Annual Drinking Water Quality Report

Monitoring Performed January – December 2022

Butts County, et al. Water & Sewer Authority/City of Jackson/City of Jenkinsburg
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Jackson, GA 30233
PWSID#: GA0350051

As partners in water supply, we at the Butts County Water & Sewer Authority, City of Jackson, and City of Jenkinsburg are working twenty-four hours a day to deliver high-quality water to our customers. Whether it is making sure that enough water is available when supply is low, or ensuring adequate pressure levels for fire protection and your morning shower, our staff members understand how critical water is to daily life.

All of our testing is done in conjunction with the Georgia Environmental Protection Division (EPD) and the U.S. Environmental Protection Agency (EPA) and confirms to schedules set by federal regulation. We are glad to report that with the thousands of samples taken throughout the year, there were NO violations of State or Federal Requirements.

We appreciate the opportunity to serve you. For questions, to arrange a plant tour, or for more information, contact Herbert L. Head, Water Production Superintendent, at (770) 775-2827 or hhead@buttswsa.com

Where Does My Water Come From?

We have a blended surface water supply from the Ocmulgee and Towaliga Rivers. Both rivers are a part of the Upper Ocmulgee watershed. Combined, our treatment facilities provide roughly 800 million gallons of clean drinking water every year.

The headwaters of the Ocmulgee basin are located in DeKalb and Gwinnett Counties and consist of the Alcovy, Yellow, and South Rivers, which drain the eastern and southeastern metropolitan Atlanta region. These rivers join at Jackson Lake. The Authority's intake is located near where the Ocmulgee River flows out of Jackson Lake dam in east Butts County. Water from the Ocmulgee River is treated at the Emerson L. Burford plant. This plant has a capacity of 4.0 million gallons per day. It is owned and operated by the Butts County Water & Sewer Authority and provides 90% of the water used in system overall.

The Towaliga Watershed is located within the larger Upper Ocmulgee watershed. The Towaliga River forms from smaller streams in southern Henry County and eastern Spalding County. This watershed has been impounded in several areas upstream from Jackson's intake for Henry County's water supply. The City of Jackson's intake is on the Towaliga in west Butts County. Water from the Towaliga River is treated at the Gerald L. "Buck" Stewart plant. This plant has a capacity of 1.0 million gallons per day. It is owned by the City of Jackson and operated by the Butts County Water & Sewer Authority.

Customers in the far southwest corner of Butts County on Chappell Mill Road, Fenner Road, and in the Brushy Creek subdivision receive their water supply through a purchase from the City of Griffin.

Monitoring Schedule

We routinely monitors for contaminants in your drinking water according to a schedule determined by Federal and State regulations. The EPD allows monitoring of some contaminants less than once per year because the concentrations of these contaminants do not change frequently. This table shows the most recent year of monitoring for these contaminant groups.

Constituent Monitored	Date Monitored / Next Monitoring
Inorganic Contaminants	2022 / 2023
Lead/Copper	2022 / 2025
Microbiological Contaminants	Monthly
Nitrates	2022 / 2023
Radioactive Contaminants	2019 / 2026
Synthetic Organic Contaminants (including pesticides and herbicides)	2021 / 2023 - 2025
Volatile Organic Contaminants	2022 / 2023
Disinfection By-products	Quarterly

Source Water Assessment

Ocmulgee River Basin

Georgia's Source Water Assessment Program is aimed at protecting public drinking water supplies at the source - the rivers, lakes and streams all across Georgia. As part of this program, a source water assessment has been done for both our intakes on the Ocmulgee and Towaliga Rivers.

The Upper Ocmulgee River Basin has a large degree of urban activity from the metropolitan Atlanta area. While our watershed profile has identified a number of potential pollution sources to the north, it rates susceptibility of the Ocmulgee intake as "Low", due to the distance of intakes from potential pollution sites and the minimum likelihood of significant releases from those identified pollution sources. *Copies of the Source Water Assessments are available for public review at the Authority's office at 100 West Second Street in Jackson.*

The Authority has also developed a detailed Watershed Assessment and Plan for the Towaliga Basin because we have a wastewater treatment facility in that basin. We continue to test waters in the Towaliga River, Cabin Creek, and Brushy Creek to monitor for quality changes that may take place due to development in this basin.

Protection of drinking water is everyone's responsibility. We encourage our customers to become active in protecting the Ocmulgee River, the Towaliga River, and other local waterways by participating with groups in our area such as the Jackson Lake Association, the South River Watershed Alliance, the Altamaha Riverkeeper, and the Georgia River Network. Here are some other ways 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.
- 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.

Lead & Copper Monitoring

Monitoring requirements for lead and copper were completed in 2022. Thirty sites were sampled and one location exceeded the Action Limit for Lead. 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 2025.

Our monitoring results in 2022 were as follows:

2022 Results	MCL	90th Percentile Sample	Range of Levels
Lead	AL = 15	0.87 ppb	ND - 41.6
Copper	AL = 1.3	0.2 ppm	0.0999 - 0.264

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your water system 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

During the past year, we have taken thousands of water samples in order to determine the presence of any primary, secondary, or unregulated contaminants. The water quality information presented in the table below is from the most recent monitoring period unless otherwise noted and it only includes those contaminants that were detected in the water.

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?)	Butts County Range Low - High (MD)	City of Griffin Range Low - High (MD)	Violation	Major Sources
BACTERIOLOGICAL CONTAMINANTS						
Total Coliform (present/absent)	<5%	0	1 positive sample †	NA	No	Naturally present in the environment
Total Organic Carbon (ppm)	TT	NA	1.11 - 2.27	NA	No	Naturally present in the environment
RADIOLOGICAL CONTAMINANTS						
Alpha emitters (pCi/L)	15	0	0.73 (2020)	NA	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	5	0	0.34 - 1.14 (2020)	NA	No	Erosion of natural deposits
Uranium (ppb)	30	0	0.013 (2020)	NA	No	Erosion of natural deposits
INORGANIC CONTAMINANTS						
Antimony (ppb)	6	6	0.23 - 0.39	NA	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	0.010	0	0.31 - 0.47‡	NA	No	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.0172 - 0.027	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	4	4	0.14 - 0.3	NA	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	5	5	ND - 0.31	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	0.97 - 1.7	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits
Copper - action level at consumer taps (ppm)	AL=1.3	1.3	0.2 90th Percentile Result	0.12 90th Percentile Result	No	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride (ppm)	4	4	0.705 - 0.806	0.63 - 0.73	No	Water additive which promotes strong teeth; erosion of natural deposits; Discharge from fertilizer and aluminum factories
Lead - action level at consumer taps (ppb)	AL=15	0	0.87 90th Percentile Result	NA	No †	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - source water (ppb)	AL=15	0	ND - 0.27	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate [measured as Nitrogen] NO3 (ppm)	10	10	0.166 - 0.667	ND - 0.42	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Thallium (ppb)	0.002	0.0005	ND - 0.42	NA	No	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
DISINFECTANTS & DISINFECTION BYPRODUCTS »						
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1 - 1	1 - 1	No	Water additive used to control microbes
Total Haloacetic Acids HAA (ppb)	60	NA	16.9 - 43.4	13.5 - 50.2	No	By-product of drinking water disinfection
Total Trihalomethanes TTHM (ppb)	80	NA	28.1 - 72.9	19.3 - 67.5	No	By-product of drinking water disinfection

† One positive **Total Coliform** sample occured on October 18, 2022. All follow up testing was negative. The presence of coliform bacteria in the sample 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.

‡ 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.

† One sample site in 2022 exceeded the Action Level (AL) for **Lead**. Please see page 2 for additional information regarding Lead and Copper.

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

Unregulated Contaminants	Range Low - High (MD)	Major Sources
Bromodichloromethane (ppb)	6.3 - 14.5	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by product of chlorination
Chloroform (ppb)	20.0 - 55.3	
Dibromochloromethane (ppb)	1.4 - 4.5	

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

Contaminant	MCL	Maximum Detected
Alkalinity, Total (as CA, Co3) (ppm)	NA	44.7
Calcium, as Ca (ppm)	NA	7.4
Carbon Dioxide (ppm)	NA	39.3
Chloride (ppm)	250	10.3
Conductivity (umhos)	NA	155
Copper (ppm)	1	0.0463
Hardness (ppm)	NA	20.2

Contaminant	MCL	Maximum Detected
Magnesium (ppm)	NA	2.47
Manganese (ppm)	0.05	0.0155
Nickel (ppb)	NA	0.95
pH (std units)	6.5 - 8.5	7.3
Sodium (ppm)	NA	26.3
Sulfate (ppm)	250	20.0
Total Dissolved Solids (ppm)	500	113
Zinc (ppm)	5	0.0131

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. MCLs, 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, can be naturally occurring or result from urban stormwater run-off, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides may come from a variety of sources such as agriculture, stormwater 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 stormwater runoff, and septic systems.
- Radioactive contaminants, 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 healthcare 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).

Abbreviations & Definitions

Action Level (AL): The concentration of a contaminant that triggers treatment or other requirements that a water system must follow.
Maximum Contaminant Level (MCL): The highest level of 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 disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants in drinking water.
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 the 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 the 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.