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) – 0570075

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 for Salacoa Area Water System shows the source of our water, lists the results of our tests, and contains important information about water and health.

We are proud to report that the water provided by Cherokee County's Salacoa Area Water System 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 live-stock 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 the Federal 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 atriskfrom 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 Nicchols, 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.

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; 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	MCLG	Average/ Result	Range	Major Sources	Violation
Inorganic Contaminants								
Copper ¹	2019	ppb	AL = 1300	0	230	36-340 5 samples	Corrosion of household plumbing systems; Erosion of Natural deposits; Leaching from wood preservatives.	NO
Fluoride ²	2019	ppm	4	4	0.70	0.59-0.83	Erosion of natural deposits; Water additive which promotes; Discharge from fertilizer and aluminum factories	NO
Lead ³	2019	ppb	AL=15	0	0.65	0-1.3 5 samples	Corrosion of household plumbing systems	NO
Nitrate /Nitrite 4	2019	ppm	10	0	2.10	0.44-2.10	Runoff from fertilizer use; Leaching from septic tanks; sewerage ; Erosion of natural deposits	NO
Chlorine	2019	ppm	4	N/A	1.2	0.2-1.2	Drinking water additive used for disinfection	NO
Volatile Organic								
TTHMs[Total Trihalomerthames]	2019	ppb	80	0	12.2	1.3-12.2	By-product of drinking water disinfection.	NO
HAAs [Haloacetic Acids]	2019	ppb	60	0	3.9	1.1-3.9	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 5 sites tested, none exceeded the Action Level (AL). 4—Nitrate and Nitrite are measured together.

Compliance with other Drinking Water Regulations
Although we ran many tests, only the listed substances were found. They are all below the MCL required

Microbiological Contaminants	Sample Dates	MCL	MCLG	Level 1 Assessment Trigger 5	Level Detected	Likely Source	Violation
Total Coliform	Jan. 1, 2019— Dec. 31, 2019	TT	TT	Exceeds 5.0% TC+ samples in a month	0% Total Coliform Positive (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

5 - 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.



Winning Team from E.T. Booth MS team—"Snow Day" L to R—D.J. Oakes, Rhys Moritz, Carson Mierzejewski and Jack Novack

Water Source

The Cherokee County-Salacoa Area Water System purchases water from The Pickens County Water & Sewer Authority. The sources of Pickens County Water are purchased from: The City of Calhoun, The City of Jasper, The Cherokee County Water & Sewerage Authority and Big Canoe Mt. Resort. You may obtain a copy of Pickens County's water Quality report by contacting Mr. Phillip Dean, Director of Utilities at 706-253-8718, via e-mail: pdean@pickencountyga.gov, or thru the website: www.pickenscountyga.gov

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!

FROM TODAY'S YOUTH COME TOMORROW'S LEADERS - LET'S LEAD SOME TO THE WATER PROFESSION!" This is the mission statement of the planning committee for Georgia Association for Water Professionals (GAWP) Model Water Tower Competition (MWTC). This annual competition was hosted by Cherokee County Water and Sewerage Authority (CCWSA) 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 expanded to include 3 schools this year: E.T. Booth, Creekland and Mill Creek Middle School. Approximately 150 students participated in the competition. They had a total of 8 weeks to plan, design and build their water towers. Each school had engineering professionals mentoring them along the way with design, structure and functionality of the towers. Eight model water towers advanced to the county competition from each school. Prizes were given for 1st, 2nd and 3rd place plus superlatives. E.T. Booth MS's water tower "Snow Day" took home the 1st place prize. Mrs. Reeder, from E.T. Booth, can proudly display the district MWTC waterdrop trophy. In total \$4000 was invested into the MWTC from CCWSA, CedarChem, Bermex, Hayes Pipe Supply Inc, Freese & Nichols, Brown & Caldwell, Engineering Strategies Inc and Hazen & Sawyer. Thank you to all the volunteers that made the competition possible by judging and leading student activities. We are looking forward to this competition being a part of our educational programs for years to come.



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.