

A close-up photograph of a water filter with water flowing through it. The filter is a cylindrical mesh structure. The water is clear and is captured in mid-pour, creating a smooth, conical stream. The background is a soft, out-of-focus blue. The overall image has a clean, professional aesthetic.

# ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2018

*Presented By*  
**Catoosa Utility  
District Authority**

## Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



“ We remain vigilant in delivering the best-quality drinking water ”

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Matthew Shoemaker, Water Plant Manager and Laboratory Analyst, or Dennis Faulkenberry, Water Plant Operator and Laboratory Analyst, or Randy Thomason, Superintendent, at (706) 937-4121.

## Where Does My Water Come From?

The Catoosa Utility District Authority (CUDA) provides water to its customers from Yates Spring. Our customers are very fortunate to have a clean and pure supply of drinking water. Our water supply is a groundwater source, which means it is not exposed to air and is not subject to direct pollution and contamination like a river or reservoir. In fact, because groundwater is the safest and highest quality water available to meet the public demand of water intended for human consumption, we are able to provide you with water directly from the source.

Throughout the distribution system, we add only, as required, chlorine at 1.5 ppm and fluoride at about 0.85 ppm. Chlorine is added as a precaution against any bacteria that may be present, and fluoride is added to help our teeth be strong. Demand for good, clean water is high; on average, we provide approximately 5 million to 6.5 million gallons of water a day to our customers.

A natural spring like Yates Spring could be vulnerable to underground contaminants and changes that may occur underground. CUDA is well aware of the importance of quality drinking water and the risks associated with our drinking water source. Consequently, CUDA takes every precaution to protect our water from being contaminated. On occasions such as extremely high demand, drought, or emergencies, CUDA purchases water from Tennessee American Water Company (TAWC) and Eastside Utility District (EUD). Both draw surface water from the Tennessee River. We assure you these companies meet or exceed the same strict quality regulations and requirements as we do. If you have any questions or concerns about their water, we have their water quality reports on file at the main office.

## Lead in Home Plumbing

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 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 at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the second and fourth Tuesday of each month beginning at 9 a.m. at the CUDA office at 1058 Old Mill Road, Ringgold, Georgia. Call the office at (706) 937-4121 for information.

## Source Water Assessment

Catoosa Utility District Authority (CUDA) draws water from Yates Spring. CUDA's goal is to ensure our water is protected from contamination. CUDA has developed a source water assessment plan, and Georgia EPD has completed a Well Head Protection Plan for CUDA which looks at different sources of pollution that could affect the Yates Spring. Some sources of pollution are electrical poles, transformers, stormwater runoff, agricultural fields, and petroleum pipelines. Both documents are available for viewing at CUDA's main office at 1058 Old Mill Road, Ringgold, Georgia. If you would like to view these documents, please call our main office at (706) 937-4121 before you visit so that a member of our staff will be available to view the documents with you and answer any questions you may have. CUDA takes all precautions to ensure your source water remains free of pollution. Both TAWC and EUD have also developed a source water assessment plan.



Water sources have been rated as reasonably susceptible (high), moderately susceptible (moderate), or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water source. Both TAWC and EUD have been rated as reasonably susceptible to potential contamination. For information on these ratings, you can contact TAWC at (866) 736-6420 and EUD at (423) 892-2890.

## Table Talk

Get the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

For each substance listed, compare the value in the Level Detected column against the value in the MCL (or AL, SMCL) column. If the Level Detected value is smaller, your water meets the health and safety standards set for the substance.

### Other Table Information Worth Noting

Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

Date Sampled will show on which date the substance was detected. If multiple samples are taken over a period of time, the column will show the range of different sample dates.

The Range column displays the lowest and highest sample readings. If there is an NA showing, that means that only a single sample was taken to test for the substance (assuming there is a reported value in the Level Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Likely Source.





## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES											
				Catoosa Utility District Authority		Eastside Utility District		Tennessee American Water			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2018	15	0	NA	NA	NA	NA	0.111	0.111–0.111	No	Erosion of natural deposits
Barium (ppm)	2018	2	2	0.071	0.071–0.071	NA	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters <sup>1</sup> (pCi/L)	2018	50	0	NA	NA	NA	NA	0.891	0.891–0.891	No	Decay of natural and man-made deposits
Chlorine (ppm)	2018	[4]	[4]	1.49	1.40–1.57	1.63	0.84–2.20	1.48	0.40–2.05	No	Water additive used to control microbes
Fluoride (ppm)	2018	4	4	0.75	0.73–0.79	0.74	0.62–0.88	0.73	0.68–0.81	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2018	60	NA	10.45	ND–14.8	26.13	11.9–39.7	39.7	12.3–41.8	No	By-product of drinking water disinfection
Nitrate (ppm)	2018	10	10	0.88	0.88–0.88	0.322	0.322–0.322	0.30	0.25–0.35	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	26.2	2.6–38.7	37.48	19.2–35.8	67.6	33.4–85.5	No	By-product of drinking water disinfection
Total Coliform Bacteria (Positive samples)	2018	TT	NA	0	NA	0	NA	0	NA	No	Naturally present in the environment
Total Organic Carbon <sup>2</sup> (ppm)	2018	TT	NA	NA	NA	1.16	0.913–1.33	1.43	1.10–1.43	No	Naturally present in the environment
Turbidity (NTU)	2018	TT	NA	0.21 <sup>3</sup>	0.06–0.21	0.72 <sup>4</sup>	0.01–0.72	0.46 <sup>4</sup>	0.02–0.46	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2018	TT = 95% of samples meet the limit	NA	NA	NA	99.9%	NA	99.9%	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

				Catoosa Utility District Authority		Eastside Utility District		Tennessee American Water			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2016	1.3	1.3	0.13	0/30	0.161 <sup>5</sup>	0/30 <sup>5</sup>	0.114	0/54	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2016	15	0	2.6	0/30	1.88 <sup>5</sup>	0/30 <sup>5</sup>	2	0/54	No	Corrosion of household plumbing systems; Erosion of natural deposits

## UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Eastside Utility District		Tennessee American Water		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Sodium (ppm)	2018	6.43	6.43–6.43	5.3	5.1–5.5	Erosion of natural deposits; Used in water treatment

## OTHER UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Eastside Utility District		Tennessee American Water	
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Anatoxin-a (ppb)	2018	<0.0300	ND–0.0300	NA	NA
Cylindrospermopsin (ppb)	2018	<0.0900	ND–0.0900	NA	NA
HAA9 (ppb)	2018	NA	NA	40.0	17.0–45.0
Manganese (ppm)	2018	NA	NA	0.73	ND–1.5
Microcystin–Total (ppb)	2018	<0.300	ND–0.300	NA	NA

<sup>1</sup> The MCL for beta particles is 4 mrem/year. U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

<sup>2</sup> The value reported under Amount Detected for TOC is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC removal requirements.

<sup>3</sup> Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of disinfectants.

<sup>4</sup> Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

<sup>5</sup> Sampled in 2017.

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

**LRAA (Locational Running Annual Average):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

**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.

**MCLG (Maximum Contaminant Level Goal):** 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.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

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