Cherokee County-Salacoa Area Water System 2016 Annual Water Quality Report Presented by the January 1, 2016 thru December 31, 2016

Cherokee County Water & Sewerage Authority Georgia Water System I.D. Number: (GA) - 0570075 Safe Drinking Water... Is Everyone's Business



Water Quality Surpasses All Standards

herokee County Water and Sewerage Authority is proud of the fine drinking water it provides. This annual water quality report for the Salacoa Area Water System 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'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.

See Our Water Quality Data Table On the Back.

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 naturallyoccurring 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 naturallyoccurring 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.

(Continued on Back) 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

http://www.georgiaadoptastream.com and http://www.riversalive.com or contact Lori Forrester, CCWSA Public Information Specialist, at 770-479-1813 Ext. 246. http://www.georgiaadoptastream.com/

Water Source

The Cherokee County- Salacoa Area Water System purchases water from The Pickens County Water & Sewer Authority. Pickens County Water sources are purchased water from: The City of Calhoun, The City of Jasper, The Cherokee County Water 7 Sewerage Authority and Big Canoe Mt. Resort. You may obtain a copy of Pickens County's water Ouality report by contacting Mr. Larry Coleman, Director of Utilities at 706-253-8718, via e-mail: lcoleman@pickencountyga.gov, or thru the website: www.pickenscountyga.gov

The Cherokee County Water and Sewerage Authority and the Atlanta Regional Commission have completed 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 which provides the following information:

- Identifies the area of land that contributes the raw water used for drinking water;
- Identifies potential sources of contamination to drinking water supplies; and
- 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 Specialist P.O. Box 5000

Canton, GA. 30114

Two Hundred Ten (210) Potential Point Sources of Pollution were identified during the Source Water Assessment of the Etowah River Watershed. These, along with the non-point source pollution considerations were combined to determine an Overall Watershed Susceptibility Ranking for each watershed. The Metro Source Water Assessments Watersheds with greater than 20% impervious surface were ranked High, between 10% and 20% ranked Medium, and less than 10% ranked Low for potential non-source pollutants. The overall watershed susceptibility ranking for our Drinking Water Supply Watershed is Medium.

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!

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

www.waterdata.com . Learn more about the Cherokee County Water and Sewerage Authority water system at www.ccwsa.com .

2016 Water Quality Report

An Explanation of the Water Quality Data Table

The table shows the results of our water quality analyses. 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.

This table list all the regulated drinking water contaminants detected during the calendar year. The EPA and/or the State require us to monitor for certain contaminates less than once per year because the concentrations of these contaminants change infrequently. Therefore; some of the data represented in this report is greater than one year old. All testing is 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 (μ g/l); TT=Treatment Technique; N/A=not applicable

Warter Quality Data Table								
Contaminant	Date Tested	Unit	MCL / MRDL	MCLG	Average / Results	Range	Major Sources	Violation
Inorganic Contaminants Copper (1)	2016	ppb	AL=1300	0	265	22-270 5 samples	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives. Next test Sept.2016 see NOTE	NO
Fluoride (2)	2016	ppm	4	4	0.82	0.61 - 0.82	aluminum factories.	NO
Lead (3)	2016	ppb	AL=15	0	0.75		Corrosion of household plumbing systems. Erosion of natural deposits Next test Sept. 2016 see NOTE	NO
Nitrate	2016	ppm	10	10	1.8	0.65-1.9	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	NO
Chlorine	2016	ppm	4	4	1.2	0.2 - 1.2	Drinking water additive used for disinfection.	NO
Volatile Organic								
TTHMs [Total Trihalomethanes]	2016	ppb	80	0	22.7	1.7 - 5.9	By-product of drinking water disinfection.	NO
HAAs [Haloacetic Acids]	2016	ppb	60	0	2.3	0 - 2.3	By-product of drinking water disinfection.	NO

Water Quality Data Table Footnotes: (1) No sites exceeded the Action Level (AL) Next round of test due in 2019. (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). Next round of test due in 2019. (See NOTE below)

Health Information... (Continued from Front)

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

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

NOTE: If your home was built before 1/1/1983 or between the years of 1/1/1983 and 6/19/1988 and contains copper pipe with lead solder and you would like to participate in future Lead and Copper testing surveys, please call Joel McFarland –Cherokee County Water Laboratory Manager at 770479-2911 X 244 BEFORE our next round of sampling in September, 2019.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. For more information call the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791)

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.**

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and begin compliance with a new rule, the Revised Total Coliform Rule, April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level (MCL) violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the Public Water System (PWS). The regulated status of E. coli did not change under the RTCR, and the MCL for E coli remains the same, but requires a Level 2 assessment to provide a more thorough investigation of the cause.

Jan 1, 2016 – Mar 31, 2016								
Microbiological Contaminants								
Contaminant	MCL	MCLG	Highest level detected (%)	Sample Dates	Violation	Typical source		
Total coliform bacteria	>1 Total coliform positive samples during a monthly sampling period*	0	0	Jan1, 2016 – Mar 31, 2016	NO	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially - harmful, bacteria may be present.		
Escherichia coli (E. coli) bacteria		0	0	Jan1, 2016 – Mar 31, 2016	0	<i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes		

Apr 1, 2016- Dec 31, 2016										
	Microbiological Contaminants									
Contaminant	MCL	MCLG	Level 1 Assessment Trigger ²	Level Detected	Sample Dates	Violation	Likely Source			
Total Coliform	TT	TT	2 or more TC+ samples in a month	0	Apr 1, 2016 – Dec 31, 2016	No	Naturally present in the environment			
E. coli	One Positive Sample ¹	0	n/a	0	Apr 1, 2016 – Dec 31, 2016	NO	Human or animal fecal waste			

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

A level 1 assessment is not a violation unless it is not completed

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.