

Water Quality Report 2021

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PWS ID#: 1130001 Town of Brooks PWS ID#1130000

Dear Valued Customer,

I am pleased to inform you that your drinking water quality is excellent, and that Fayette County Water System is following all state and federal guidelines for drinking water production. Staff is committed to delivering the highest quality drinking water every hour of every day. We remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to provide safe drinking water to everyone in the community.

This year the Fayette County Board of Commissioners chose to allocate a portion of the County's American Recovery Plan Act funding into our multi-milliondollar meter replacement program. This is a long-term infrastructure investment that benefits each and every one of our customers for decades to come.

For more information about this report, or for questions

related to your drinking water, please contact FCWS Laboratory & Compliance Specialist, Emily Larrimore at (770) 461-1146. You can also find more information online at www.fayettecountyga.gov/water. For more information regarding the water supply for our region, please visit Metropolitan North Georgia Water Planning Disrict at the following link: https://northgeorgiawater.org/conserve-ourwater/water-supply-in-our-region.

Community Participation:

You are invited to participate in our public forum and voice any concerns you may have about your drinking water. A link to the Water Committee schedule and minutes for each meeting is posted at

www.fayettecountyga.gov/water under Agenda/Minutes.

Water Treatment Process

The Fayette County Water System has two water treatment plants that treat surface water to deliver clean, safe drinking water. Both plants pump raw water into their respective raw water holding pond for pretreatment. An oxidizing agent is added to reduce levels of iron, manganese, and some organic material. Alum and lime are added as the water goes into sedimentation basins. Alum and lime cause fine particles such as sediment and organic materials to bond together, forming heavier clumps that settle to the bottom of the basin. Cleaner, clearer water is skimmed off the top of the basin and is pumped to a dual media filtration system to remove any remaining fine contaminants. After the filtration process, chlorine is added to inactivate pathogens and biological contaminants. The pH of the water is adjusted through lime addition, and added phosphate then makes the water less corrosive to pipes. Fluoride is added to prevent dental cavities. Treated drinking water is then pumped from the plants into the distribution system.



Withdrawal from Reservoir Holding Pond for Pretreatment Coagulation and Flocculation Clarification via Sedimentation Conventional Filtration

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Final Chemical Addition & Disinfection Treated Water Storage Tank Homes, Businesses & Industries

Table Talk

To better understand this table, compare the value in the **Amount Detected** column against the value in the **MCL** column for that substance. If the **Amount Detected** value is smaller than the **MCL** value, your water meets the health and safety standards set for the substance. Verify that there were no violations of state and/or federal standards in the **Violation** column. If there was a violation, you would see a detailed description of the violation in this report. An **ND or less-than symbol** (<) indicates that the substance was not detected, meaning the value is below the detectable limits of the testing method for the substance. The **Range** column displays the lowest and highest values detected for the substance. An **NA** in this column means that only a single sample was taken to test for the substance. The **Typical Source** column gives information on where the substance originated.

Test Results

Only the substances detected in our water are shown in the table below. Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

Regulated Substances

Substance (Unit of Measure)	Year Sampled	Maximum Level (MCL)	Ideal Goal (MCLG)	Amount Detected	Range	Violation	Typical Sources
Fluoride (ppm)	2021	4	4	0.95	0.20 - 0.95	No	Water additive that promotes strong teeth
Nitrates (ppm)	2021	10	10	0.2	ND - 0.2	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Total Trihalomethanes (TTHMs) (ppb) ¹	2021	80	NA	62	9 - 100	No	By-product of drinking water chlorination
Total Haloacetic Acids (THAAs) (ppb) ¹	2021	60	NA	42	13 - 47	No	By-product of drinking water chlorination
Total Organic Carbon (TOC) (removal ratio) ²	2021	TT≥1	NA	1.25	1.02 - 1.38	No	Decay of organic matter in the water withdrawn from water sources such as lakes and streams
Chlorite (ppm)	2021	1	0.8	0.48	0.01 - 0.48	No	By-product of drinking water chlorination
Chlorine, free (ppm)	2021	MRDL = 4	MRDLG = 4	1.36	0.20 - 2.40	No	Drinking water disinfectant
Chlorine Dioxide (ppb)	2021	MRDL = 800	MRDLG = 800	530	10 - 530	No	Drinking water disinfectant
Turbidity (NTU) ³	2021	TT= 1 NTU	NA	0.18	0.01 - 0.018	No	Soil runoff
Turbidity (% of samples <0.3 NTU) ³	2021	TT = < 0.3 NTU in 95% of the time	NA	100%	NA	No	Soil runoff

¹ TTHMs and THAAs MCLs and amounts detected are calculated using a running annual average of quarterly test results. The range of detections are derived from the individual quarterly test results.

² TOC compliance is a calculated removal ratio of 1 (actual removal is equal to or greater than the required removal) and is reported for compliance as a running annual average, computed quarterly. For our source water, a 35% removal is required.

³ Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

Tap Water Samples Collected for Copper and Lead Analyses from Sample Sites throughout the Community ⁴

				Fayette County Water System		Broo	ks		
Substance (Unit Of Measure)	Year Sampled	AL	MCLG	Amount Detected (90th %ile)	Sites Above Al/Total Sites	Amount Detected (90th %ile)	Sites Above Al/Total Sites	Violation	Typical Source
Copper (ppm)	2019	1.3	1.3	0.21	0/30	0.64	0/10	No	Corrosion of household plumbing
Lead (ppb)	2019	15	0	0	1/30	0	0/10	No	systems; Erosion of natural deposits

⁴ Water from the treatment plants does not contain lead or copper, therefore, water is tested at customer taps. The most recent sampling was completed in 2019. Fayette County Water System and Town of Brook qualify for reduced monitoring due to low detection levels of lead and copper.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban storm-water runoff, 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, urban storm-water runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban storm-water runoff, and septic systems:

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead in Home Plumbing

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. We are responsible for providing highquality drinking water, but we 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 the Safe Drinking Water Hotline at (800) 426-4791 or at www. epa.gov/safewater/lead.









TABLE DEFINITIONS

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

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

Where Does My Water Come From?

The Source Water Assessment Plan lists and locates sources of potential contaminants in the four water supply watersheds. Potential contaminant source locations and developed areas determine susceptibility rating for each watershed.

Watershed Susceptibility Rating				
Flat Creek	Medium-High			
Flint River	High			
Horton Creek	Low			
Line Creek	Low-Medium			

In 2021, Fayette County Water System produced 3,436,349,000 gallons of drinking water from Lake Kedron, Lake Peachtree, Lake Horton, and Lake McIntosh. Water from the Flint River is pumped to Lake Horton when needed.

Supplier	Gallons	Percent
City of Atlanta	19,649,212	1%
Water Plants (2)	3,436,349,000	99%
Total	3,455,998,212	100%



Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http:// water.epa.gov/drink/ hotline.

