2020 Annual Water Quality Report

Safe Water Starts Here



A MESSAGE TO OUR VALUED CUSTOMERS

Our primary goal at Fulton County is to always deliver the best drinking water possible. Therefore, we are proud to share with you the 2020 Annual Drinking Water Quality Report, which shows that the quality of our water is excellent and safe, having met or exceeded all state and federal regulations.

At Fulton County, our customers are our top priority and we strive to deliver quality services at a fair price. The latest technology in monitoring equipment is used to provide customers assurance that their water has been treated and monitored to the highest standards in the industry. Our goal is to

preserve our precious resources, while preparing for future challenges.

Maintaining our drinking water system involves routine sampling, flushing of water lines, and ongoing maintenance. It is a team effort, consisting of more than 250 hardworking professionals who regularly monitor water quality, testing every stage of the water treatment process, around the clock, to ensure that our water flows reliably from "river to tap." Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2019. Data obtained before January 1, 2019 and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

We hope that you will take a few minutes to review our report. It contains information on Fulton County's water source, treatment and monitoring processes, laboratory results, various projects initiatives, and volunteer opportunities." Our report can also be viewed online at <u>www.fultoncountyga.gov</u> or customers may request a copy by calling us at 404-612-7400.



FROM THE DIRECTOR

I am pleased to share this year's annual water quality report that details the exceptional quality of Fulton County's drinking water. Under the Safe Drinking Water Act, the Environmental Protection Agency (EPA) requires an annual report, also known as the Consumer Confidence Report (CCR), from all community water systems nationwide.

David E. Clark, P.E. Director

Throughout the country, concerns about the safety of public water supplies remain high. But here at Fulton County, the resilience and integrity of our drinking water is a top priority and we work to stay ahead of emerging issues. Our water is treated and monitored using some of the best techniques available and delivered to your tap through sound management of our system, ongoing infrastructure investments, and long-term planning. Working with our customers, Fulton County implements programs and projects that strengthen

our drinking water system. We welcome your interest in Fulton County's water system and services. If you have questions or comments about this report, please call us at 404-612-7400 or contact me via email at <u>david.clark@fultoncountyga.gov.</u>



PROVIDING YOU AWARD-WINNING WATER SERVICES

Here at Fulton County, we take pride in ensuring that safe, clean drinking water is provided to all of our customers. We also take pride in being recognized both locally and nationally in 2019 for our water treatment facilities and for our exceptional performance in the protection of water resources.

Tom Lowe - Atlanta - Fulton County Water Resource Commission (AFCWRC) Water Treatment Facility

- American Water Works Association (AWWA) President's Award
- AWWA Director's Award
- Georgia Association of Water Professionals (GAWP) Gold Award

GAWP Wastewater Facility Gold Award

Big Creek Water Reclamation Facility

GAWP Wastewater Facility Platinum Awards

- Camp Creek Water Reclamation Facility/ Veolia Water
- Johns Creek Environmental Campus Water Reclamation
- Little Bear Creek Water Reclamation Facility
- Little River Water Reclamation Facility

GAWP Land Application System Facility Platinum Award

• Litter River Water Reclamation Facility



CONSERVATION 101

Fulton County and our region are growing rapidly as new residents and businesses move to the area. We can all help protect our water supply by doing our part to conserve with some small changes to our daily habits. For more information on water conservation, please contact Amy Warnock at <u>amy.warnock@fultoncountyga.gov</u> or call (404) 612-7400.



WHERE YOUR WATER COMES FROM

A watershed is an area of land that drains into a river, stream, or lake. The source of drinking water for the North Fulton Water system comes from the protected watersheds in the Chattahoochee River basin, which is closely monitored by the State of Georgia, Fulton County, and several environmental groups. This surface water supply is processed at the Tom Lowe Atlanta - Fulton County Water Treatment Plant located in Johns Creek. The plant produces drinking water of the highest quality and has consistently won numerous awards in the water industry.



WATER SYSTEM OVERVIEW

Our system is supplied by two drinking water reservoirs with a total capacity of 895 million gallons, which equates to 30 days of supply. Additionally, our system contains:

- 9 elevated storage tanks
- 3 ground storage tanks
- 2 high pressure zones
- 5 pump stations
- 16.7 mg reserve capacity
 1,200 miles of water mains
- 85,274 water meters
- 25,000 fire hydrants
- city 24,892 drinking water tests nains • 277,000 population served
- Cities served: Alpharetta,
 - Johns Creek, Milton, Roswell

FROM RIVER TO TAP: OUR WATER TREATMENT PROCESS



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3. PRE-TREATMENT DISINFECTION: Sodium Hypochlorite is added to kill disease-causing organisms.

4. COAGULATION & FLOCCULATION: Chemicals are added to make fine suspended particles clump together. Gentle mixing of the water encourages this process. The clumps of particles are called "floc".

5. SEDIMENTATION (Gravity Settling): The newly formed "floc" settles by gravity and is removed from the bottom of the settling tanks.

6. FILTRATION: Water flows through filters which remove even more microscopic particles.

7. POST TREATMENT DISINFECTION: Sodium Hypochlorite is added a second time to kill any remaining disease-causing organisms.

8. FINAL TREATMENT:

Fluoride is added to help prevent tooth decay. Lime and Orthophosphate is fed to protect pipes from corrosion.

PROTECTING OUR WATER SOURCES

Fulton County, in conjunction with the Atlanta Regional Commission, completed a source water assessment that itemized potential sources of surface water pollution within the watershed areas of our water supply. The Chattahoochee River was found to have a medium risk of potential pollutant loads. The full source water assessment report is available on our website at <u>www.fultoncountyga.gov</u>.





The results of our monitoring in 2019 are shown in this table. The most important information in this report is that the substances detected by our monitoring and reported to you in this table pose no known health risk at these levels. Listed below are a few definitions to help you interpret the water quality monitoring data.

90th Percentile: Calculation that determines compliance with the regulation for copper and lead. If this number is less than the action level, then the system is compliant.

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

Exemptions: State or EPA permission not to meet maximum contaminant level or a treatment technique under certain conditions.

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 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 to control microbiological 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.

Nephelometric Turbidity Unit (NTU): The unit used to express a measurement of turbidity, or cloudiness of a liquid.

Parts per billion (ppb): One part per billion is the same as one penny in 10 million dollars.

Parts per million (ppm): One part per million is the same as one penny in 10 thousand dollars.

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

Turbidity: Measurement of the cloudiness of the water. A good indicator of water quality and effectiveness of disinfectants.

WATER QUALITY MONITORING RESULTS

(Testing Period: January 1, 2019 – December 31, 2019)

EPA REGULATED SUBSTANCES OR CONTAMINANTS MONITORED IN THE WATER PLANT						
Substance (units)	Maximum Residual Disinfectant Level	Maximum Residual Disinfectant Level Goal	Highest Amount Detected	Range Detected (lowest to highest)	Meets EPA standard?	Typical Source
Fluoride (ppm)	4	4	0.70	0.68 - 0.70	YES	Erosion of natural deposits; Water additive that promotes strong teeth
Nitrate (measured as Nitrate-Nitrate)	10	10	0.43	N/A	YES	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Substance (units)	EPA Highest Level Allowed (MCL)	Treatment Technique (TT)	Amount Detected	Range Detected (lowest to highest)	Meets EPA standard?	Typical Source
Total Organic Carbon [TOC] (ratio)	Π	TT = ≥ 1	1.07	1.00 - 1.07	YES	Naturally present in the environment
Turbidity (NTU)	π	TT = 1	0.07	N/A	YES	Soil runoff
	N/A	TT + % samples less than 0.3 NTU	100% (lowest monthly percentage)	N/A	YES	Soil runoff
	EPA REG	ULATED SUBSTANCES OR		ITORED IN THE DISTRIBUTION	SYSTEM	
Substance (units)	Maximum Residual Disinfectant Level	Maximum Residual Disinfectant Level Goal	Highest Amount Detected	Range Detected (lowest to highest)	Meets EPA standard?	Typical Source
Chlorine (ppm)	4	4	1.50	0.32 – 1.50	YES	Water additive used to control microbes
Substance (units)	Action Level (AL) or MCL (90% of the samples collected must be at or below the AL)	Maximum Residual Disinfectant Level Goal	90th percentile (90% of samples taken were below this amount)	# of samples above action level (AL) (No more than 5 samples above AL allowed)	Meets EPA standard?	Typical Source
Copper (ppb) (collected in August 2018)	1300	1300	150	0 out of 50 samples taken	YES	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb) (collected in August 2018)	15	0	1.5	2 out of 50 samples taken	YES	Corrosion of household plumbing systems; Erosion of natural deposits
Substance (units)	Maximum Contaminant Level	Maximum Contaminant Level Goal	Highest Number of Positive Samples Reported	% of positive samples in the total number of samples collected	Meets EPA standard?	Typical Source
Total Coliform (percentage positive samples in total # of samples collected per month)	5% of monthly samples are positive	0	2	1.3	YES	Naturally present in the environment
Fecal Coliform or E. coli bacteria (number of positive samples)	0	0	0	N/A	YES	Human or animal fecal waste
Substance (units)	Maximum Contaminant Level	Maximum Contaminant Level Goal	Highest Level Detected Average	Range Detected (lowest to highest)	Meets EPA standard?	Typical Source
Haloacetic Acid HAA5** (ppb)	60	N/A	33.0	25.0 - 43.0	YES	By-product of drinking water chlorination
Trihalomethane** TTHM (ppb)	80	N/A	52.4	26.6 - 67.7	YES	By-product of drinking water chlorination

**Stage 2 monitoring for TTHM/HAA5 is based on locational running averages

Waivers (exemptions) were extended to the County by the State in January 2020 through December 2022 for the following synthetic organic compounds: Alachlor, Aldicarb Sulfone, Aldicarb Sulfoxide, Atrazine, Benzo (A) Pyrene, Carbofuran, Chlorodane, Dalapon, Di (2-Ethylhexyl) Adipate, Dibromochloropropane (DBCP), Dinoseb, Diquat, Di(2-Ethylhexyl) Phthalate, Endothall, Endrin, Ethlyene Dibromide (EDB), Glyphosate, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexaclorocyclopentadiene, Lindane, Methoxychlor, Oxymyl (Vydate), Pentachlorophenol, Picloram, Polychlorinated Biphenyls (PCBs), Simazine, 2,4-D, Toxapene, 2,4,5-TP (Silvex), 2,3,7,8-TCDD (Dioxin).

Inorganic Constituents: Asbestos and Cyanide

Additional copies of this report are available at your public library.

INFORMATION FROM THE EPA ABOUT DRINKING WATER CONTAMINANTS

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 (800-426-4791).

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 it can pick up substances resulting from the presence of animals or from human activity:



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 runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; Pesticides and herbicides, from agriculture, urban storm water runoff, and residential uses;

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, 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. 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 contaminants in bottled water, which must provide the same protection for public health.

SPECIAL NOTICE FOR IMMUNO-COMPROMISED PERSONS

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 people and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency (EPA)/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available on the Safe Drinking Water Hotline at 800-426-4791.



For additional information about water regulations visit: <u>www.epa.gov/dwreginfo</u>



LEAD IN DRINKING WATER

At Fulton County the safety and quality of the water we supply to you is of great importance to us. Our results show that we have been very

successful in our treatment process to minimize the tendency for lead to enter the 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. The Tom Lowe Atlanta - Fulton County Water Treatment Plant is



responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components inside homes or commercial buildings. 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 the water for drinking or cooking. Periodically clean out the aerators (screens on the faucet). These screens can trap sediment and debris over time. 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 (800-426-4791) or online at <u>www.epa.gov/safewater/lead.</u>

SHOULD I BE CONCERNED ABOUT LEAD IN MY WATER?

The primary way lead and copper can enter drinking water systems is through the corrosion of (1) the plumbing material inside your home or (2) the service line going to your home. If that service line is composed primarily of lead, there is a potential for lead contamination (especially, if corrosive water flows through the line or sits stagnant in it). Fortunately, the North Fulton distribution system has virtually no lead service lines. The internal home plumbing of concern is "copper piping with lead solder" which was banned in Georgia in 1986. Homes built between January 1, 1983 and June 30, 1988 are what we target. To protect you from lead and copper contamination that could occur from your home plumbing, Fulton County uses corrosion control techniques that reduce the water's ability to leach lead and copper from the pipes into the water stream. With these measures in place, any concern about lead in drinking water should be at a minimum.

CHECKING FOR LEAD AND COPPER IN YOUR WATER

Fulton County is required to submit samples collected at customer taps to the state once every three years; our last sampling cycle was August 2018. The US EPA has established an "action level" of 15ug/l for lead and 1300 ug/l copper. Our system is in compliance of these limits (See the Lead-Copper results in this report).



PHARMACEUTICAL DISPOSAL

Most of us, at one point or another, will be faced with the question of what to do with unused medications in our household. We don't want to keep these medications around, as some of them may be harmful and cause an emergency for children or pets. Others may be misused or abused by household members or visitors.

So what should we do with them?

Throwing medication in the trash may not keep it out of the hands of people who could be harmed by it. Flushing it can cause medications to end up in our watersheds and water sources, because septic tanks and most wastewater treatment plants are not equipped to completely remove all of these different substances.

Fortunately, Fulton County has a large network of secure drug disposal boxes throughout the County. These locked boxes are emptied by law enforcement on a regular basis and the pharmaceuticals are transported to the GBI incinerator.

HOW TO SAFELY DISPOSE OF UNUSED MEDICINES:

Residents can follow these simple steps to dispose of unused medicines:

- Store medication out of reach of children and pets until you are ready to drop it off.
- Use the drug drop box locator, found at <u>www.fultoncountyga.gov.</u> to find the location nearest you.
- Remove labels and any identifying information from packaging and place medications in the drop box.

With these simple steps, we can all do our part to protect our families, our neighbors, and our drinking water supply.

STORM WATER MANAGEMENT: KEEPING LITTER OUT

Here at Fulton County Public Works, we are committed to providing you clean, healthy, and safe drinking water. Help us achieve that goal by reducing your litter output!

Did you know?

Whenever it rains, water runs off the land in the form of stormwater. As it moves over land, roads, sidewalks, and other impenetrable surfaces, excess water is not absorbed into the ground. Instead, it flows directly



into storm drains that lead to surface waters, including rivers, lakes and streams. Unfortunately, that excess water takes with it anything picked up along the way - including litter, fertilizers, pesticides, and other pollutants. As you imagine, this can have a huge impact on the quality of our drinking water sources. Fortunately, there is something you can do to help!

How can you help?

- DISCARD YOUR TRASH AND LITTER IN THE GARBAGE CAN: In 2019, the Fulton County Maintenance and Operations team collected 146.7 tons of trash from Fulton County roadways! That's the equivalent to the weight of about 8 empty semi-trucks!
- RECYCLE: Check with your City's solid waste manager to determine if curbside recycling services are provided for residents within your neighborhood. If not, there may be a recycling center near you. Information about solid waste and recycling can be found on our website at <u>www.fultoncountyga.gov</u>.
- BE THE SOLUTION TO STORMWATER POLLUTION! Never dump anything in our streets, down our storm drains, or into a drainage ditch.
- GET INVOLVED: Volunteer for community cleanups.

PUBLIC INVOLVEMENT AND VOLUNTEER OPPORTUNITIES

Water quality and safety are often difficult to understand and the information in this report may not answer all of your questions. For additional information, questions or concerns, please contact Corlette Banks by phone at 404-612-7400 or via email at <u>corlette.banks@fultoncountyga.gov.</u>

Our public education and outreach team offers a diverse list of program initiatives including guided tours, exhibits and events to connect people to the source of Fulton County's drinking water. School field trips, educational events, volunteer opportunities and family programs bring the history, science and culture of the watershed alive. Learn more at <u>www.fultoncountyga.gov</u> or call us at 404-612-7400.







YOUR OPINION MATTERS

At Fulton County, we believe informed customers are our best allies. You can participate through public hearings associated with environmental permitting and reviewing of new facilities and projects. Notice of upcoming meetings is posted at the Government Center and posted on "Upcoming Events" on our web site at <u>www.fultoncountyga.gov</u>.

The Atlanta - Fulton County Water Resources Commission hold regularly scheduled board meetings that are open to the public, generally once per quarter, at 1:00 p.m. Meeting locations alternate between the Atlanta City Hall and Fulton Government Center. Please contact the office of the General Manager at 678-942-2791 to confirm a meeting date and location.





WATER IS WORTH IT

We all know that clean, safe water is essential to life, however it can sometimes be more difficult to see how this essential service translates to numbers on paper when you get your bill. Your water bill pays for a lot more than simply water. When you pay a bill for water and sewer services, you are paying for the materials, facilities, and skills that go into treating our drinking water and maintaining the systems that deliver that water to your homes. Also factored into your bill are the costs associated with the wastewater collection systems (which removes wastewater from our homes), the wastewater treatment facilities, and the process of returning clean water back to our watersheds. These systems protect our health, our families, our environment, and the infrastructure that provides these services is the backbone of our communities. Water and wastewater professionals are on the job every day, oftentimes under extreme conditions, to help keep things flowing smoothly.



Our water and sewer rates also fund maintenance, upgrades, and expansions to existing infrastructure. Fulton County Public Works has capital improvement projects underway at the Big Creek Water Reclamation Facility (WRF), Little River WRF, and Camp Creek WRF, as well as other current and planned projects in the water distribution and wastewater collection systems. These projects will upgrade facilities and expand treatment capacity to meet both current and future demands. As our community and our region continue to grow, our water and wastewater needs are evolving. By planning ahead for these needs, Fulton County will continue to provide high quality drinking water and efficient, environmentally sound wastewater treatment for all of our customers.

FULTON COUNTY DEPARTMENT OF PUBLIC WORKS

141 Pryor Street SW, Suite 6001, Atlanta, GA 30303 www.fultoncountyga.gov/publicworks

404-612-7400

Water testing performed from January 1 to December 31, 2019

WSID 1210005

Important information about your drinking water.

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

Fulton County Board of Commissioners

Robb Pitts, Chairman, (At-Large) Marvin S. Arrington Jr, Vice-Chairman, District 5 Liz Hausmann, District 1 Bob Ellis, District 2 Lee Morris, District 3 Natalie Hall, District 4 Joe Carn, District 6

Dick Anderson, County Manager

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