

The City of Athens is pleased to present the 2020 Annual Water Quality Report. Our goal is to meet the water usage needs of our customers by providing the highest quality water available. Public participation regarding the water system is offered through attending public meetings, calling (903) 675-5131, emailing utilities@athenstx.gov, or visiting www.athenstx.gov. Specific questions or concerns about water quality may be directed to (903) 677-6666.

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. (903) 675-5131 – para hablar con una persona bilingüe en español.



City of Athens

PWS ID #1070005 and #1070252

508 E. Tyler St.

Athens, Texas 75751



PWS ID #1070005 and #1070252

2020 Annual Drinking Water Quality Report



Source 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.

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.

Where Do We Get Our Drinking Water?

The City of Athens (PWS #1070005) water system distributed 616,495,000 gallons of water during 2020. Athens water includes surface water, obtained from Lake Athens, and ground water produced from water wells. The Athens Municipal Water Authority (AMWA) (PWS #1070252) provided 361,022,000 gallons of treated surface water and 213,880,000 gallons of ground water. An additional 41,493,000 gallons of ground water was produced by water wells operated by the City of Athens to supplement the total annual consumption. Water loss, which includes water not accounted for through metering and/or estimation, totaled 17,010,000 gallons for 2020. The TCEQ Source Water Assessment report describes the susceptibility and types of constituents that may come into contact with the drinking water sources based on human activities and natural conditions. Please call (903) 677-6666 for more information on source water assessments and protection efforts of our system.

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

This report is a summary of water quality provided to our customers. The analysis was made by using data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented on the following page. We hope this information helps you become more knowledgeable about what's in your drinking water.

All Drinking Water May Contain Contaminants and Cryptosporidium

When drinking water meets federal standards there may not be any health 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).

Cryptosporidium is a microscopic intestinal parasite found naturally in the environment. Although filtration removes most Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Athens regularly collects treated and untreated water samples to test for this pathogen. Results of those tests did not indicate the presence of cryptosporidium during 2020. Not everyone exposed to the organism becomes ill. Individuals with healthy immune systems usually overcome the effects within a few weeks. However, immune-compromised people are at a greater risk of developing life-threatening illness. We encourage at risk individuals to consult their doctor regarding appropriate precautions to prevent infection. To request more information on Cryptosporidium, please call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

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.

Secondary Constituents

Constituents, such as calcium, sodium, or iron, commonly found in drinking water at varying concentration, can influence the taste, color, and odor of water. The State of Texas regulates these taste and odor constituents, called secondary constituents, but does not consider them cause for health concern. The secondary constituents are not presented in this annual report, however, can be performed as needed in response to a water quality concern.

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>.

2020 Test Results

The table on this page includes a list all of federally regulated or monitored constituents that have been found in your drinking water. The U.S. EPA requires water systems to test up to 90 constituents. As the table illustrates, the drinking water provided to Athens customers met or exceeded all established standards. The table identifies contaminants detected during 2020, or the most recent testing done in accordance with regulations, including the maximum amounts allowed by state and federal regulations.

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

Inorganic Contaminants		City of Athens		AMWA					
Contaminant (Unit)	Date Sampled	Average Amount Detected	Range of Detected Levels	Average Amount Detected	Range of Detected Levels	MCL	MCLG	Violation	Likely Source of Contamination
Barium (ppm)	2020	0.031	0.031	0.066	0.066	2.0	2.0	No	Erosion of natural deposits; discharge of drilling wastes or metal refineries.
Fluoride (ppm)	2020	0.105	0.105	0.0931	0.0931	4.0	4.0	No	Water additive to promote strong teeth; erosion of natural deposits.
Nitrate (ppm)	2020	NA	NA	0.189	0.189	1.0	1.0	No	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.

Radioactive Contaminants		City of Athens		AMWA					
Contaminant (Unit)	Date Sampled	Average Amount Detected	Range of Detected Levels	Average Amount Detected	Range of Detected Levels	MCL	MCLG	Violation	Likely Source of Contamination
Combined Radium 226 & 228 (pCi/L)	2018	1.5	1.5	NA	NA	5.0	5.0	No	Erosion of natural deposits.

Disinfection By-Products		City of Athens		AMWA					
Contaminant (Unit)	Date Sampled	Average Amount Detected	Range of Detected Levels	Average Amount Detected	Range of Detected Levels	MCL	MCLG	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHM)(ppb)	2020	27.4	8.3 - 40.2	30.2	3.15 - 50.9	80.0	0.0	No	By-product of drinking water disinfection
Total Haloacetic Acids (HAA5) (ppb)	2020	23.6	3.5 - 26.3	26.4	12.0 - 36.3	60.0	0.0	No	By-product of drinking water disinfection

Residual Disinfectant		City of Athens		AMWA					
Contaminant (Unit)	Date Sampled	Average Amount Detected	Range of Detected Levels	Average Amount Detected	Range of Detected Levels	MRDL	MRDLG	Violation	Likely Source of Contamination
Total Chloramine Residual (ppm)	2020	1.95	0.5 - 3.8	3.5	1.9 - 4.3	4.0	<4.0	No	Disinfectant used to control microbes.

Total Coliform Bacteria					
Highest No. of Positive Samples	Maximum Contaminant Level Goal	Total Coliform MCL	Fecal E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	0	0	0	No	Naturally present in the environment

Lead and Copper		City of Athens			
Contaminant (Unit)	Date Sampled	90th Percentile Values	Sites Exceeding Action Level	MCL	Likely Source of Contamination
Lead (ppb)	2020	0.00354	0	15.0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	2020	0.113	0	1.3	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

Unregulated Contaminant Monitoring Rule 4 (UCMR4)		City of Athens		AMWA		
Contaminant (Unit)	Date Sampled	Average Amount Detected	Range of Detected Levels	Average Amount Detected	Range of Detected Levels	Likely Source of Contamination
Chloroform (ppb)	2020	17.5	2.94 - 31.0	17.99	3.15 - 35.3	By-product of drinking water disinfection
Bromodichloromethane (ppb)	2020	5.49	1.14 - 10.3	5.58	5.73 - 13.0	By-product of drinking water disinfection

Unregulated contaminant monitoring is conducted to help the EPA determine where certain parameters occur, and whether those contaminants need to be monitored.

Turbidity		City of Athens			
Contaminant (Unit)		Highest	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest Single Measurement (NTU)		0.46	1 NTU	No	Soil runoff
Lowest Monthly % of Samples Meeting Limits (NTU)		100%	0.3 NTU	No	Soil runoff

Definitions

The charts on the following pages may contain terms and abbreviations with which you are not familiar. To help you better understand these terms we've provided the following definitions:

Action Level (AL) – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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 have been found in our water system.

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 E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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 risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (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 (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.

NA – not applicable.

NTU – nephelometric turbidity units (a measure of turbidity).

Parts per billion (ppb) – micrograms per liter ($\mu\text{g}/\text{l}$) or one ounce in 7,350,000 gallons of water.

Parts per million (ppm) – milligrams per liter (mg/l) or one ounce in 7,350 gallons of water.

Picocuries per liter (pCi/L) – a measure of radioactivity.

