

Annual Drinking Water Quality Report

Monitoring Performed January – December 2021

Randolph County Water, Sewer and Fire Protection Authority

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We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report). The purpose of this report is to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We want you to understand the efforts made to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. The water we distribute comes from various sources:

Cleburne County Water Authority	A large percentage of the water distributed by the Randolph County Water, Sewer & Fire Protection Authority (RCWS&FPA) is water purchased from the Cleburne County Water Authority. The connection is via Highway 431 North near the Cleburne/Randolph County Line. Cleburne County buys water from Anniston, whose source is Coldwater Spring, Heflin Alabama, and Carroll County, Georgia.
Wedowee Water, Sewer & Gas Board	Water is also purchased from the Water, Sewer& Gas Board of the Town of Wedowee. This surface water is drawn from the nearby Little Tallapoosa River and is acquired through connections with the Wedowee system at New Hope (County Road 56) and Rock Stand (County Road 61).
Heard County Water Authority	The Heard County Treatment Facilities are located in Heard County Georgia. The water is withdrawn from the surface water of the Centralhatchee Creek. The water is then treated at the Heard County Waterworks and distributed throughout their system. RCWS&FPA receives this water via a connection located along Alabama Highway 22 near the Georgia/Alabama state line.
The Utilities Board of Roanoke	During emergency situations, we purchase water from the Roanoke Water System, which draws surface water from Jones Creek and Crystal Lake, at two connections along Alabama Highway 22 (one on each side of the Town of Roanoke).

Additionally, we sell water to the following systems: Clay County Water Authority; East Alabama Water, Sewer & Fire Protection District; Town of Wadley; Water & Sewer Board of The Town of Ranburne; Wedowee Water Sewer & Gas Board; and the Town of Woodland.

We work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future. Thank you for allowing us to continue providing your family with clean, quality water this year.

We want our valued customers to be informed about their water utility. A copy of this report can be picked up at the Utilities Office between the hours of 8 am - 4:30 pm Monday - Friday. Our Board normally meets the second Thursday of each month at 10 am. If you have any questions about this report, concerning your water utility, or would like to know about the next Board meeting - please contact Mark Prestridge at 256-357-9005.

Monitoring Schedule

We routinely monitors for contaminants in your drinking water according to Federal and State laws. ADEM allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. The following table shows the most recent year of monitoring for these contaminant groups - (Date Monitored / Next Monitoring)

Constituent Monitored	Date Monitored / Next Monitoring
Lead/Copper	2020 / 2023
Microbiological Contaminants	Monthly
Disinfection By-products	Annually

Variances and Exemptions

Based on a study conducted by ADEM with the approval of the EPA, a statewide waiver for the monitoring of asbestos and dioxin was issued.

Thus, monitoring for these contaminants were not required

Lead & Copper Monitoring

We completed monitoring requirements for lead and copper in 2020. Twenty sites were sampled without exceeding the Action Level limits for lead and copper. The system will continue to monitor for lead and copper every three years. The next monitoring period for the system will be the period of June – September 2023. Our monitoring results in 2020 were as follows:

2020 Results	MCL	90th Percentile Sample	Range of Levels
Lead	AL = 15	0.77 ppb	ND - 5.0
Copper	AL = 1.3	0.0667 ppm	0.0057 - 0.262

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Randolph County Water, Sewer, and Fire Protection Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. These recommended actions are very important to the health of your family:

- Use only water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead.
- 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.

Lead levels in your drinking water are likely to be higher if:

- Your home or water system has lead pipes, or
- Your home has faucets or fittings made of brass which contains some lead, or
- Your home has copper pipes with lead solder and you have naturally soft water, and
- Water often sits in the pipes for several hours

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 www.epa.gov/safewater/lead

Our Results

The table below contains results from the most recent monitoring of primary, secondary, and unregulated contaminants. The monitoring was performed in accordance with the sampling requirements established by the Environmental Protection Agency (EPA) and ADEM. Although many more contaminants were tested, the table shows only those contaminants that were detected during the calendar year of this report - unless otherwise noted. Randolph County Water, Sewer, and Fire Protection Authority is pleased to report that your drinking water meets or exceeds all Federal and State requirements.

Table of Detected Contaminants					
Primary Standards - Mandatory standards set by the Safe Drinking Water Act used to protect public health. These apply to all public water systems.					
Inorganic Chemical Contaminants	MCL, TT, or MRDL (What's Allowed?)	MCLG (What's the Goal?)	Randolph County Range Low - High (MD)	Violation	Major Sources
Copper (ppm)	AL=1.3	1.3	0.0057 - 0.262 (2020)	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	AL=15	0	ND - 5.0 (2020)	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfectants & Disinfection Byproducts »	MCL, TT, or MRDL (What's Allowed?)	MCLG (What's the Goal?)	Randolph County Range Low - High (MD)	Violation	Major Sources
Total Haloacetic Acids (HAA5)	60	NA	3.3 - 12.3	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	80	NA	9.6 - 33.9	No	By-product of drinking water disinfection

» There is convincing evidence that additional of a disinfectant is necessary for control of microbial contaminants

Unregulated Contaminants	Randolph County Range Low - High (MD)	Major Sources
Bromodichloromethane (ppb)	2.03 - 6.24	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by product of chlorination
Bromoform (ppb)	NA	
Chloroform (ppb)	6.85 - 25.9	
Dibromochloromethane (ppb)	0.66 - 1.69	

As previously stated, the water we distribute comes from various sources. Listed on the next two pages are the Detected Contaminants reported by those sources for the previous calendar year (unless specific year is noted)

Table of Detected Contaminants

Primary Standards - Mandatory standards set by the Safe Drinking Water Act used to protect public health. These apply to all public water systems.

Contaminants	MCL, TT, or MRDL (What's Allowed?)	MCLG (What's the Goal?)	Cleburne County Range Low - High (MD)	Heard County Range Low - High (MD)	Roanoke Utilities Range Low - High (MD)	Wedowee Utilities Range Low - High (MD)	Violation	Major Sources
BACTERIOLOGICAL CONTAMINANTS								
Cryptosporidium (Calculated organisms/liter) †	TT	0	NA	NA	NA	ND - 1	No	Human and animal fecal waste
Giardia lamblia	TT	0	NA	NA	NA	ND - 18	No	Human and animal fecal waste
Total Coliform	<5% present/absent	0	ND	2 positive samples ‡	ND	ND	No	Naturally present in the environment
Total Organic Carbon (ppm)	TT	NA	1.0 - 1.5	.75 - 1.3	NA	1.04 - 1.86 Average Removal Ratio: 1.461	No	Naturally present in the environment
Turbidity (NTU)	TT	NA	0.08 - 0.09	.06 - .28	0.12	0.02 - 0.28 (Tested Daily)	No	Soil Runoff
RADIOLOGICAL CONTAMINANTS								
Alpha emitters (pCi/L)	15	0	-0.25+/-1.63	NA	NA	NA	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	0.19+/0.45	NA	NA	NA	No	Erosion of natural deposits
INORGANIC CONTAMINANTS								
Arsenic (ppb) ‡	0.010	0	0.55	ND	0.0027	0.3	No	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	2	2	25.5	ND	0.0118	0.0122	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper (ppm)	AL=1.3	1.3	0.05	0.087 (2019)	0.0205	0.0262 - 0.282 (2019)	No	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride (ppm)	4	4	0.61 - 0.70	.24 - 1.00	ND	0.362	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead (ppb)	AL=15	0	ND	ND (2019)	ND	0.34 - 2.7 (2019)	No	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate [measured as Nitrogen] NO3 (ppm)	10	10	0.26	ND	0.105	0.533	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Thallium (ppb)	0.002	0.0005	ND	ND	0.00017	ND	No	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
DISINFECTANTS & DISINFECTION BYPRODUCTS »								
Chlorine (ppm)	4	4	1.72	1.02 - 1.71	ND	ND	No	Water additive used to control microbes
Total Haloacetic Acids (HAA5)	60	NA	11.27	0.25 - 0.78	49.6	LRAA Range 22.7 - 33.5	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	80	NA	16.42	0.15- 0.57	53.9	LRAA Range 36.0 - 52.8	No	By-product of drinking water disinfection

† **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. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Additional information regarding Cryptosporidium can be found on page 2 of this report.

‡ The presence of **Total Coliform** bacteria in the samples was not a compliance violation. These are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. When a sample is Present, additional testing occurs until the result is Absent.

» While your drinking water meets EPA's standard for **Arsenic**, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

» There is convincing evidence that additional of a **Disinfectant** is necessary for control of microbial contaminants

Secondary Standards - Non Mandatory standards established as a guideline to assure good aesthetic qualities such as taste, color, and odor.

Maximum Detected				
Contaminant	MCL	Cleburne County	Roanoke Utilities	Wedowee Utilities
Aluminum (ppm)	0.05 to 0.2	NA	0.0451 (2020)	0.0405
Calcium (ppm)	NA	NA	7.03 (2020)	5.86
Carbon Dioxide (ppm)	NA	NA	17.6 (2020)	ND
Chloride (ppm)	15	NA	6.01 (2020)	9.52
Conductivity (umhos)	NA	NA	77.6 (2020)	79.2
Hardness (ppm)	NA	NA	22.4 (2020)	20.4
Magnesium (ppm)	NA	NA	1.32 (2020)	1.51
Sulfate (ppm)	250	21.4	54.7	ND
Manganese (ppm)	0.05	NA	0.0023 (2020)	0.0379
Nickel (ppb)	NA	NA	0.00078	0.62
pH (standard units)	6.5 - 8.5	NA	7.0 (2020)	7.0
Sodium (ppm)	NA	NA	2.53 (2020)	4.04
Total Dissolved Solids TDS (ppm)	500	NA	45.0 (2020)	9.83
Zinc (ppm)	5	NA	0.513 (2020)	ND

Unregulated Contaminants	Cleburne County	Heard County	Roanoke Utilities	Wedowee Utilities
	Range Low - High (MD)			
Bromodichloromethane (ppb)	ND	ND	ND	ND - 9.88
Bromoform (ppb)	ND	ND	ND	ND - 0.70
Chloroform (ppb)	ND	ND	ND	12.7 - 75.4
Dibromochloromethane (ppb)	ND	ND	ND	ND - 7.62

Major Sources	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by product of chlorination
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Abbreviations & Definitions

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

Lowest Running Annual Average (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

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.

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 Detected (MD)

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 Disinfection 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.

Not Applicable (NA)

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Not Detected (ND): Laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.

pCi/L (picocuries per liter): a measure of Radioactivity

ppb (parts per billion): micrograms per liter (µg/L)

ppm (parts per million): milligrams per liter (mg/L)

Threshold Odor Number (T.O.N.): The greatest dilution of a sample with odor-free water that still yields a just detectable odor.

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

Variations & Exemptions: ADEM or EPA permission not to meet an MCL or a treatment technique under certain conditions.

General Information Regarding Drinking Water Contaminants

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. MCL's, defined in a List of Definitions in this report, are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. 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:

- 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 result from urban storm water run-off, 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, storm water run-off, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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.

Water systems also test your source water for pathogens, such as *Cryptosporidium* and *Giardia*. These pathogens can enter the water from animal or human waste. All test results were well within state and federal standards. For people who may be immuno-compromised, a guidance document developed jointly by the Environmental Protection Agency and the Center for Disease Control is available online at www.epa.gov/safewater or from the Safe Drinking Water Hotline at 800-426-4791. This language does not indicate the presence of cryptosporidium in our drinking water. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

Visit www.epa.gov/watersense for more information.

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.