

Cherokee County

2019 Annual Water Quality Report

Presented by the

(January 1, 2019 through December 31, 2019)

Cherokee County Water & Sewerage Authority

Georgia Water System I.D. Number:

(GA) - 0570002

Cherokee's Safe and Sustainable Water Begins Here!



Water Quality Surpasses All Standards

Cherokee County Water and Sewerage Authority is proud of the fine drinking water it provides. This annual water quality report shows the source of our water, lists the results of our tests, and contains much important information about water and health.

We are proud to report that the water provided by Cherokee County Water and Sewerage Authority meets or exceeds established water quality standards.

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Board Meetings are held the last Monday of each month at 110 Railroad Street. Even numbered months at 4:00 pm. Odd numbered months at 9:00 am. Please call for the holiday schedule. The public is welcome.

Find out more about Cherokee County Water and Sewerage Authority on the Internet at www.ccwsa.com.

Health Information

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 at (800) 426-4791.

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:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. 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.
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses.
- D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff, and septic systems.
- E. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- F. 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. Cherokee County Water and Sewerage Authority 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 EPA's website: <http://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water>

The Environmental Protection Agency (EPA) and Food and Drug Administration (FDA) are both responsible for the safety of drinking water. EPA regulates public drinking water (tap water), while FDA regulates bottled drinking water.

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/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.

Freese and Nichols, Inc. was contracted by Cherokee County Water and Sewerage Authority in 2017 to complete a source water assessment itemizing potential sources of surface water pollution to your drinking water supply. Your drinking water is supplied from the Etowah River. A Source Water Assessment is a study and report that provides the following information:

- Identifies the area of land that contributes the raw water used for drinking water.
- Identifies potential sources of contamination to the drinking water supply.
- Provides an understanding of the drinking water supply's susceptibility to contamination.

The results of this assessment can be found on the Internet at <http://ccwsa.com/water/source-water-assessment/> or you can request information by mail from CCWSA.

Attn: Lori Forrester—Public Information Manager
P.O. Box 5000
Canton, GA 30114

An Explanation of the Water Quality Data Table

The table shows the results of our water quality analyses. **Every regulated contaminant that we detected in the water, even in the minutest traces, is listed here.** This table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement.

Definitions of MCL and MCLG are important.

Maximum Contaminant Level or 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 or 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.*

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

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

The data presented in this report is from the most recent testing done in accordance with regulations.

Key To Table: AL=Action Level; MCL=Maximum Contaminant Level; MCLG=Maximum Contaminant Level Goal; NTU=Nephelometric Turbidity Units; ppm=parts per million, or milligrams per liter (mg/l); one part per million is equivalent to one minute in 2 years or one penny in 10 thousand dollars; ppb=parts per billion: one part per billion is equivalent to one minute in 2,000 years or one penny in 10 million dollars; or micrograms per liter (µg/l); TT=Treatment Technique; N/A=not applicable

WATER QUALITY TABLE

| Contaminant | Year tested | Unit | MCL/ MRDL | MCL G | Average/ Result | Range | Major Sources | Violation |
|--------------------------------|-------------|------|-----------|-------|-----------------|-----------------------|---|-----------|
| Inorganic | | | | | | | | |
| Copper ¹ | 2018 | ppb | AL = 1300 | 0 | 43.5 | 5.3–180 50 samples | Corrosion of household plumbing systems; Erosion of Natural deposits; Leaching from wood preservatives. | NO |
| Fluoride ² | 2019 | ppm | 4 | 4 | 0.72 | 0.60–0.84 | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories | NO |
| Lead ³ | 2018 | ppb | AL=15 | 0 | 2.1 | 0-21 50 samples | Corrosion of household plumbing systems | NO |
| Nitrate /Nitrite ⁴ | 2019 | ppm | 10 | 10 | 0.34 | N/A | Runoff from fertilizer use; Leaching from septic tanks; sewage ; Erosion of natural deposits | NO |
| Chlorine | 2019 | ppm | 4 | N/A | 1.8 | 0.2-1.8 | Drinking water additive used for disinfection | NO |
| Organic | | | | | | | | |
| TOC [Total Organic Carbons] | 2019 | ppm | TT | N/A | 0.66 | 0.00-0.99 | Naturally present in the environment | NO |
| Turbidity ⁵ | 2019 | NTU | TT=1 | 0 | 0.14 | 0.03-0.14 | Soil runoff | NO |
| Volatile Organic | | | | | | | | |
| TTHMs[Total Trihalomethanes] | 2019 | ppb | 80 | 0 | 44.0 | 20.1-56.3 | By-product of drinking water disinfection. | NO |
| HAAs [Haloacetic Acids] | 2019 | ppb | 60 | 0 | 31.5 | 19.5-42.0 | By-product of drinking water disinfection. | NO |

Water Quality Data Table Footnotes: 1—No sites exceeded the Action Level (AL). 2—Fluoride is added to the drinking water to help in the prevention of dental cavities (caries) in children. 3—Of the 50 sites tested, none exceeded the Action Level (AL). 4—Nitrate and Nitrite are measured together. 5— Turbidity is the measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of monthly samples must be below 0.30 NTU. During the reporting year, 100% of all samples taken to measure turbidity met water quality standards.

Compliance with other Drinking Water Regulations

Although we ran many tests, only the listed substances were found. They are all below the MCL required

Table Continued

| Microbiological Contaminants | Sample Dates | MCL | MCLG | Level 1 Assessment Trigger ⁶ | Level Detected | Likely Source | Violation |
|------------------------------|--------------------------------|-----|------|---|---|--------------------------------------|-----------|
| Total Coliform | Jan. 1, 2019– Dec. 31, 2019 | TT | TT | Exceeds 5.0% TC+ samples in a month | 1% Total Coliform Positive in February 2018 (TC+) | Naturally Present in the environment | NO |
| E.coli | Jan. 1, 2019– Dec. 31, 2019 | 0 | 0 | n/a | 0 positive | Human or animal fecal waste | NO |

6 - A PWS will receive an E.coli MCL violation when there is any combination of an EC+ sample result with a routine/repeat TC+ or EC+ sample result. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. E.coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes.

“FROM TODAY’S YOUTH COME TOMORROW’S LEADERS – LET’S LEAD SOME TO THE WATER PROFESSION!”



The Cherokee County Water and Sewerage Authority (CCWSA) received several awards from the Georgia Association of Water Professionals (GAWP). The Etowah Water Treatment Plant received Best Operated Water Plant of the year – Surface Water 15 MGD to 49.99 MGD, the Rose Creek Water Pollution Control Facility received Water Reclamation Facility of the year award- Advanced treatment 6.0 MGD – 9.9 MGD and the Riverbend Complex received Water Reclamation Facility of the year award – Advanced treatment 1 MGD or less. The Etowah Water Treatment Plant received a Platinum Award for complete and consistent Safe Drinking Water Act permit compliance for the 4th year in a row. Two of the wastewater plants Rose Creek and Fitzgerald Creek received Platinum awards for complete and consistent National Pollution Discharge Elimination System (NPDES) permit compliance for the 9th year in a row. The newest wastewater plant Riverbend Complex received a Gold Award for complete and consistent NPDES permit compliance for 2018. The awards were presented at the April 2019 board meeting.

This is the mission statement of the planning committee for GAWP’s Model Water Tower Competition. This annual competition was hosted in Cherokee County for the second-time on March 6th, 2020 at E.T. Booth Middle School. This STEM activity focuses on students learning complex concepts such as hydraulic and structural efficiency while thinking green and using recycled materials. The competition has expanded to include 3 schools: E.T. Booth, Creekland and Mill Creek Middle School. Approximately 140 students are participating in the competition. They will have a total of 8 weeks to plan, design, and build their water towers. There will be 8 model water towers advancing to the county competition from each school. At the county competition prizes will be given for 1st, 2nd and 3rd plus multiple superlatives. The winning school will receive a water drop trophy. We are looking forward to this competition being a part of our educational programs for the coming years.

Water Source

Cherokee County Water and Sewerage Authority is supplied by surface water from the Etowah River and is treated at Etowah River Water Treatment Facility, 583 Coker’s Chapel Road. The Cherokee County Water and Sewerage Authority also purchases treated water from Cobb County –Marietta Water Authority and City of Woodstock.

Why is the Etowah Important?

The Upper Etowah River Watershed courses through five North Georgia counties: Lumpkin, Dawson, Forsyth, Pickens, Cherokee. The streams and rivers in the Etowah watershed provide drinking water for residents and also support agriculture, industry and recreation. Responsible stewardship of this amazing resource is necessary to ensure its many values are protected FOREVER!



Georgia's Streams Need Your Help. Source water quality is affected by the activities of individuals living in the watershed. Two programs that work to maintain source water quality, and in which individuals can be involved, are Georgia Adopt-A-Stream and Rivers Alive. Georgia Adopt-A-Stream is a volunteer water-quality monitoring program that teaches individuals how to monitor local waterways chemically, physically and biologically. Rivers Alive sponsors annual volunteer cleanup events where individuals work to physically remove trash that has found its way into the waterway. To learn more visit <https://adoptastream.georgia.gov/> and <https://riversalive.georgia.gov/> or contact Lori Forrester, CCWSA Public Information Specialist, at 770-479-1813 Ext. 246.

For more information, call Cherokee County Water and Sewerage Authority at (770) 479-1813, x246, Lori Forrester, CCWSA Public Information Specialist. Water Quality Data for community water systems throughout the United States is available at www.waterdata.com. Learn more about the Cherokee County Water and Sewerage Authority water system at www.ccwsa.com.