

2011 Annual Drinking Water Quality Report

(Consumer Confidence Report)

CITY OF WAXAHACHIE

401 S Rogers
(972) 937-7330 ext. 122

Waxahachie, Texas 75165
www.waxahachie.com

SPECIAL NOTICE

Required language for ALL community public water systems

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.

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:** 972-937-7330

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us. *En Español* Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (972) 937-7330 para hablar con una persona bilingüe en español.

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's in your drinking water.

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 Lake/Reservoir: LAKE WAXAHACHIE, BARDWELL RESERVOIR, CEDAR CREEK RESERVOIR and RICHLAND CHAMBERS RESERVOIR. A Source Water Susceptibility Assessment for your drinking sources(s) is currently being updated by the Texas Commission on Environmental Quality. 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 information contained in the assessment allows us to focus our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

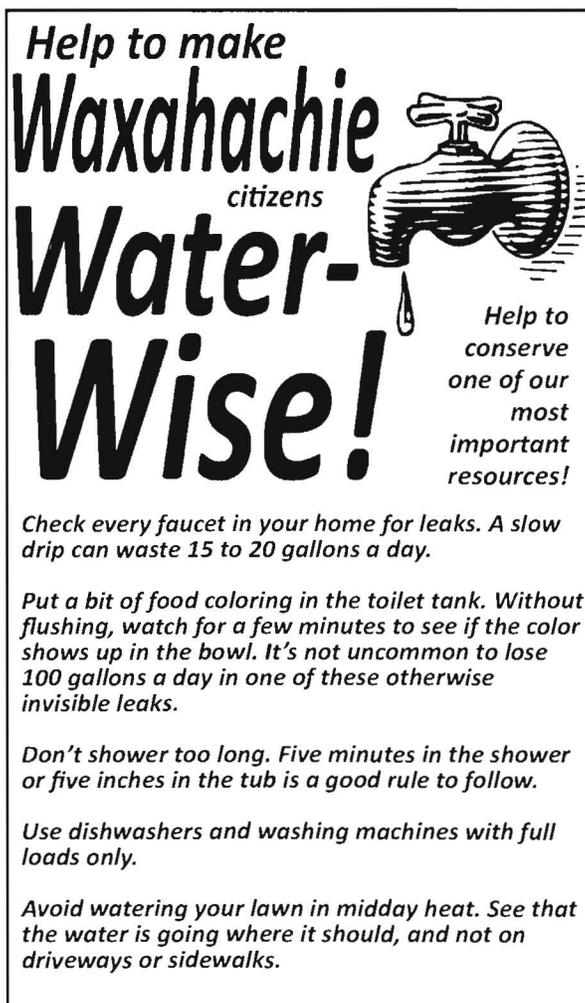
Do you conserve water? You can do your part to conserve water by; not watering between the hours of 10:00 am to 6:00 pm (this is the hottest part of the day); do not water the gutters and sidewalks; water every third to fifth day instead of every day. More water saving information is available at city hall.

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.



**Help to make
Waxahachie
citizens
Water-
Wise!**

*Help to
conserve
one of our
most
important
resources!*

*Check every faucet in your home for leaks. A slow
drip can waste 15 to 20 gallons a day.*

*Put a bit of food coloring in the toilet tank. Without
flushing, watch for a few minutes to see if the color
shows up in the bowl. It's not uncommon to lose
100 gallons a day in one of these otherwise
invisible leaks.*

*Don't shower too long. Five minutes in the shower
or five inches in the tub is a good rule to follow.*

*Use dishwashers and washing machines with full
loads only.*

*Avoid watering your lawn in midday heat. See that
the water is going where it should, and not on
driveways or sidewalks.*

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.

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. ALG's 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.

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

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

Inorganic Contaminants

Year	Contaminant	Highest Level Detected	Range of Level Detected	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
1/12/2011	Barium	.049	0.049 - 0.049	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
1/12/2011	Fluoride	0.57	0.57 - 0.57	4.0	4	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
1/12/2011	Nitrate	0.26	0.26 - 0.26	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Organic Contaminants

Year	Contaminant	Highest Level Detected	Range of Level Detected	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2011	Atrazine	0.23	0.21 - 0.23	3	3	ppb	N	Runoff from herbicide used on row crops.
1/12/2011	Arsenic	1.17	1.17 - 1.17	10	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
1/12/2011	Chromium	0.153	0.153 - 0.153	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits
1/12/2011	Thallium	0.149	0.149 - 0.149	2	.5	ppb	N	Discharge from electronics, glass, and leaching from ore-processing sites; drug factories.

Disinfection Byproducts

Year	Contaminant	Highest Level Detected	Range of Level Detected	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2011	Total Haloacetic Acids (HAA5)	* 25.7	15.1 – 35.4	60	No goal for the total	Ppb	N	Byproduct of drinking water disinfection.
2011	Total Trihalomethanes	* 42.2	31.1 - 49.7	80	No goal for the total	Ppb	N	Byproduct of drinking water disinfection.

* Calculated on the highest localized running annual average (LRAA) site

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.								
Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant		
2011	Chloroform	15.00	8.29	20.70	ppb	Byproduct of drinking water disinfection.		
2011	Bromoform	1.48	1.0	2.1	ppb	Byproduct of drinking water disinfection.		
2011	Bromodichloromethane	14.38	10.24	18.00	ppb	Byproduct of drinking water disinfection.		
2011	Dibromochloromethane	9.24	5.62	13.10	ppb	Byproduct of drinking water disinfection.		

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 elsewhere in this report.							
Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant	
2011	Source Water	4.60	3.50	6.00	ppm	Naturally present in the environment.	
2011	Drinking Water	3.00	2.50	4.10	ppm	Naturally present in the environment.	
2011	Removal Ratio	1.20	1.00	2.10	% removal*	NA	

* Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

COLIFORMS

What are 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 more hardy 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.

Total Coliform

Year	Highest No. of Positive	Total Coliform Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Violation	Source of Contaminant
2011	0 positive monthly samples	*	0	N	Naturally present in the environment.
* Two or more coliform found samples in any single month.					

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

Secondary and Other Not Regulated Constituents
(No associated adverse health effects)

Year (Range)	Constituent	Average Level	Minimum Level	Maximum Level	Limit	Unit of Measure	Source of Constituent
1/12/2011	Aluminum	0.027	0.027	0.027	.05	ppm	Abundant naturally occurring element.
1/12/2011	Bicarbonate	92	92	92	NA	ppm	Corrosion of carbonate rocks such as limestone.
1/12/2011	Calcium	46.3	46.3	46.3	NA	ppm	Abundant naturally occurring element.
1/12/2011	Chloride	13.5	13.5	13.5	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
1/12/2011	Copper	0.001	0.001	0.001	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
1/12/2011	Magnesium	2.26	2.26	2.26	NA	ppm	Abundant naturally occurring element.
1/12/2011	Nickel	0.002	0.002	0.002	NA	ppm	Erosion of natural deposits.
1/12/2011	pH	7.9	7.9	7.9	≥7.0	units	Measure of corrosiveness of water.
1/12/2011	Sodium	26.8	26.8	26.8	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
1/12/2011	Sulfate	49	49	49	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
1/12/2011	Total Alkalinity as CaCO ₃	92	92	92	NA	ppm	Naturally occurring soluble mineral salts.
1/12/2011	Total Dissolved Solids	207	207	207	1000	ppm	Total dissolved mineral constituents in water.
1/12/2011	Total Hardness as CaCO ₃	125	125	125	NA	ppm	Naturally occurring calcium.

Lead and Copper

Year (Range)	Contaminant	The 90 th Percentile	Number of Sites Exceeding Action Level	MCLG	Action Level	Violation	Unit of Measure	Source of Contaminant
2009	Lead	0	0	0	15	N	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2009	Copper	0.204	0	1.3	1.3	N	ppm	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 or at <http://www.epa.gov/safewater/lead>.

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MCLG	Unit of Measure	Source of Contaminant
2011	Chloramines	3.2	1.3	4.0	4.0	< 4.0	ppm	Disinfectant used to control microbes.
2011	Chlorite	.25	0.05	0.71	1.05	< 1.05	ppm	Disinfectant used to control microbes
2011	Chlorine Dioxide	0.00	0.00	0.05	.8	< .8	ppm	Disinfectant used to control microbes

Turbidity

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, and diarrhea and associated headaches.

2011	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contaminant
Highest single measurement	1 NTU	0.19	N	Soil runoff
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff

You can help prevent grease buildups from blocking sewer lines!

Follow these guidelines to help stop sewer overflows into streets and storm drains. Doing so will also save money on costly cleanups and repairs, and protect the quality of our water.



DO!

Put used oil and grease in covered containers.

Scrape food scraps from dishes into cans and garbage bags and dispose of properly. Avoid using your garbage disposal.

Remove oil and grease from dishes, pans, fryers and griddles. Cool first before you skim, scrape, or wipe excess grease.

Rinse dishes and pans with cold water before putting them in the dishwasher.

Cover kitchen sink with catch basket and empty into garbage can as needed.

DON'T!

Don't pour oil and grease down the drain.

Don't put food scraps down the drain.

Don't run water over dishes, pans, fryers and griddles to wash oil and grease down the drain.

Don't rinse off grease with hot water.





WATER QUALITY REPORT

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WAXAHACHIE, TEXAS 75168

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