



2019 ANNUAL

DRINKING WATER QUALITY REPORT

(Consumer Confidence Report)

CITY OF WAXAHACHIE

Public Water System #0700008

(469) 309-4320

401 S Rogers St, Waxahachie, Texas 75165

www.waxahachie.com

WATER SAVING TIPS

NOTICE: The City Water Conservation Plan, Ordnance No. 3107, Adopted by the City of Waxahachie City Council on April 1, 2019 prohibits irrigation, whether public or private, between the hours of 10:00 a.m. and 6:00 p.m. beginning June 1 through September 30 of any year. Hand-held watering, and soaker hoses are allowed anytime.



Water between 6 p.m.-10 a.m. (when temperatures tend to be cooler and evaporation is at its lowest).



Every drop counts so turn off the water while brushing your teeth or shaving.



Check all faucets, pipes, hoses, sprinklers, and toilets for leaks.



Install low flow shower heads, high efficiency toilets, and low flow aerators on faucets.



Do not use toilets as a wastebasket



Equip all garden/yard hoses with a hose timer and adjust sprinklers so they don't water the sidewalk or street.

► Water saving tips - do not water the gutters and sidewalks; water every third to fifth day instead of every day. More water saving information is available at city hall.

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

We are proud to provide this report which summarizes the quality of water that we provide to 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 is in your drinking water.



Photos courtesy of Poston Gardens in Waxahachie

DRINKING WATER 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).

About The Following Pages

The pages that follow 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.

Available Resources:

The internet is an excellent resource for drinking water information. The American Water Works Association (AWWA) is a reliable source of valuable water information. AWWA has launched an updated, user-friendly website at DrinkTap.org. This site contains water quality information on contaminants, water conservation, water security, water infrastructure, regulatory topics, source water, fluoridation, and consumer confidence reports.



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 provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800) 426-4791.

WHERE DOES OUR WATER COME FROM?

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. Contaminants that may be present in source water before treatment include:

Microbial contaminants, such as viruses and bacteria, which 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 agricultural, 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 results of oil and gas production and mining activities.

Where do we get our Drinking Water?

Our drinking water is obtained from SURFACE water sources. It comes from the following Lakes or Reservoirs: LAKE WAXAHACHIE, BARDWELL RESERVOIR, CEDAR CREEK RESERVOIR and RICHLAND CHAMBERS RESERVOIR. The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Utility Administration at (469) 309-4320.

PUBLIC PARTICIPATION OPPORTUNITIES

Date:

City Council meetings 1st and 3rd Mondays of each month

Time: 7:00 p.m.

Location:

Council Chambers, 401 S Rogers St, Waxahachie, Texas

Phone: 469-309-4000

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (469) 309-4000

FIGHT F.O.G.

(Fats, Oils & Grease) Keep Fats, Oils and Grease Out of Your Drain and Prevent Clogged Pipes and Sewer Back-ups!

- 1 Pour cold fats, oils and grease into a covered, disposable container and throw it into your garbage. Never pour fats, oil or grease down sink drains or toilets.
- 2 Soak up spilled oils and grease with an absorbent material such as paper towels or kitty litter and throw into your garbage.
- 3 Before you wash dishes: scrape food scraps, fats, oils and grease into your garbage.
- 4 Use sink strainers to catch any remaining food waste while washing dishes.



2019 WATER QUALITY REPORT

Disinfection Byproducts

Contaminant	Unit of Measure	Highest	Lowest	MCL*	MCLG	Violation	Source of Contaminant
Total Haloacetic Acids (HAA5)	ppb	75.9	20.3	60	No Goal	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	ppb	100	35.8	80	No Goal	N	By-product of drinking water disinfection.
Chlorite	ppm	0.29	<0.02	1	<0.8	N	By-product of drinking water disinfection.

* MCL is based on a Locational Running Annual Average (LRAA) for each sample location. See information below.

Locational Running Annual Averages

Contaminant	Unit of Measure	Highest	Description					
Total Haloacetic Acids (HAA5)	ppb	43.6	This result is the highest location running annual average for Haloacetic Acid.					
Total Trihalomethanes (TTHM)	ppb	61.9	This result is the highest locational running annual average for Total Trihalomethanes.					

Quarterly Locational Running Annual Average for All Quarters of 2019 for Each Disinfection Byproducts Site.

Site 1	HAA5	TTHM	Site 2	HAA5	TTHM	Site 3	HAA5	TTHM	Site 4	HAA5	TTHM
1st Quarter	28.4	42.5	1st Quarter	36.8	52.4	1st Quarter	30.5	42.7	1st Quarter	30.5	42.4
2nd Quarter	32.8	47.7	2nd Quarter	36.9	55.1	2nd Quarter	31.7	47.1	2nd Quarter	31.0	46.5
3rd Quarter	40.3	57.2	3rd Quarter	43.6	61.9	3rd Quarter	38.8	55.4	3rd Quarter	38.1	56.4
4th Quarter	38.7	56.1	4th Quarter	40.1	59.6	4th Quarter	36.8	52.8	4th Quarter	35.0	55.2

* As individual sample results for monitoring locations exceeded the TTHM or HAA5 MCL, the system must report locational running annual averages - all results above are expressed in ppb.

Inorganic Contaminants

Contaminant	Unit of Measure	Highest Level Detected	Range of Level Detected	MCL	MCLG	Violation	Source of Contaminant
Barium	ppm	0.056	0.051 - 0.056	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Cyanide	ppb	84.1	<20 - 84.1	200	200	N	Discharge from plastic and fertilizer factories; discharge from steel/metal factories.
Fluoride	ppm	0.17	0.119 - 0.17	4	4	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate	ppm	1.15	0.821 - 1.15	10	10	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Organic Contaminants

Contaminant	Unit of Measure	Highest	Lowest	Range of Level Detected	MCL	MCLG	Violation	Source of Contaminant
Atrazine	ppb	0.7	0.4	0.4 - .07	3	3	N	Runoff from herbicide used on row crops.
Simazine	ppb	0.17	<0.06	0 - 0.17	4	4	N	Herbicide runoff.

Total Organic Carbon

Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfectant byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THM's) and haloacetic acids (HAA) which are reported in the next section of this report.

Contaminant	Unit of measure	Highest	Lowest	Violation	Source of Contaminant
Source Water	ppm	6.7	2.9	N	Naturally present in the environment.
Drinking Water	ppm	3.8	1.9	N	Naturally present in the environment.
Removal Ratio	% removal	2.70	1.26	N	NA

Unregulated Contaminants

Chloroform, bromoform, bromodichloromethane and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to the distribution system.

Contaminant	Unit of Measure	Highest	Lowest	Violation	Source of Contaminant
Chloroform	ppb	48.8	22.4	N	By-product of drinking water disinfection.
Bromodichloromethane	ppb	17.0	13.7	N	By-product of drinking water disinfection.
Dibromochloromethane	ppb	4.96	4.64	N	By-product of drinking water disinfection.

Total Coliform

Highest No. of Positive Samples	Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Violation	Source of Contaminant
2.30%	0	<5%	N	Naturally present in the environment.

What are total coliforms?

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are harder than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Fecal coliform bacteria and, in particular, E. coli, are members of the coliform bacteria group originating in the intestinal tract of warm-blooded animals and are passed into the environment through feces. The presence of fecal coliform bacteria (E. coli) in drinking water may indicate recent contamination of the drinking water with fecal material. The following table indicates whether total coliform or fecal coliform bacteria were found in the monthly drinking water samples submitted for testing by your water supplier last year.

Water Loss as Reported in the Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board for the time period of January 2019 to December 2019, our system lost an estimated 361,832,064 gallons of water, or 13.25% of total Water Produced. If you have any questions about the water loss audit please call (469) 309-4320.

Lead and Copper

Year	Contaminant	Unit of Measure	The 90th Percentile	Number of Sites Exceeding Action Level	MCLG	Action Level	Violation	Source of Contaminant
2019	Lead	ppm	0.002	0	0	0.015	N	Corrosion of household plumbing systems; erosion of natural deposits.
2019	Copper	ppm	0.070	0	1.3	1.3	N	Corrosion of household plumbing systems; erosion of natural deposits leaching from wood preservatives.

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 (800) 726-4791 or at <http://www.epa.gov/safewater/lead>.

Maximum Residual Disinfectant Level

Contaminant	Unit of Measure	Highest	Lowest	Average	MRDL	MRDLG	Violation	Source of Contaminant
Chloramines	ppm	4.8	0.05	3.3	4	<4.0	N	Disinfectant used to control microbes.
Chlorine Dioxide	ppm	0.48	0.00	0.03	0.8	<0.8	N	Disinfectant used to control microbes.

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.

Secondary and Other Non-Regulated Constituents

Contaminant	Unit of Measure	Highest	Lowest	Limit	Violation	Source of Contaminant
Aluminum	ppm	0.041	0.028	0.05	N	Abundant naturally occurring element.
Bicarbonate	ppm	126	106	NA	N	Corrosion of carbonate rocks such as limestone.
Calcium	ppm	62.7	45.5	NA	N	Abundant naturally occurring element.
Chloride	ppm	18.3	15.6	300	N	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
Copper	ppm	0.017	0.0012	1	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Magnesium	ppm	2.96	1.91	NA	N	Abundant naturally occurring element.
Nickel	ppm	0.0015	0.0014	NA	N	Erosion of natural deposits.
pH	ppm	9.21	6.93	≥7	N	Measure of corrosiveness of water.
Sodium	ppm	28.4	24.7	NA	N	Erosion of natural deposits; byproduct of oil field activity.
Sulfate	ppm	59.4	50.8	300	N	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
Total Alkalinity as CaCO ₃	ppm	126	106	NA	N	Naturally occurring soluble mineral salts.
Total Dissolved Solids	ppm	262	236	1000	N	Total dissolved mineral constituents in water.
Total Hardness as CaCO ₃	ppm	164	126	NA	N	Naturally occurring calcium.

Turbidity

Contaminant	Unit of Measure	Highest	Limit	Violation	Source of Contaminant
Highest Single	NTU	0.17	1	N	Soil Runoff.
Lowest Monthly % meeting limit	NTU	100%	0.3	N	Soil Runoff.

Radioactive Contaminants

Year	Contaminant	Unit of Measure	Highest	Lowest	MCL	MCLG	Violation	Source of Contaminant
2017	Combined Radium 226/228	pCi/L	1.5	1.5	5	0	N	Erosion of Natural Deposits.
2019	Beta/Photon Emitters	pCi/L	4.8	4.8	50	0	N	Decay of natural and man-made deposits.

*EPA Considers 50 pCi/L to be the level of concern for beta particles.

DEFINITIONS

Maximum Contaminant Level (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 (MCLG): 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.

Maximum Residual Disinfectant Level (MRDL): The highest level of 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 (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 contamination.

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

Action Level (AL): 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.

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

ppm: parts per million, or milligrams per liter – or one ounce in 7,350 gallons of water.

ppb: parts per billion, or micrograms per liter – or one ounce in 7,350,000 gallons of water.

NA: not applicable.

mrem/yr: Measure of radiation absorbed by the body.

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 (µg/L)

ppt - parts per trillion, or nanograms per liter

ppq - parts per quadrillion, or picograms per liter

NR - Not Regulated