



Water Quality Report

DATA FROM JANUARY 1, 2021 – DECEMBER 31, 2021

Quality Water, Quality Services.

Clayton County's Drinking Water

REPORT CARD

The Clayton County Water Authority's (CCWA) mission is to provide quality water and quality services to our community. Our water professionals take this mission to heart while ensuring that you have safe, reliable, high quality drinking water. We are pleased to share our Water Quality Report, which provides information about the quality of our drinking water. This report, also referred to as a Consumer Confidence Report, includes data from January 1 – December 31, 2021 confirming that Clayton County's drinking water met or exceeded all standards set by our federal and state governments.

We hope we have presented the information in a user-friendly format that is easy to understand. If you have any questions about this report, contact CCWA's Environmental Compliance Manager, Michael Arnette at 770.302.3445. Thank you for entrusting us with the safety of your drinking water.

Important Information About Your Drinking Water

This report contains very important information about your drinking water. If you do not understand it, please have someone explain it to you.

Should I Worry About Lead in my Drinking Water?

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. CCWA is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. To minimize the potential for lead exposure when water has been sitting in home plumbing, flush your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

If you would like to know more about CCWA's testing, contact CCWA's Environmental Compliance Manager Michael Arnette at 770.302.3445. 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 1.800.426.4791](tel:18004264791) or online at www.epa.gov/safewater/lead.

Contaminants How & Why Are They in Drinking Water?

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. Drinking water is collected from lakes, rivers, streams, ponds or reservoirs. As water travels over land or through the ground, it dissolves naturally occurring minerals and picks up pollutants from the presence of humans or animal activity. More information on contaminants may be obtained by calling the [Environmental Protection Agency's Safe Drinking Water Hotline at 1.800.426.4791](tel:18004264791).

What May Be Present in Source Water?

- 1 Microbial substances, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- 2 Inorganic substances, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- 3 Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- 4 Organic chemical substances, 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.
- 5 Radioactive substances, 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 regulations establish limits for substances in bottled water, which must provide the same protection for public health.

Board Meetings

CCWA's Board of Directors meets on the first Thursday of each month at 1:30 p.m. at 1600 Battle Creek Road in Morrow.

These meetings are open to the public. Meeting agendas and notices are posted on our website: www.ccwa.us

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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

EPA/Center for Disease Control (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 at 1.800.426.4791.***



Hot Water Heaters and Non-potable Water

Water that runs through your water heater is non-potable. This means it is not suitable for consumption. Sediments, metals, bacteria, and other pathogens can be present in the water heater tank and hot water pipes, making the water unsafe for cooking and drinking. DO NOT use the hot water tap for food and beverage preparation. The hot water line is for bathing, cleaning, and washing only. Use cold water when brushing teeth, drinking, and making food. When preparing food and hot beverages, always begin with cold water, then heat in a kettle, microwave, or pot.

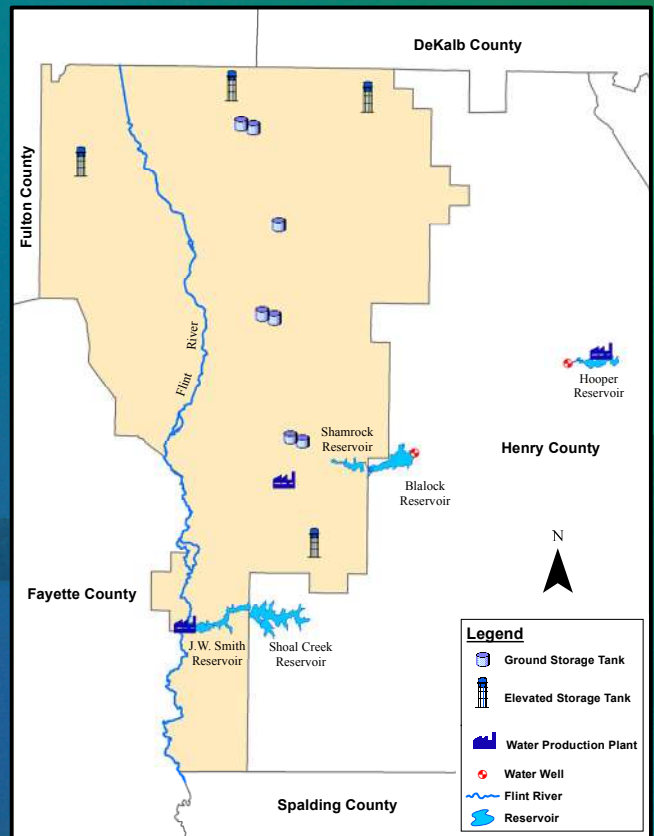
**CCWA Board
of Directors
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Source Water Assessment Plan

CCWA has 3 primary watersheds (Little Cotton Indian Creek, Shoal Creek & Pates Creek) that we produce water from directly, and one secondary watershed (Flint River) that we use as a supplement to the 3 primary watersheds. CCWA and the Atlanta Regional Commission have completed a SWAP itemizing potential sources of surface water pollution to your drinking water supply. The complete results are available for public view at our Main Office at 1600 Battle Creek Rd. in Morrow, GA 30260. The primary sources received a susceptibility ranking of low to medium and the secondary source received a medium to high susceptibility ranking.



Did you know?

Conserving water in your home not only helps the environment, but also saves you money? Here are some easy ways to conserve water:



Find & fix leaks

Household leaks contribute to the loss of more than 1 trillion gallons of water nationwide each year. They can also cause a spike in your water bill. For tips on finding leaks in your home, visit our website at www.ccwa.us/tips-on-leaks



Shorten your showers

The average showerhead uses two gallons of water per minute. Limiting your showers to five minutes can save hundreds of gallons of water per year! Switching to a low flow showerhead can help you save even more.



Use your dishwasher

An ENERGY-star rated dishwasher averages approximately three gallons of water per load. Handwashing dishes uses almost 10x that with up to 30 gallons of water per load.

H. Bernard Franks, General Manager
Keisha Thorpe, Assistant General Manager - Operations
Teresa Worley, Assistant General Manager - Support Services

Billing/Service Questions 770.960.5200

Water Quality Questions 770.302.3445

Tap on the Go & Community Outreach

CCWA's Ambassadors provide outreach and education through facility tours, school presentations, community events, civic and homeowner meetings and CCWA's annual events. Our Tap on the Go team participates in many community events to provide ice cold tap water and dispel popular misconceptions about tap water. If you see our team, stop by and say hello.



Go Behind the Tap

Field Trips and facility tours are a great way for students and other groups to learn what goes on behind the tap at a water production plant, water reclamation facility or constructed treatment wetlands. **For more information, visit our website at www.ccwa.us/tours**

Learn more about our employees and how they provide our community with quality water and service at our Behind the Tap blog. **Check them out on our website at www.ccwa.us/blog**

Visit our Newman Wetlands Center

The Newman Wetlands Center is the focal point of the Clayton County Water Authority's community education efforts. NWC was conceptualized by Melvin L. Newman, then the general manager of CCWA, as a place for free community education about the crucial role wetlands play in the cycle of water.

This 32-acre site includes a half mile wetlands trail, an exhibit/learning area, a 50-seat auditorium, offices, conference facility and picnic area. Keep your ears and eyes open for wildlife while exploring the Boardwalk Trail. Visitors are welcome to either wander through our wetlands on their own or they may wish to be part of a larger group guided by our staff. Educational opportunities are also available year-round for all ages. The NWC hosts our annual Wetlands & Watershed Festival the first Saturday in October. **For more information visit our website at www.newmanwetlandscenter.com**

Enjoy our Fishing Reservoirs & Recreation Areas

During the months of March-October, Clayton County Water Authority opens our J.W. Smith, Shamrock and Blalock Reservoirs to our community for their enjoyment. CCWA's Recreation Areas are perfect for fishing, canoeing or even just enjoying a picnic. **Visit our website at www.ccwa.us/fishing-information for more details.**

Regulated Substances (2021 Data)

Non-Disinfection Substances

Substance Tested And Detected	Units	Goal (MCLG)	Maximum Allowed (MCL)	Amount Detected	Range Detected	Is it Safe? Does it meet Standards?	Probable Source
Copper (a)	ppm	1.3	AL = 1.300	0.100	*0 samples above AL	Yes	Corrosion of household plumbing systems
Lead (a)	ppb	0	AL = 15	0.00	*0 samples above AL	Yes	Corrosion of household plumbing systems
Fluoride (b)	ppm	4	4	0.74	0.00 - 1.32	Yes	Water additive which promotes strong teeth
Nitrate	ppm	10	10	0.00 - 0.43	0.43	Yes	Erosion of natural deposits
Turbidity (c)	NTU	TT	TT	*Highest value of the year 0.296	*% of samples <0.3 NTU 100.00%	Yes	Soil runoff
Total Organic Carbon (d)	NA	TT	TT	1.17	1.00 - 1.39	Yes	Naturally present in the environment
Total Coliform (e)	%	0	AL1 = 1.300	1.1%	0% - 1.1%	Yes	Naturally present in the environment

Disinfection Substances

Substance Tested And Detected	Units	Goal (MCLG)	Maximum Allowed (MCL)	Amount Detected	Range Detected	Is it Safe? Does it meet Standards?	Probable Source
Chlorine	ppm	4	4	1.06	0.01 - 2.17	Yes	Water additive used to control microbes
Chlorine Dioxide	ppm	0.8	0.8	0.13	0.00 - 0.68	Yes	Water additive used to control microbes
Chlorite	ppm	0.8	1	0.31	0.00 - 0.93	Yes	By-product of drinking water chlorination
Haloacetic Acids (f)	ppb	0	60	41.1	18.8 - 65.0	Yes	By-product of drinking water chlorination
Total Trihalomethanes (f)	ppb	0	80	59.0	16.3 - 97.9	Yes	By-product of drinking water chlorination

How to read this report

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

AL: Action Level: means the concentration of a substance that triggers a treatment or other requirement that a water system must follow. **May have up to 5 samples above action level and remain in compliance.*

MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

TT: Treatment Technique: A required method or process intended to reduce the level of a contaminant in drinking water. **We must report the highest monthly value plus the lowest percentage. Numbers below 95% would be a violation.*

ml: Milliliter or one-thousandth of a liter. 1 liter is slightly more than a quart.

ppm: Parts Per Million: means 1 part per 1,000,000 (same as milligram per liter) and corresponds to 1 minute in 2 years, or 1 penny in \$10 thousand dollars. EQUIVALENT to mg/L (milligrams per liter) measurement.

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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NTU: Nephelometric Turbidity Unit, a measure of water clarity.

PPB: Parts Per Billion: means 1 part per 1,000,000,000 (same as micrograms per liter) and corresponds to 1 minute in 2,000 years, or 1 penny in \$10 million dollars.

(a): Water from the treatment plant does not contain lead or copper, however, under EPA test protocol, water is tested at the consumer's tap. Tap tests show that where a consumer may have lead pipes or lead-soldered pipes, the water is not corrosive. This means the amount of lead or copper absorbed by the water is limited to safe levels.

(b): Fluoride is added in treatment to bring the natural level to the Georgia EPD optimum of 0.8 ppm (see definition of ppm).

(c): Turbidity is a measure of the clarity of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

(d): Total Organic Carbon is a measure of the possible formation of harmful chlorine byproducts. We monitor this substance (3) different ways to receive a complete picture of this substance in our water. Compliance with Federal law is determined by a ratio of all (3) methods and the ratio must be 1 or above.

(e): 180 samples are tested each month. No more than 5% may be positive for total coliform bacteria.

(f): CCWA system wide sites are collected quarterly at locations approved by the Georgia EPD. Compliance to the MCL is based on the LRAA, or Local Running Annual Average, for each site.

N/A: Not Applicable



Interconnections

CCWA has multiple interconnections with other utilities. These interconnections are used during an emergency to ensure Clayton County customers do not go without water. To ensure these interconnections are properly working, the valves are routinely operated. During a short period in 2021, a valve malfunctioned after it was operated causing City of Atlanta's water to flow into Clayton County's distribution system. We are including the City of Atlanta's information, as some customers within Clayton County may have received this water.

The Source of Atlanta's Water

Each day, the Atlanta water system provides approximately 98 million gallons of treated drinking water for more than 1.2 million residents in the metropolitan area. The Chattahoochee River serves as the only local surface water supply for the City of Atlanta.

The Chattahoochee Water Treatment Plant processes river water directly while the Hemphill Water Treatment Plant processes water from a reservoir that is filled from the river. Together the plants produce 75 percent of Atlanta's drinking water. The rest is supplied by the Atlanta-Fulton County Water Treatment Plant that also processes water from the Chattahoochee River. Jointly owned by the City of Atlanta and Fulton County, it produces water for the northeast portion of our drinking water distribution system.

2021 CCR Data for Wholesalers of the Atlanta Water System

Information for your CCR from the Chattahoochee WTP, Hemphill WTP, and consecutive system monitoring.

WSID# GA1210001

2021 Regulated Contaminants sampled in the Distribution System

Parameter	Units	MCL	Result	Range of Detections	Represents	Violation
Chlorine	ppm	MRDL = 4	1.12	0.0 - 1.87	Highest Montly Average	No
Total Coliform	% of samples	<5 % Positive per month	1.6%	0.0 - 1.6	Highest Montly Percentage	No
Haloacetic Acids	ppb	60	43.3	9.6 - 43.3	Highest Quarterly LRAA	No
Total Trihalomethanes	ppb	80	61.3	14.0 - 61.3	Highest Quarterly LRAA	No

2021 Regulated Contaminants sampled at the Treatment Plants

Parameter	Units	MCL	Result	Range of Detections	Represents	Violation
Fluoride	ppm	4	0.73	0.30 - 1.10	Highest Montly Average	No
Nitrate/Nitrite*	ppm	10	0.58	0.49 - 0.64	Yearly Average	No
Total Organic Carbon**	ratio	Treatment Technique (TT)	1.39	1.0 - 1.39	Highest Montly Ratio	No
Turbidity	NTU	TT = 1 NTU	0.08	0.01 - 0.48	Highest Montly Average	No
Turbidity	% of samples	TT = 95% samples < 0.3 NTU	99.6%	N/A	Lowest Montly Percentage	No

* Nitrate and Nitrite are measured together as Nitrogen (N) ** The TOC result shows the calculated removal ratio in both source and treated water.

2021 Lead and Copper Levels - sampled at the Residential Taps (including consecutive systems)

Parameter	Units	MCL	Result	No. of Residential Tap sampled	Represents	Violation
Copper*	ppm	AL = 1.3	0.15	50	90th Percentile	No
Lead*	ppb	AL = 15	2.4	50	90th Percentile	No

*Triennial Monitoring. No Sites exceeded the Action Level (AL) for Lead and Copper in 2021.

2019 Unregulated Contaminants sampled at the source*

Parameter	Units	MCL	Result	No. of Residential Tap sampled	Represents	Violation
Bromide	ppb	Not regulated	32.6	21.0 - 32.6	Highest Detected	No

2019 Unregulated Contaminants sampled at the Treatment Plants*

Parameter	Units	MCL	Result	No. of Residential Tap sampled	Represents	Violation
Quinoline	ppb	Not regulated	0.046	0.026 - 0.046	Highest Detected	No
Manganese**	ppb	50	1.96	0.445 - 1.96	Highest Detected	No

*Unregulated contaminant sampling takes place every five years. It helps EPA to determine where certain contaminants occur and whether the contaminants need to be regulated.

**Manganese-EPA does not enforce the "secondary maximum contaminant level" (SMCL). It is not considered to present a risk to human health at the SMCL.