



2022 Annual
**WATER QUALITY
REPORT**

Citico Water Treatment Plant
PWS ID: 0000107

**QUALITY. ONE MORE WAY
WE KEEP LIFE FLOWING.**



**TENNESSEE
AMERICAN WATER**

WE KEEP LIFE FLOWING®

What is a Consumer Confidence Report (CCR)

Once again, we proudly present our Annual Water Quality Report, also referred to as a Consumer Confidence Report (CCR). CCRs let consumers know what contaminants, if any, were detected in their drinking water as well as related potential health effects. CCRs also include details about where your water comes from and how it is treated. Additionally, they educate customers on what it takes to deliver safe drinking water and highlight the need to protect drinking water sources.

We are committed to delivering high quality drinking water service. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, environmental compliance, sustainability and community education while continuing to serve the needs of all our water users.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at 1-866-736-6420.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien al 1-866-736-6420.

Ntawm no yog ib co lus qhia tseem ceeb heev txog koj cov dej seb huv npaum li cas. Yog tias koj xav tau kev pab txhais cov lus qhia no, thov hu rau pib ntawm 1-866-736-6420.

這是關於您的水質的十分重要的資訊。如果您需要幫助翻譯此資訊請致電 **1-866-736-6420** 與我們聯繫。

आपके पानी की गुणवत्ता के बारे में यह बहुत महत्वपूर्ण सूचना है। यदि इस सूचना के अनुवाद के लिए आपको सहायता की जरूरत हो, तो कृपया **1-866-736-6420** र हमें काल करें।

Это очень важная информация о качестве Вашей воды. Если Вам требуется перевод этой информации, позвоните нам по телефону 1-866-736-6420.

Ito ay isang napakahalagang impormasyon tungkol sa kalidad ng iyong tubig. Kung iyong kailangan ng tulong sa pagsalin ng impormasyon na ito, mangyaring tumawag sa amin sa 1-866-736-6420.

Đây là thông tin rất quan trọng về chất lượng nước của quý vị. Nếu quý vị cần thông dịch thông tin này, xin gọi chúng tôi theo số 1-866-736-6420.

TABLE OF CONTENTS

What is a Consumer Confidence Report	2
A message from our President	3
Mark of Excellence	4
About Your Drinking Water Supply	5
What are the Sources of Contaminants?	6
Protecting Your Drinking Water Supply	7
About Lead	8-9
Important Information About Your Water	10-11
• Cryptosporidium	
• Fluoride	
• UCMR	
• PFOA/PFAS	
Water Quality Results	12
Definitions of Terms Used in Document	13
Water Quality Results: Detailed Charts	14-18
Six Ways to Save Water	19
About Us	20
Contact Us	21

A message from **Tennessee American Water's President**



Grant A. Evitts

President, Tennessee
American Water

Dear Tennessee American Water Customer,

Having access to safe, reliable water service is something that can be easily taken for granted. At Tennessee American Water, it's our top priority.

I am pleased to share with you our 2022 Consumer Confidence Report, which is a testament to the hard work and dedication of our employees.

As you read through this annual water quality information, you will see that we continue to supply high quality drinking water service to keep your life flowing. We monitor and test your water at multiple points throughout our process of drawing it from its source, treating it to meet drinking water standards, and distributing it through our pipeline systems. In fact, we test for about 100 regulated contaminants as required by state and federal drinking water standards.

QUALITY: We take water quality so seriously that our water treatment plant has been nationally recognized for over 22 years with Directors Awards from the U.S. Environmental Protection Agency's (EPA) Partnership for Safe Water program for surpassing federal and state drinking water standards. We remain committed to protecting our sources of drinking water. We utilize advanced technology and detection methods that are paving the way for source water protection across the country.

SERVICE: In 2022, we invested over \$27 million to upgrade our water treatment and pipeline systems in the communities we serve. These investments allow us to improve water quality, water pressure, fireflow capacity and service reliability for our customers.

VALUE: While costs to provide water service continue to increase across the country, our investments help us provide high quality water service that remains an exceptional value for such an essential service. We hope our commitment to you and our passion for water shines through in this report detailing the source and quality of your drinking water in 2022. We will continue to work to keep your life flowing – today, tomorrow and for future generations.

Proud to be your local water service provider,

A handwritten signature in blue ink that reads "Grant A. Evitts". The signature is fluid and cursive.

Grant A. Evitts
Tennessee American Water

This report contains important information about your drinking water. Translate it or speak with someone who understands it at (866) 736-6420, Monday-Friday, 7 a.m. to 7 p.m.



ATTENTION: Landlords and Apartment Owners

Please share a copy of this notice with your tenants. It includes important information about their drinking water quality.



Mark of Excellence



EVERY STEP OF THE WAY.

Our team monitors and tests your water at multiple points throughout our process of drawing it from its source, treating it to meet drinking water standards, and distributing it through our pipeline systems. **In fact, American Water performs over one million tests annually for about 100 regulated contaminants, nationwide.**



EXPERTISE. RECOGNIZED AT THE HIGHEST LEVEL.

American Water is an expert in water quality testing, compliance and treatment and has established industry-leading water testing facilities. Our dedicated team of scientists and researchers are committed to finding solutions for water quality challenges and implementing new technologies. We are recognized as an industry leader in water quality and work cooperatively with the EPA so that drinking water standards and new regulations produce benefits for customers and public water suppliers. American Water has earned awards from the EPA's Partnership for Safe Water as well as awards for superior water quality from state regulators, industry organizations, individual communities, and government and environmental agencies.



WATER QUALITY. DOWN TO A SCIENCE.

Our team also has access to American Water's Central Laboratory in Belleville, Illinois, which conducts sophisticated drinking water testing and analysis. American Water scientists refine testing procedures, innovate new methods, and set new standards for detecting potentially new contaminants—even before regulations are in place.



MAINTAINING QUALITY FOR FUTURE GENERATIONS.

Just as Tennessee American Water is investing in research and testing, we also understand the importance of investing in the infrastructure that provides high-quality water service to you. Last year alone, **we invested over \$27 million to improve our water treatment and pipeline systems.**

NOT JUST MEETING DRINKING WATER STANDARDS— SURPASSING THEM.

The EPA regulates about 100 potential contaminants and sets stringent standards for each one. **Tennessee American Water takes water quality so seriously that:**

Tennessee American Water's Citico Plant is a volunteer participant in the US Environmental Protection Agency's Partnership for Safe Water, a national program designed to achieve operational excellence in water treatment for the past 22 years. In 2020 Tennessee American Water was awarded the "20-Year Directors Award". The Partnership for Safe Water program, administered by the EPA and other water related organizations, honors water utilities for achieving operation excellence by voluntarily optimizing their treatment facility operations and adopting more stringent performance goals than those required.





About Your Drinking Water Supply

WHERE YOUR WATER COMES FROM

The Tennessee American Water Citico Water Treatment Plant located in Chattanooga, Tennessee, draws surface water from the Tennessee River. Our goal is to protect our water from contamination, and we are working with the state to determine the vulnerability of our water source to potential contamination. Learn more about local waterways at <https://mywaterway.epa.gov/>. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. The SWAP Report assesses the susceptibility of untreated water sources to potential contamination.

To ensure safe drinking water, all public water systems treat and routinely test their water. 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. Tennessee American Water source is rated as reasonably susceptible to potential contamination.

An explanation of Tennessee's SWAP, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at: <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or contact TDEC at 1-888-891-8332 (1-888-891-TDEC) to obtain copies of specific assessments. Tennessee American Water can also be contacted at 1-866-736-6420 to obtain a copy of the source water assessment specifically for our company.



QUICK FACTS ABOUT THE CHATTANOOGA SYSTEM

Communities served -

In TN: Chattanooga, East Ridge, Elder Mountain, Lookout Mountain, Red Bank, Signal Mountain (wholesale customer)

In GA: Catoosa Utility District Authority (wholesale), Lookout Mountain, Ft. Oglethorpe (wholesale), Rossville, Walker County (wholesale)

Water source:

Tennessee River

Average amount of water supplied to customers on a daily basis: 40 million gallons per day

Disinfection treatment:

surface water supplies are disinfected with chlorine to maintain water quality in the distribution system.



What are the Sources of Contaminants?

To provide tap water that is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) 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 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, aquifers and/or groundwater. 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.

SPECIAL HEALTH INFORMATION

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

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 may 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 may also, come from gas stations, urban storm water runoff, and septic systems.
Radioactive Contaminants	which can be naturally occurring or may be the result of oil and gas production and mining activities.



Protecting Your Drinking Water Supply

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect our shared water resources. This includes utilities, businesses, residents, government agencies and organizations. Everyone who lives, works, and plays in the area has a role and stake in clean water supplies.

WHAT CAN YOU DO?

Quality drinking water starts upstream. Everyone can help maintain and improve drinking water supplies through the following actions:

- Properly dispose of pharmaceuticals, household chemicals, oils and paints. Materials can impact water ways if poured down the drain, flushed down the toilet, or dumped on the ground.
- Check for leaks from automobiles and heating fuel tanks. Clean up any spills using an absorbent material like cat litter. Sweep up the material and put it in a sealed bag. Check with the local refuse facility for proper disposal.
- Clean up after your pets and limit the use of fertilizers and pesticides.
- Take part in watershed activities.

Report any spills, illegal dumping or suspicious activity to the Tennessee Department of Environment & Conservation: 1-888-891-8332 or Ask.TDEC@tn.gov

FOR MORE INFORMATION

To learn more about your water supply and local activities, visit us online at tennesseeamwater.com or contact the regional Source Water Protection Lead, Thalika Hollingsworth at 423-771-4751.

WHAT ARE WE DOING?

Our priority is to provide reliable, quality drinking water service for customers. The source of supply is an important part of that mission. We work to understand and reduce potential risks to your drinking water supply. In addition to the Source Water Protection Plan we have developed under the Tennessee Source Water Assessment Program (SWAP), we work with organizations to support their work in protecting our water sources. We believe that everyone plays a role and by partnering with environmental organizations, we help spread awareness of ways individuals can make a positive impact. Examples of the types of activities we support include river, stream and creek clean ups, “skip the straw” awareness to reduce microplastics, bank stabilization and prevention of run-off, and benefits of gardening with native plants.

Here are a few of the efforts underway to protect our shared water resources:



Community Involvement: We have a proactive public outreach program to help spread the word and get people involved. This includes school education, contests, and other community activities.



Environmental Grant Program: Each year, we fund projects that improve water resources in our local communities.



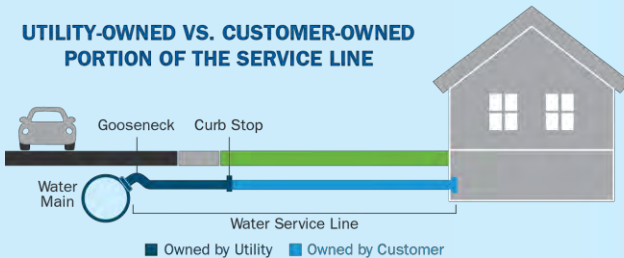
Pharmaceutical Collection: We partner with local law enforcement & drug abuse prevention organizations to sponsor Drug Take Back events in our community. These events as well as local permanent lock boxes offer residents a way to safely dispose of unwanted drugs for free. This helps keep pharmaceutical products from entering water supplies. Learn more [here](#).



About 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. American Water 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>.

UTILITY-OWNED VS. CUSTOMER-OWNED PORTION OF THE SERVICE LINE



Please note: This diagram is a generic representation. Variations may apply.

The most common source of lead in tap water is from the customer's plumbing and their service line.

The utility-owned water mains are not made of lead; however, the water service line that carries the water from the water main in the street to your home could be. Homeowners' service lines may be made of lead, copper, galvanized steel or plastic. You can assess your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve.

MINIMIZING YOUR POTENTIAL EXPOSURE

You cannot see, smell or taste lead, and boiling water will not remove lead. Here are steps you can take to reduce your potential exposure if lead exists in your home plumbing.

CHECK YOUR PLUMBING AND SERVICE LINE

If you live in an older home, consider having a licensed plumber check your plumbing for lead. If your service line is made of lead, and you're planning to replace it, be sure to contact us at 423-771-4749.



1. Flush your taps. The longer the water lies dormant in your home's plumbing, the more lead it might contain. If the water in your faucet has gone unused for more than six hours, flush the tap with cold water for 30 seconds to two minutes before drinking or using it to cook. To conserve water, catch the running water and use it to water your plants.



2. Use cold water for drinking and cooking. Hot water has the potential to contain more lead than cold water. If hot water is needed for cooking, heat cold water on the stove or in the microwave.



3. Routinely remove and clean all faucet aerators.



4. Look for the "Lead Free" label when replacing or installing plumbing fixtures.



5. Follow manufacturer's instructions for replacing water filters in household appliances, such as refrigerators and ice makers, as well as home water treatment units and pitchers. Look for NSF 53 certified filters.



6. Flush after plumbing changes. Changes to your service line, meter, or interior plumbing may result in sediment, possibly containing lead, in your water supply. Remove the strainers from each faucet and run the water for 3 to 5 minutes.





Determining Your Service Line Material

Homeowners' service lines are most commonly made of lead, copper, galvanized steel or plastic. Homes built before 1930 are more likely to have lead plumbing systems.

There are different ways that you can determine if you have a lead service line.

- You can access your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve and identify the pipe material using the chart on the right.
- A licensed and insured plumber can inspect your pipes and plumbing.
- Lead test kits can be purchased at local hardware and home improvement stores. These kits are used to test paint, but can also be used to test pipe – not the water inside. Look for an EPA recognized kit. Wash your hands after inspecting plumbing and pipes.

TYPES OF PIPE

	<ul style="list-style-type: none"> Galvanized: A dull, silver-gray color. Use a magnet - strong magnets will typically cling to galvanized pipes.
	<ul style="list-style-type: none"> Copper: The color of a copper penny.
	<ul style="list-style-type: none"> Plastic: Usually white, rigid pipe that is jointed to water supply piping with a clamp. Note: It can be other colors, including blue and black.
	<ul style="list-style-type: none"> Lead: A dull, silver-gray color that is easily scratched with a coin. Use a magnet - strong magnets will <u>not</u> cling to lead pipes.

YOUR SERVICE LINE MATERIAL

Please note if your service lines contain lead, it does not mean you cannot use water as you normally do. Tennessee American Water continues to meet all state and federal water quality regulations stipulated in the Lead and Copper Rule (<https://www.epa.gov/dwreginfo/lead-and-copper-rule>). We also have a corrosion control program that mitigates interactions between pipe material and distributed water. Our most recent lead and copper program was completed in 2022. All homes with service lines containing lead from our state-approved sampling sites did not exceed the action level for lead. If you're wanting to have your water tested, here's a list of state-approved laboratories for drinking water analyses:

https://www.tn.gov/content/dam/tn/environment/water/drinking-water-unit/wr_wq_dw_approved-commercial-labs.pdf

Plastic	Galvanized	Copper	Lead
			
<p>Color: May be white, black, blue or grey. May have identification on sidewall indicating type of plastic</p> <p>Scratch test: Not needed</p> <p>Magnet: Will NOT stick</p> <p>Coin tap: Non-tinny, sharp noise</p>	<p>Color: Dull gray</p> <p>Scratch test: Dull silver</p> <p>Magnet: WILL stick</p> <p>Coin tap: Tinny noise</p> <p>Note: Galvanized, will have threaded joints</p>	<p>Color: Copper/bronze</p> <p>Scratch test: Shiny copper</p> <p>Magnet: Will NOT stick</p> <p>Coin tap: Tinny noise</p>	<p>Color: Dull gray</p> <p>Scratch test: Bright silvery, easily scratched</p> <p>Magnet: Will NOT stick</p> <p>Coin tap: Dull noise</p> <p>Note: Look for a lead bulb; Not always rigid, look for a bend</p>

 We Need Your Help!

If you know what type your service line material is coming into your house from the street, please email tawleadinginquiries@amwater.com and also include a picture for validation.

Important Information About **Drinking Water**

CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. For more information on Cryptosporidium, contact the Safe Drinking Water Hotline (800-426-4791).

FLUORIDE

Fluoride is a naturally occurring substance. It can be present in drinking water from two sources:

1. **By nature** when groundwater comes into contact with fluoride-containing minerals naturally present in the earth; or
2. **By a water purveyor** through addition of fluoride to the water they are providing in the distribution system.

The Citico System has naturally-occurring fluoride in the source water. The fluoride levels at Citico treatment plant was adjusted to achieve an optimal fluoride level of 0.7 parts per million (ppm) and a control range of 0.6

ppm to 0.9 ppm to comply with the state's Water Fluoridation Standards. The naturally-occurring fluoride levels in the Citico source water is close to optimal levels (approximately 0.1 ppm) and with Citico's fluoride addition, the fluoride levels in the entire system are consistent year-round.

If you have any questions on fluoride, please call Tennessee American Water's Customer Service Center at (866) 736-6420.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR)

The EPA created the Unregulated Contaminants Monitoring Rule (UCMR) to assist them in determining the occurrence of unregulated contaminants in drinking water and whether new regulations are warranted. The first Unregulated Contaminants Monitoring Rule (UCMR1) testing was completed in 2003 for a list of contaminants specified by the EPA. Unregulated contaminants are those for which the EPA has not established drinking water standards. UCMR2 testing was conducted between November 2008 and August 2009, and UCMR3 assessment monitoring was conducted between January 2013 and December 2016. The fourth list of contaminants to monitor as part of the UCMR was published by the EPA in December 2016. UCMR4 testing began in 2018 and continued into 2020. The results from the UCMR monitoring are reported directly to the EPA. The results of this monitoring are incorporated in the data tables in this report as appropriate. For more information, contact our Customer Service Center at 1-866-736-6420.



Important Information About Drinking Water



PFAS

Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals used in many household products including nonstick cookware (e.g., Teflon™), stain repellants (e.g., Scotchgard™), and waterproofing (e.g., GORE-TEX™). They are also used in industrial applications such as in firefighting foams and electronics production. There are thousands of PFAS chemicals, and they persist in the environment. Two well-known PFAS chemicals are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). These were phased out of production in the United States and replaced by hexafluoropropylene oxide-dimer acid (commonly known as GenX), perfluorobutane sulfonic acid (PFBS) and others.

Tennessee American Water has performed voluntary sampling to better understand occurrence of certain PFAS in drinking water sources. This sampling allows us to understand how our water compares against the non-enforceable Health Advisory Level set by U.S. EPA. Sampling also allows Tennessee American Water to be better prepared as U.S. EPA and Tennessee Department of Environment and Conservation are currently developing drinking water standards for PFOA and PFOS. Additionally, in 2024, Tennessee American Water - Citico will be checking our drinking water for 29 PFAS chemicals through our participation in the U.S. EPA Unregulated Contaminant Monitoring Rule program, or UCMR. Through the UCMR program, water systems collect data on a group of contaminants that are currently not regulated in drinking water at the federal level. U.S. EPA uses this information when deciding if it needs to create new drinking water limits.

The science and regulation of PFAS and other contaminants is always evolving, and Tennessee American Water strives to be a leader in research and development. PFAS contamination is one of the most rapidly changing areas in the drinking water field. We have invested in our own independent research, as well as engaging with other experts in the field to understand PFAS occurrence in the environment. We are also actively assessing treatment technologies that can effectively remove PFAS from drinking water, because we believe that investment in research is critically important to addressing this issue.



American Water has a history of leading research to understand contaminants that can make their way through the environment. Our dedicated scientists work with leaders in the water community to develop methods to detect, sample, measure and address these contaminants. Because investment in research is critical to address PFAS, American Water actively assesses treatment technologies that can effectively remove PFAS from drinking water.

Lauren A. Weinrich, Ph.D.
Principal Scientist



Water Quality Results

WATER QUALITY STATEMENT

We are pleased to report that during calendar year 2022, the results of testing of your drinking water complied with all state and federal drinking water requirements.

For your information, we have compiled a list in the table below showing the testing of your drinking water during 2022. The Tennessee Department of Environment and Conservation (TDEC) allows us to monitor for some contaminants less than once per year because the concentration of the contaminants does not change frequently. Some of our data, though representative, are more than one year old.

EVER WONDER WHY OR WHAT ABOUT DRINKING WATER?

Below are links to YouTube videos and the topics they address. The videos are short - around 1 minute long with subtitles. Click on the links to learn more!

Taste and Smell of Water Explained:

<https://youtu.be/a4uaaxTOWoE>

Sulfur Smell Explained:

https://youtu.be/DX0EYWnB_ek

Chlorine in Drinking Water:

<https://youtu.be/QUaldDT7nEg>

Cloudy Water Explained:

<https://youtu.be/uYkCcW9RE4c>

Residue from Water Explained:

https://youtu.be/x7_pwehvgmA

Toilet Leaks:

<https://youtu.be/OzlrOfYgzY>

Lead in Drinking Water:

<https://youtu.be/xNihqfuyhaA>

Fluoride in Drinking Water:

<https://youtu.be/g-03JCe9AjY>

Discolored Water Explained:

<https://youtu.be/W21NUWP9oa8>

What are PFAS?:

https://youtu.be/vWoOtHOVb_c

CONTACT INFORMATION

This CCR was prepared by TNAW Water Quality Team. If you have questions about this report, you want additional information about your drinking water, or want to know how to participate in local activities that may help protect the quality of your drinking water, please contact: Lori Stenzel, Manager, Water Quality & Environmental Compliance, email: lori.stenzel@amwater.com or phone: (423) 771-4705.



Definition of Terms

These are terms that may appear in your report.

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, that 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.

LRAA: Locational Running Annual Average

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. See also Secondary Maximum Contaminant Level (SMCL).

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 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.

MFL: Million fibers per liter.

micromhos per centimeter ($\mu\text{mhos/cm}$): A measure of electrical conductance.

NA: Not applicable

ND: Not detected

Nephelometric Turbidity Units (NTU): Measurement of the clarity, or turbidity, of the water.

pH: A measurement of acidity, 7.0 being neutral.

picocuries per liter (pCi/L): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

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

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

parts per trillion (ppt): One part substance per trillion parts water, or nanograms per liter.

Secondary Maximum Contaminant Level (SMCL): Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

TON: Threshold Odor Number

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

%: Percent

MEASUREMENTS

Parts Per Million



in a 10 gallon fish tank

Parts Per Billion



in a 10,000 gallon swimming pool

Parts Per Trillion



in 35 junior size Olympic pools

Water Quality Results

Tennessee American Water conducts extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables. While most monitoring was conducted in 2022, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting the tables below, see the “Definition of Terms” on the previous page. Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

NOTE: Regulated contaminants not listed in this table were not found in the treated water supply.

LEAD AND COPPER MONITORING PROGRAM - At least 50 tap water samples collected at customers' taps every 3 years

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Action Level (AL)	90 th Percentile	Range	No. of Homes Sampled	Homes Above Action Level	Typical Source
Lead (ppb)	2022	Yes	0	15	2	<1 - 8	50	0	Corrosion of household plumbing systems.
Copper (ppm)	2022	Yes	1.3	1.3	0.072	<0.025 - 0.098	50	0	Corrosion of household plumbing systems.

DISINFECTION BYPRODUCTS - Collected in the Distribution System

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Level Detected (Max LRAA)	Range Detected	Typical Source
Total Trihalomethanes (TTHMs) (ppb)	2022	Yes	NA	80	62.1	24.9 - 60.0	By-product of drinking water disinfection.
Haloacetic Acids (HAAs) (ppb)	2022	Yes	NA	60	30.5	11.9 - 35.9	By-product of drinking water disinfection.

NOTE: Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Range Detected reflects all samples from this year used to calculate the running annual average. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

DISINFECTANTS - Collected in the Distribution System and at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Compliance Result	Range Detected	Typical Source
Chlorine (ppm) (Distribution System)	2022	Yes	MRDLG = 4	4	1.52 ¹	0.61 - 2.16	Water additive used to control microbes.
Chlorine (ppm) (Entry point)	2022	Yes	MRDLG=4	4	1.58 ²	1.58 - 2.25	Water additive used to control microbes.

1-Data represents the highest quarterly running annual average of chlorine residuals measured in distribution system of compliance samples.

2-Data represents the lowest residual entering the distribution system from our surface water treatment plant.

TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Range of % Removal Required	Range of Removal Achieved	Number of Quarters out of compliance	Typical Source
Total Organic Carbon (ppm)	2022	Yes	NA	TT: \geq 25%-45% removal	25% to 67%	0	Naturally present in the environment.

The treatment technique requirement for Total Organic Carbon was met 100% of the time in 2022. Alternative Compliance criteria value used in place of calculated value in some quarters since source or treated water TOC was less than 2.0 mg/L.

TURBIDITY - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Amount Detected	Range Detected	Typical Source
Turbidity ¹ (NTU)	2022	Yes	0	TT: Single result >1NTU	0.28	0.02 - 0.28	Soil runoff.
	2022	Yes	NA	TT: At least 95% of samples <0.3 NTU	100%	NA	Soil runoff.

1-Turbidity is a measure of the cloudiness of the water. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system. During 2022, 100% of all samples taken to measure turbidity met water quality standard of less than 0.3 NTU. Turbidity in excess of 5 NTUs is just noticeable to the average person.

REGULATED SUBSTANCES

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Compliance Result	Range Detected	Typical Source
Fluoride ¹ (ppm) (Distribution)	2022	Yes	4	4	0.68	0.65 - 0.70	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate ² (ppm) (Entry point)	2022	Yes	10	10	0.27	0.19 - 0.27	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.

1-Fluoride compliance result is the average of quarterly distribution samples.

2-Nitrate compliance result is the highest result achieved in 2022 at the entry point.

OTHER SUBSTANCES OF INTEREST - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Limit	Average Amount Detected	Range Detected	Comments
Iron ¹ (ppm)	2022	NA	NA	NA	<0.10	<0.10	Secondary standard limit = 0.3 mg/L
Manganese ¹ (ppm)	2022	NA	NA	NA	<0.010	<0.010	Secondary standard limit = 0.05 mg/L
Sodium ² (ppm)	2022	NA	NA	NA	8.5	8.1 - 8.8	Erosion of natural deposits; used in water treatment
Chloride ¹ (ppm)	2022	NA	NA	NA	11.6	11.4 - 11.7	Secondary standard limit = 250 mg/L
Hardness (ppm)	2022	NA	NA	NA	75	60 - 92	Soft 0 - 60 mg/L Moderately Hard 61 - 120 Hard 121 - 180 Very Hard greater than 180
Hardness (grains/gal)	2022	NA	NA	NA	4.4	3.5 - 5.4	Naturally occurring
pH ¹	2022	NA	NA	NA	7.3	7.1 - 7.5	Secondary standard limit = 6.5 - 8.5
Temp ³ (Celsius)	2022	NA	NA	NA	20.9	10.0 - 29.5	
Total Dissolved Solids ¹ (ppm)	2022	NA	NA	NA	65	54 - 76	Secondary standard limit = 500 mg/L
Zinc ¹ (ppm)	2022	NA	NA	NA	0.19	0.14 0.24	Secondary standard limit = 5.0 mg/L

1-Substances with Secondary MCLs do not have MCLGs and are not legally enforceable; these limits are primarily established to address aesthetic concerns.

2-For healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

3-Temp. is the temperature of the effluent water

UNREGULATED CONTAMINANT MONITORING

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored. For additional information call the Safe Drinking Water Hotline at (800) 426-4791.

ADDITIONAL WATER QUALITY PARAMETERS OF INTEREST					
Parameter	Units	Years	Average Result	Range Detected	Typical Source
Bromochloroacetic Acid	ppb	2018, 2019	2.1	0.8 - 3.4	By-product of drinking water disinfection
Bromodichloroacetic acid	ppb	2018, 2019	2.8	1.5 - 4.1	By-product of drinking water disinfection
Chlorodibromoacetic acid	ppb	2018, 2019	0.08	<0.3 - 0.4	By-product of drinking water disinfection
Dibromoacetic Acid	ppb	2018, 2019	0.05	<0.3 - 0.47	By-product of drinking water disinfection
Dichloroacetic Acid	ppb	2018, 2019	8.9	3.6 - 15	By-product of drinking water disinfection
Monobromoacetic Acid	ppb	2018, 2019	0.04	<0.3 - 0.32	By-product of drinking water disinfection
Total Haloacetic Acids	ppb	2018, 2019	23	11 - 38	By-product of drinking water disinfection
Total Haloacetic Acids - Br	ppb	2018, 2019	5.1	2.7 - 7.9	By-product of drinking water disinfection
Total Haloacetic Acids-UCMR4	ppb	2018, 2019	28	13 - 45	By-product of drinking water disinfection
Trichloroacetic Acid	ppb	2018, 2019	13.5	7.1 - 23.0	By-product of drinking water disinfection
Manganese	ppb	2018, 2019	0.6	<0.4 - 1.5	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element.

Haloacetic acids test were performed on water in the distribution system.

Manganese test was performed on effluent water leaving the treatment plant and has a Secondary MCL of 50 ppb.

PFAS

Tennessee American Water has performed voluntary sampling to better understand the occurrence of certain PFAS in drinking water sources. This sampling allows us to understand how our water compares against the non-enforceable Health Advisory Level set by U.S. EPA. Sampling also allows Tennessee American Water to be better prepared as U.S. EPA and Tennessee Department of Environment and Conservation are currently developing drinking water standards for PFOA and PFOS.

UNREGULATED PFAS CHEMICALS					
Parameter	Year Sampled	Units	Highest Result	Range Detected	Typical Source
Perfluorooctanoic acid (PFOA)	2022	ppt	5.9	ND - 5.9	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorooctane sulfonic acid (PFOS)	2022	ppt	9.5	2.3 - 9.5	
Hexafluoropropylene oxide-dimer acid GenX	2022	ppt	ND	ND	
Perflurorbutane sulfonic acid (PFBS)	2022	ppt	44.1	3.1 - 44.1	
Perflurorbutanoic acid (PFBA)	2022	ppt	13.6	3.0 - 13.6	
Perfluorodecanoic acid (PFDA)	2022	ppt	ND	ND	
Perfluoroheptanoic Acid (PFHpA)	2022	ppt	2.4	ND - 2.4	
Perfluorohexanoic Acid (PFHxA)	2022	ppt	3.9	ND - 3.9	
Perfluoropentanoic Acid (PFPeA)	2022	ppt	4.9	ND - 4.9	

PFAS are currently not regulated in Tennessee. In 2022, U.S. EPA set health advisory levels for four PFAS chemicals – PFOA (0.004 part per trillion (ppt), PFOS (0.02 ppt), GenX (10 ppt), and PFBS (2,000 ppt). Based on current analytical methods, however, the health advisory levels for PFOA and PFOS are below the level of both detection (determining whether or not a substance is present) and quantitation (the ability to reliably determine how much of a substance is present). This means that it is possible for PFOA or PFOS to be present in drinking water at levels that exceed health advisories even if testing indicates no level of these chemicals. U.S. EPA is currently developing drinking water regulations for PFOA or PFOS that take these challenges into consideration and Tennessee American Water will take appropriate actions to meet any new regulations. Finally, PFAS chemicals are unique, therefore, two PFAS chemicals at the same level typically do not present the same risk. Therefore, you should not compare the results for one PFAS chemical against the results of another. For more information on PFAS, please visit: <https://www.amwater.com/resources/pdf/american-water-PFAS.pdf>



Every Drop Counts

Six Simple Steps to Save Water



Fix any leaking faucets.

One drop every 2 seconds from a leaky faucet wastes 2 gallons of water every day. That's water — and money — down the drain.



Don't let faucets run when brushing, shaving, or washing the dishes. Just turning off the water while you brush can save 200 gallons a month.



Run washing machines and dishwashers only when they are full, or select the properly-sized wash cycle for the current laundry load.



Install water-saving shower heads and faucet aerators in the bathroom and kitchen (available at most home improvement stores and some supermarkets).



Don't wash your car at home. A car wash uses much less water and often recycles it, too.



Turn off automatic lawn and garden sprinklers when it's raining outside and at the end of the growing season.



About Us

With a history dating back to 1886, **American Water Works Company, Inc.** (NYSE: AWK) is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 7,000 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to 15 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing.

Tennessee American Water, a subsidiary of American Water, is the largest investor-owned water utility in the state, providing high-quality and reliable water service to approximately 380,000 residents in Tennessee and northern Georgia. For more information, visit tennesseeamwater.com and follow us on Twitter, Facebook, Instagram and YouTube.



TENNESSEE AMERICAN WATER FACTS AT A GLANCE

- **COMMUNITIES SERVED**
14 communities in three TN counties (Hamilton, Marion & Sequatchie), two GA counties (Walker & Catoosa) and including Sale for Resale Customers (Signal Mountain, TN; Ft. Oglethorpe, GA; Catoosa Utility District Authority, GA; Walker County Water Authority)
- **PEOPLE SERVED**
Approximately 380,000 residents in Tennessee and northern Georgia (88% residential, 11% commercial/Industrial, 1% public entities such as schools, hospitals, government facilities)
- **EMPLOYEES**
110
- **TREATMENT FACILITIES**
Two surface water treatment plants and one groundwater source
- **MILES OF PIPELINE & OTHER DISTRIBUTION FACILITIES**
 - Miles of pipe: 1,443 miles
 - Hydrants: 5,723
 - Valves: 19,609
- **Storage and transmission**
 - Boosters: 33
 - Tanks: 38

How to Contact Us

If you have any questions about this report, your drinking water, or service, please contact Tennessee American Water's Customer Service Center Monday to Friday, 7 a.m. to 7 p.m. at 1-866-736-6420.



WATER INFORMATION SOURCES

Tennessee American Water
www.tennesseeamwater.com

Tennessee Department of Environment and Conservation(TDEC):
www.tn.gov/environment

United States Environmental Protection Agency (USEPA):
www.epa.gov/safewater

Safe Drinking Water Hotline: (800) 426-4791

Centers for Disease Control and Prevention: www.cdc.gov

American Water Works Association: www.awwa.org

Water Quality Association: www.wqa.org

National Library of Medicine/National Institute of Health:
www.nlm.nih.gov/medlineplus/drinkingwater.html

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at 1-866-736-6420.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at 1-866-736-6420.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien al 1-866-736-6420.

Ntawm no yog ib co lus qhia tseem ceeb heev txog koj cov dej seb huv npaum li cas. Yog tias koj xav tau kev pab txhais cov lus qhia no, thov hu rau peb ntawm 1-866-736-6420.

這是關於您的水質的十分重要的資訊。如果您需要幫助翻譯此資訊請致電 **1-866-736-6420** 與我們聯繫。

आपके पानी की गुणवत्ता के बारे में यह बहुत महत्वपूर्ण सूचना है। यदि इस सूचना के अनुवाद के लिए आपको सहायता की जरूरत हो, तो कृपया **1-866-736-6420** र हमें काल करें।

Это очень важная информация о качестве Вашей воды. Если Вам требуется перевод этой информации, позвоните нам по телефону 1-866-736-6420.

Ito ay isang napakahalagang impormasyon tungkol sa kalidad ng iyong tubig. Kung iyong kailangan ng tulong sa pagsalin ng impormasyon na ito, mangyaring tumawag sa amin sa 1-866-736-6420.

Đây là thông tin rất quan trọng về chất lượng nước của quý vị. Nếu quý vị cần thông dịch thông tin này, xin gọi chúng tôi theo số 1-866-736-6420.