City of Amarillo
2012 Water Quality Report

In 2011, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Texas Commission on Environmental Quality (TCEQ) has established public water supply system ratings, and Amarillo's water supply system received the highest achievable rating, Superior.

Where does my water come from?

Amarillo's water supply comes from surface water and groundwater. The surface water supply is from Lake Meredith. The groundwater supply is from the Ogallala Aquifer. The City's drinking water is a blend of both sources. The purpose of this blend (approximate ratio of 6% lake water to 94% well water) is to adjust mineral content of drinking water within state guidelines. Lake Meredith, our surface water supply, is located approximately 32 miles northeast of Amarillo and contains at least 7.5 billion gallons of water. Amarillo receives groundwater from 41 wells in Carson County, 13 wells in Potter County, and 63 wells in Randall and Deaf Smith counties. The City utilizes a conventional treatment process to supply drinking water and presently has the capacity to treat and supply 121 million gallons of water per day. Daily water production averages between 40-50 million gallons.

Source water assessment and its availability

SURFACE WATER – The Watershed of Lake Meredith consists primarily of farm and ranch lands; therefore, the susceptibility for surface water contamination is mainly from agricultural practices. Fertilizers, pesticides and other agricultural chemicals, as well as run-off from Confined Animal Feeding Operations (CAFOs), represent potential contamination sources.

GROUNDWATER – Amarillo's municipal water supply wells are located mostly in farming and ranching areas. Susceptibility for contamination is mainly from agricultural chemicals. Other potential sources of contamination are CAFOs, septic systems, oil field related activities and abandoned private water wells. To help protect our drinking water source, the City has an ongoing Wellhead Protection Program, which is designed to apply TCEQ well standards and guidelines to protect against any pollution entering the underground water.

Do I need to take special precautions?

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 for infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Crytosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (800-426-4791).

Espanol (Spanish)

Este reporte incluye informacion importante sobre el agua para tomar.
Para asistancia en español, favor de llamar al telefono (806) 378-3079.

Why are there contaminants in my 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, bacteria and protozoans that 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 that may come from a variety of sources such as agriculture, urban stormwater 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 stormwater runoff and septic systems;
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activies.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide 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, color or odor of drinking water, please contact our business office at the telephone number listed below.

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 helath effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

How can I get involved?

By attending and voicing your opinions at meetings of the Amarillo City Commission, you can become involved in the decision-making process affecting our municipal water system. The City Commission meets the first Tuesday of the month at 5:30 p.m., and every Tuesday thereafter at 3p.m. on the third floor of City Hall, 509 E. 7th Ave.

You may also contact the City of Amarillo's Utilities Division at the following address and telephone number: (806) 378-4266, TDD (806) 378-4229, PO Box 1971, Amarillo, TX 79105-1971.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information contact:
City of Amarillo
Attn: Director of Utilities
PO Box 1971
Amarillo, TX 79105-1971
Phone: (806) 378-4266, TDD (806) 378-4229
Fax: (806) 378-3027
E-mail: emmett.autrey@amarillo.gov
Website: www.amarillo.gov

Water Quality Data Table

The table below lists drinking water contaminants that were detected by the State of Texas during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in these tables are from our most recent tests that were performed in 2011. The State of Texas requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently; therefore, some of the data below reflects testing done in 2009 through 2011.

Important Drinking Water Definitions:

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water at which there is no known or expected risk to health. MCLGs allow for a margin of safety;

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;

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

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

2011 CONSUMER CONFIDENCE REPORT

Inorganic Contaminants

Year Sampled	Contaminants	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminants
2011	Barium	0.141	0.128	0.183	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2011	Chromium	< 0.10	< 0.10	< 0.10	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits.
2011	Flouride	1.21	0.99	1.44	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer use; and aluminum factories
2011	Nitrate	1.34	1.21	1.58	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
2011	Combined Radium 226 & 228	0.1	0	0.2	5	0	pCi/L	Erosion of natural deposits
2011	Gross Beta Emitters	5.7	5.7	5.7	50	0	pCi/L	Decay of natural & man-made deposits
2011	Gross Alpha	7.3	7.3	7.3	15	0	pCi/L	Erosion of natural deposits

Maximum Residual Disinfectant Level

Year	Disinfectant Used	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2011	Chlorine	1.47	1.21	1.71	4	<4	ppm	Disinfectant used to control microbes

Disinfection Byproducts

Year Sampled	Contaminants	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2011	Haloacetic Acids	5.1	3.3	6	60	ppb	Byproduct of drinking water disinfection
2011	Total Trihalomethanes	4.9	2.5	8.2	80	ppb	Byproduct of drinking water disinfection

Unregulated Contaminants*

Year Sampled	Contaminants	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2011	Chloroform	0.02	< 1	0.8	ppb	Byproduct of drinking water disinfection
2011	Bromoform	1.43	< 1	2.4	ppb	Byproduct of drinking water disinfection
2011	Bromodichloromethane	0.83	< 1	2.1	ppb	Byproduct of drinking water disinfection
2011	Dibromochloromethane	1.71	< 1	3.7	ppb	Byproduct of drinking water disinfection

* 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.

Lead and Copper

Year Sampled	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2009	Lead	0.0012	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2009	Copper	0.11	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

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.

Turbidity

Year Sampled	Contaminant	Highest Measurement	Lowest Monthly % of Samples Meeting Limits		Turbidity Limits	Unit of Measure	Source of Contaminant
			Required	Actual			
2011	Turbidity	0.58	95	96.4	0.3	NTU	Soil runoff

Total Organic Carbon

Total Organic Carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection by products.
Disinfection is necessary to ensure that the water does not have unacceptable levels of pahtogens.
Byproducts of disinfection include trihalomethanes (THMs) and lhaloacetic acids (HAAs) which are reported elsewhere in this report.

Year Sampled	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2011	Source Water	1.44	0.29	2.93	ppm	Naturally present in the environment.
2011	Drinking Water	1.48	0.36	3.16	ppm	Naturally present in the environment.
2011	Removal Ratio	-26.83	-114.9	15.9	% removal	NA

*removal ratio is the percentage of TOC removed by the treatment process divided by the precent of TOC required by TCEQ to be removed.

Cryptosporidium Monitoring Information

We monitored for Cryptosporidium, a microbial parasite that may be commonly found in surface water. Cryptosporidium may come from animal and human feces in the watershed. The results of our monitoring indicated the absence of Cryptosporidium in the raw water and/or treated water. The testing methods used cannot determine if the organisms are alive and capable of causing Cryptosporidiosis, and abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water.

Total Coliform

Year Sampled	Contaminant	Highest monthly % of positive samples	MCL	Unit of Measure	Source of Contaminant
2011	Total Coliform Bacteria	0.8	*		Naturally present in the environment. (There were 2 detects in a total of 1,532 samples.)

* Presence of coliform bacteria in 5% or more of the monthly results

Units Description:
NA: Not Applicable ND: Not detected
mrem/year: Millirems per year (a measure of radiation absorbed by the body).
MNR: Monitoring not required, but recommended.
ppm: parts per million or milligrams per liter (mg/l). The equivalent of 2 or 50% of a dissolved aspirin tablet in one bathtub (about 50 gallons) of water.
ppb: parts per billion or micrograms per liter (ug/l). The equivalent of 2 of a dissolved aspirin tablet in 1,000 bathtubs (about 50,000 gallons) of water.
pCi/L: picocuries per liter (a measure of radioactivity). EPA considers 50pCi/L to be the level of concern for beta particles.
NTU: Nephelometric Turbidity Units (a measure of turbidity). Turbidity measures water treatment plant's = efficiency in removing suspended matter from the water.
# of monthly positive samples: Number of samples taken monthly that were found to be positive.