bromoform	ppb	Not regulated	0	0.5	0 to 3.69	By-products of drinking water disinfection; regulated as a group called Total Trihalomethanes
Bromodichloromethane	ppb	Not regulated	0	2.55	2.48 to 6.91	
Chloroform	ppb	Not regulated	70	2.43	2.5 to 10.6	
Dibromochloromethane	ppb	Not regulated	60	2.33	2.02 to 6.61	
Dibromoacetic Acid	ppb	Not regulated	N/A	1.24	1.2 to 4	By-products of drinking water disinfection; regulated as a group called Haloacetic Acids
Dichloroacetic Acid	ppb	Not regulated	0	3.54	3.80 to 9.4	
Monobromoacetic Acid	ppb	Not regulated	N/A	0	0 to 0	
Monochloroacetic Acid	ppb	Not regulated	70	0.68	1 to 2.3	
Trichloroacetic Acid	ppb	Not regulated	20	0.14	0 to 2.4	

Sources 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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. For more information on taste, odor, or color of drinking water, please contact the system's business office.

Contaminants that may be present in source water before treatment 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.

Be water wise! Find useful water-saving tips at www.WaterIsAwesome.com. Year-round irrigation restrictions are in effect which prohibit lawn watering between 10 a.m. and 6 p.m. and require customers to irrigate twice a week on designated days only. Get information on watering restrictions at www.ci.crowley.tx.us.

Contact Us

Water Customer Service

817-297-2201
7:30 am - 5:30 pm Monday - Thursday
7:30 am - 11:30am Friday
24-Hour Emergencies 817-297-2276

Online Water Bill Payments
www.municipalonlinepayments.com/crowleytx/utilities

Water Administration

Crowley City Hall
201 E. Main Street
Crowley, Texas 76036

Other Water Resources

Environmental Protection Agency
www.epa.gov

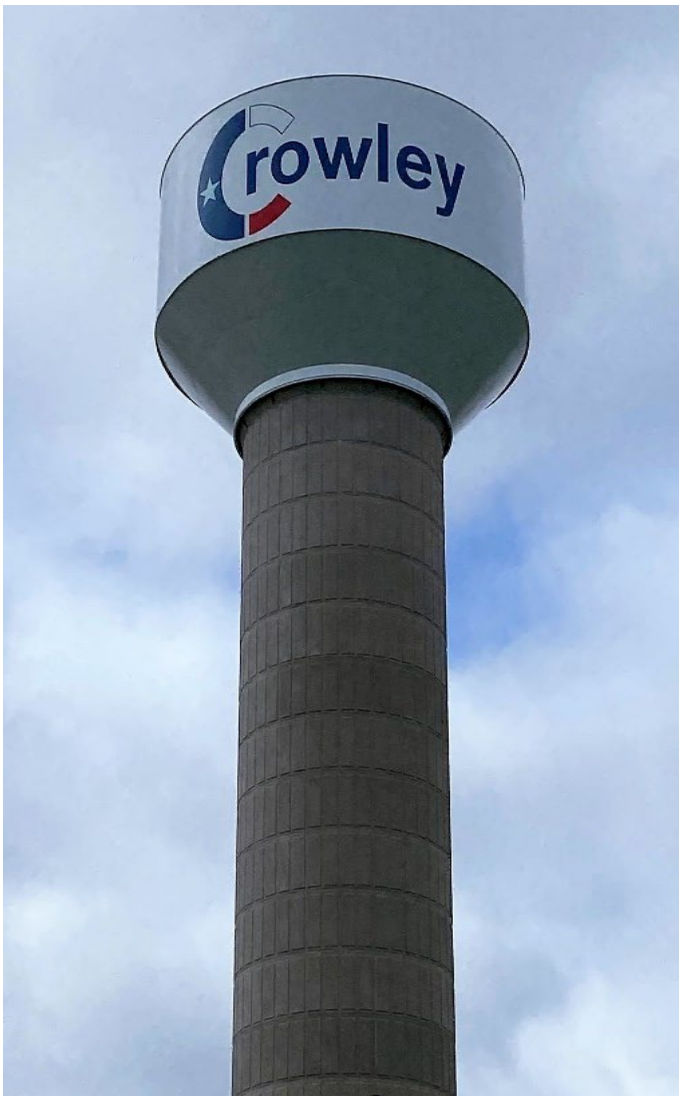
Texas Commission on Environmental Quality
www.tceq.texas.gov

Texas Water Development Board
www.twdb.texas.gov

American Water Works Association
www.awwa.org

Drink Tap
www.drinktap.org

For additional information, please visit the City of Crowley's website at www.ci.crowley.tx.us



Permanent Watering Schedule Restrictions Per City Ordinance 05-2019-369

MONDAY: **NO** Watering allowed

TUESDAY & FRIDAY:
Non-residential sites
(apartments, businesses, parks, common areas)

WEDNESDAY & SATURDAY:
Residential addresses ending in 0, 2, 4, 6, 8

THURSDAY & SUNDAY:
Residential addresses ending in 1, 3, 5, 7, 9

No Watering between the hours of 10am to 6 pm