



**City of Watauga 2019 Drinking Water Quality Report
Public Works Department (817) 514-5843**

The City of Watauga is dedicated to providing safe and reliable drinking water to its customers. This report is a summary of the quality of the water the City of Watauga provides our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TECQ) required tests and is presented in the following information. We hope this information helps you become more knowledgeable about what's in your drinking water.

Public Participation Opportunity

Date:	July 22, 2020
Time:	1:00 - 4:00 pm
Location:	Public Works
Phone:	(817) 514-5843

**Special Notice for the ELDERLY, INFANTS,
CANCER PATIENTS, People with HIV/AIDS
or Other Immune Problems:**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

City of Watauga Drinking Water Quality

The City of Watauga drinking water is regulated by the Texas Commission on Environmental Quality (TCEQ). The City did not list any water quality violations on the 2019 Water Quality Report because there were none. The City of Watauga has a Superior Water System rating as designated by TCEQ since 1999. Inspections on the water system are made by TCEQ. Water quality is monitored by the City's Utility Division on a monthly basis. For more information, call (817) 514-5843.

En Español

Este reporte incluye informacion importante sobre la agua para tomar. Si tiene preguntas o discusiones sobre este reporte en español, favor de llamar al tel. (817) 514-5838 para hablar con una persona bilingue en español.

Where do we get our drinking water?

Our drinking water is obtained from surface water resources. The sources of our drinking water come from Fort Worth. They include Lake Bridgeport, Eagle Mountain Lake, Lake Worth, Lake Benbrook, Cedar Creek Reservoir and Richland-Chambers Reservoir. TCEQ will be reviewing all of Texas' drinking water sources. It is important to protect your drinking water by protecting your water source. The Tarrant Regional Water District owns the four remaining lakes as well as the water rights to them.

About the following pages

The pages that follow list all of the federally regulated or monitored constituents, which have been found in your drinking water. U.S. EPA requires water systems to test up to 97 constituents.

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 EPA. These constituents are not causes for health concerns. Therefore, secondary constituents are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

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 the 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.

Water Sources

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.

TCEQ Assessed Source Water

The Texas Commission on Environmental Quality conducted a source water assessment of our water supply lakes. The Fort Worth water system was determined to be susceptible to some contaminants, using criteria developed by TCEQ in its federally approved source water assessment program.

The City of 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. The Texas Commission on Environmental Quality (TCEQ) completed an assessment of the Fort Worth's source waters. TCEQ classified the risk to our source waters as highly susceptible to some contaminants, which means there are activities near the source water or watershed that make it very likely chemical constituents may come into contact with the source water. It does not mean that there are any health risks present.

The Trinity River Authority (TRA) uses surface water from Lake Arlington. A Source Water Susceptibility Assessment for your drinking water source is currently being updated by the Texas Commission on Environmental Quality (TCEQ). 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 assessment report consists of maps showing the assessment area, an inventory of known land use activities of concern and documentation of specific contaminants of concern. The report is available by contacting the Fort Worth Water Department office at 1000 Throckmorton Street in Fort Worth, Texas or the Trinity River Authority at 11201 Trinity Boulevard in Euless, Texas.

Further details about sources and source water assessments are available in Drinking Water Watch at:
<http://dww.tceq.state.tx.us/DWW/>.

CITY OF WATAUGA 2019 DATA

2019 Consumer Confidence Report for Public Water System CITY OF WATAUGA

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

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

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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. Fort Worth was not required to conduct a Level 1 assessment in 2019.

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. Fort Worth was not required to conduct a Level 2 assessment in 2019.

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 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 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.

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.

MFL:	million fibers per liter (a measure of asbestos)
mrem:	millirems per year (a measure of radiation absorbed by the body)
na:	not applicable.
NTU:	nephelometric turbidity units (a measure of turbidity)
pCi/L:	picocuries per liter (a measure of radioactivity)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Ppq:	parts per quadrillion, or picograms per liter (pg/L)
Ppt:	parts per trillion, or nanograms per liter (ng/L)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Information About Your Drinking Water

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.

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 Brandon Dupree 817-514-5851.

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. We are responsible for providing high quality drinking water, but we 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>.

What's in the Water?

The following charts list the contaminants that require monitoring or are regulated and were detected in Watauga and Fort Worth water. The data included is from calendar year 2019 unless otherwise indicated.

Watauga Water Quality Data Report 2019

2019 Water loss Data

The City of Watauga had an estimated water loss of 198,601,723 gallons (27.04) % of water purchased). This loss is contributed to leaks, breaks, theft and inaccuracy of meters.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	2 positive monthly sample.	2	0	2	N	Naturally present in the environment.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	10/02/2019	1.3	1.3	0.43	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	10/02/2019	0	.015	0.00	0	ppb	N	Corrosion of household plumbing systems: erosion of natural deposits

2019 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2019	8.90	3.80 - 8.90	No goal for the total	60	ppb	N	By-product 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'

Total Trihalomethanes	2019	16.1	7.03 - 16.1	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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* 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'

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2019	0.721	0.232 - 0.721	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	2019	0.107	0.007 - 0.107	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chloramines	2019	3.26	0.70-3.88	4	4	ppm	N	Water additive used to control microbes.

Other explanations

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. Fort Worth was not required to conduct a Level 1 assessment in 2019.

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. Fort Worth was not required to conduct a Level 2 assessment in 2019.

The City of Watauga did have to perform a Level 1 assessment in the year 2019.
The City of Watauga did not have to perform a Level 2 assessment in the year 2019.

**“City of Watauga’s Unregulated Contaminant Monitoring Rule (UCMR 4) Information”
Data gathering to determine if more regulation needed**

The City of Watauga Tested for 30 compounds in the fourth round of unregulated contaminant monitoring. 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. These samples were taken in 2019, Watauga’s testing detected only 2 of the 30 compounds.

UCMR 4				
Detected Contaminants				
Contaminant	Unit of Measure	Range of Detections	2019 Average	Common Sources of Substances
HAA6	ppb	3.92 to 7.05	5.26	Byproducts of drinking water disinfection.
HAA9	ppb	9.64 to 16.1	11.68	Byproducts of drinking water disinfection.

UCMR 3 contaminants not detected

Cyanotoxins

Total microcystin
microcystin-LA
microcystin-LF
microcystin-LR
microcystin-LY
microcystin-YR
nodularin
anatoxin-a
cylindrospermopsin

Metals

Germanium
Manganese

Semi-volatile Chemicals

butylated
hydroxyanisole
o-toluidine
quinoline

Alcohols

1-butanol
2-methoxyethanol
3-propen-1-ol

Pesticides and Pesticide Manufacturing Byproduct

Alpha-hexachlorocyclohexane
chlorpyrifos
dimetipin
ethoprop
oxyfluorfen
profenofos
tebuconazole
Total permethrin (cis-transribufos)

Trinity River Authority of Texas Tarrant County Water Supply Project – Regulated Contaminants

Regulated Contaminants									
Year or Range	Contaminant	Collection Date	Highest Single Sample	Range of levels Detected	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2019	Barium	6/17/2019	0.041	0.041-0.041	2	2	ppm	No	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
2019	Fluoride	6/17/2019	0.447	0.447-0.447	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2019	Nitrate	6/17/2019	0.175	0.175-0.175	10	10	ppm	No	Runoff from fertilizer use; leaking from septic tanks, sewage, erosion of natural deposits
Year or Range	Contaminant	Highest Single Sample	Range of Levels Detected		MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2019	Bromate	<5.00	<5 – <5		10*	0	ppb	No	By-product of drinking water disinfection

*Compliance is based on Running Average of monthly averages for Bromate at the end of each quarter, which was less than the 5 ppb for each quarter in 2019.

Turbidity is a measure of the cloudiness of water. It is a good indicator of the effectiveness of the filtration system.

Year	Contaminant	Highest Single Measurement	% of Samples \leq 0.3 NTU	Range of Levels Detected	Units of Measure	Source of Contaminant
2019	Turbidity	0.26	100	0.03-0.26	NTU	Soil runoff

We need to tell you about a monitoring violation:

The City of Watauga currently purchases surface water from the Trinity River Authority's (TRA) Tarrant County Water Supply Project (TCWSP). The City is required to inform you of an incident that occurred on June 18, 2019 at the TRA TCWSP. This incident resulted in a monitoring/reporting violation for failing to monitor or report as required in the Surface Water Monthly Operating Report (SWMOR).

A plant shutdown was scheduled on June 18, 2019, for construction activities. One of the 24 filters was scheduled to receive a new turbidity meter during this Plant shut down. The old turbidity meter was removed and the new meter installation was delayed. When the Plant resumed normal operation, the filter was activated with no turbidity meter installed. This resulted in no turbidity measurement for one filter for approximately five hours. **At no time during the five hours did the combined filter effluent turbidity levels exceed standards and there is no reason to believe that the quality of water was compromised**

The following is Mandatory language required by the Texas Commission on Environmental Quality for Monitoring and Reporting Violations:

The TRA TARRANT COUNTY WATER PROJECT, PWS ID TX2200199, has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Title 30, Texas Administrative Code (30 TAC), Section 290, Subchapter F. Public water systems that treat surface water and/or ground water under the direct influence of surface water are required to submit monthly operating reports with operational data of the treatment, disinfection and quality of the water provided to their customers.

We failed to monitor and/or report the following constituents Turbidity, in 1 filter* for 5 hours

*At no time during these 5 hours did the combined filter effluent turbidity levels exceed standards.

This/These violation(s) occurred in the monitoring period(s) June 18, 2019, for 5 hours

Results of regular monitoring are an indicator of whether or not your drinking water is safe. We did not complete all monitoring and/or reporting for surface water constituents, and therefore TCEQ cannot be sure of the safety of your drinking water during that time.

We are taking the following actions to address this issue:

Standard Operating Procedures are in place for taking a filter out of service which include lock out/tag out procedures and this had been provided to staff.

Fort Worth Water Quality Data Report 2019

Contaminant	Measure	MCL	2019 Level	Range of Detects	MCLG	Violation	Common Sources of Substance in Drinking Water
Barium 1	ppm	2	0.06	0.05 to 0.06	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta particles & Photon emitters 2	pCi/L	50	5.6	4.4 to 5.6	0	No	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photon and beta radiation
Fluoride	ppm	4	0.54	0.15 to 0.54	4	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	0.58	0.18 to 0.58	10	No	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Nitrite ³ (measured as Nitrogen)	ppm	1	0.02	0.1 to 0.02	1	No	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Bromate	ppb	10	4.35	0 to 14.8	0	No	By-product of drinking water disinfection
Atrazine	ppb	3	0.1	0.0 to 0.1	3	No	Runoff from herbicide used on row crops
Cyanide	ppb	200	126	74.8 to 126	200	No	Discharge from plastic fertilizer factories; discharge from steel and metal factories.
Arsenic	ppb	10	1.50	0 to 1.50	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production waste.
Turbidity 1	NTU	TT=1.0	0.05 Highest single result	0 to 0.5	0.5	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 the filtration system.)
	%	TT=95	99.9% Lowest monthly % of samples ≤0.3 NTU	99.9 to 100	100		
Contaminants	High	Low	Average	MCL	MCLG		Common Sources of Substance in Drinking Water
Total Organic Carbon	1	1	1	TT=% removal	N/A	No	Naturally occurring

Total Organic Carbon 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 SUVA calculations is considered passing.

Unregulated Contaminants

Contaminant	Unit	Range of Detections	2019 Level	MRDL	MRDLG	Common Sources of Substance in Drinking Water
Chloral Hydrate	ppb	0.23 to 0.43	0.33	Not Regulated	N/A	By-product of drinking water disinfection
Bromoform	ppb	1.02 to 4.09	1.07	Not Regulated	0	By-product of drinking water disinfection; not regulated individually; included in Total Trihalomethanes
Bromodichloromethane	ppb	1.12 to 8.94	3.97	Not Regulated	0	
Chloroform	ppb	1.32 to 8.11	3.68	Not Regulated	70	
Dibromochloromethane	ppb	1.01 to 10.4	3.68	Not Regulated	60	
Dichloroacetic Acid	ppb	2.40 to 9.20	4.78	Not Regulated	0	By-product of drinking water disinfection; not regulated individually; included in Haloacetic acids
Monochloroacetic Acid	ppb	1.00 to 2.50	0.61	Not Regulated	70	
Trichloroacetic Acid	ppb	1.00 to 2.00	0.09	Not Regulated	20	
Monobromoacetic Acid	ppb	1.00 to 1.00	0.02	Not Regulated	N/A	
Dibromoacetic Acid	ppb	1.00 to 3.20	1.41	Not Regulated	N/A	

TRWD monitors raw water

While Fort Worth, the USACE and TRWD own the lakes, the TRWD is in charge of monitoring the quality of the raw water in all of them. Every month, staff tests the water for Cryptosporidium, Giardia Lamblia and viruses. The source of these parasites and viruses is human and animal fecal waste found in the watersheds. TRWD's 2019 testing showed low levels of Cryptosporidium, Giardia Lamblia and viruses in some of the water supply. The disinfection process in water treatment removes viruses from the water. Cryptosporidium and Giardia Lamblia are removed through the disinfection and/or filtration process.

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 a watershed 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 at dww2.tceq.texas.gov/DWW/JSP/SWAP.jsp?tinwsys_is_number=5802&tinwsys_st_code=TX&wsnumber=TX2200012%20%20%20&DWWState=TX.