



FULTON
COUNTY

2021 ANNUAL
WATER
QUALITY
REPORT



A MESSAGE TO OUR VALUED CUSTOMERS

As the effects of the COVID-19 pandemic caused most of us to press the pause button, Fulton County water professionals worked tirelessly to ensure that safe, reliable water service continued to flow. Access to clean and safe water has always been a top priority of Fulton County and we are proud to share with you the 2021 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.

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 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, 2020. Data obtained before January 1, 2020 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 project initiatives, and volunteer opportunities. Understanding water quality can be a challenge and the information in this short report may not answer all of your questions. For additional information or inquiries, please contact Corlette Banks at Corlette.Banks@fultoncountyga.gov or 404-612-7400. Our report can also be viewed online at www.fultoncountyga.gov or customers may request a copy by calling us at 404-612-7400.

FROM THE DIRECTOR



David E. Clark, P.E.
Director

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

Across the country, concerns about the safety of public water supplies are at an all-time 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 technology 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.

I hope this report answers the questions you may have about the quality of your drinking water, and helps you better understand the care and commitment that goes into delivering some of the best water in Georgia. For additional information or inquiries about this report, please call us at 404-612-7400 or contact me via email at David.Clark@fultoncountyga.gov.

PUBLIC EDUCATION AND OUTREACH

Our Public Education and Outreach team provides water quality and conservation programs to Fulton County citizens and businesses. We offer a diverse list of programs including guided tours of our facilities, community workshops, and special events to connect residents to their drinking water source, the Chattahoochee River. Even in the midst of the COVID-19 pandemic, we remain committed to delivering virtual school programs, educational events, and volunteer opportunities to all of our citizens. To learn more, please contact our PEO team at 404-612-7400 or visit our website at <https://fultoncountyga.gov/services/water-services/public-education-and-outreach>.



YOUR OPINION MATTERS

At Fulton County, we believe informed customers are our best allies. We encourage you to participate in the public hearings associated with environmental permitting and reviewing of new facilities and projects. Notice of upcoming meetings are posted at the Fulton County Government Center, as well as under "Upcoming Events" on Fulton County's website at www.fultoncountyga.gov. For more information please contact Corlette Banks at 404-612-7400 or Corlette.Banks@fultoncountyga.gov.

The Atlanta-Fulton County Water Resources Commission holds regular board meetings that are open to the public, generally once per quarter. Meeting locations alternate between Atlanta City Hall and the Fulton County Government Center. Please contact the General Manager's office at 678-942-2791 to confirm a meeting date and location.

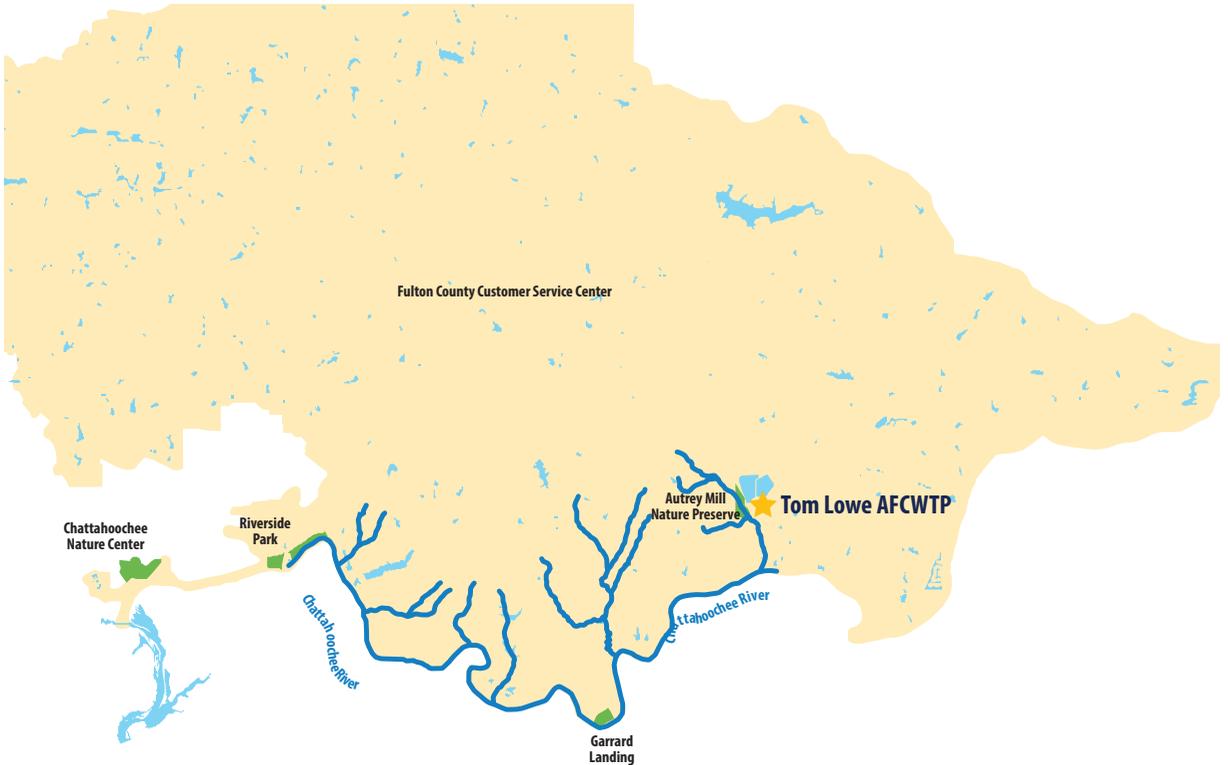
WHERE YOUR WATER COMES FROM

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 (Tom Lowe AFCWTP) located in Johns Creek. The plant produces drinking water of the highest quality and has consistently won numerous awards in the water industry.

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

WATER SYSTEM OVERVIEW

- 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
- 24,892 drinking water tests
- 315,000 population served
- Cities served: Alpharetta, Johns Creek, Milton, Roswell



— Chattahoochee River

— Lakes and Ponds

— Fulton County Water Service Area

★ Tom Lowe Atlanta-Fulton County Water Treatment Plant

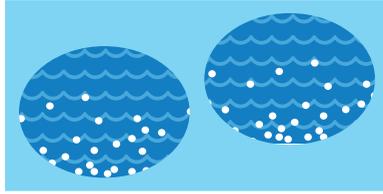
— Parks

FROM RIVER TO TAP: OUR WATER TREATMENT PROCESS



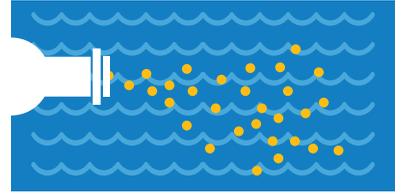
1. The River

Fulton County's tap water comes from the Chattahoochee River.



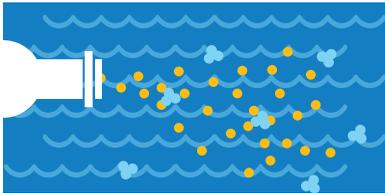
2. Gravity Settling

Water is pumped from the River to two onsite reservoirs, where sedimentation occurs; water flows by gravity to the treatment plant.



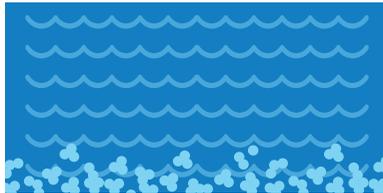
3. Pre-Treatment Disinfection

Alum is added; Sodium Hypochlorite is added to kill disease-causing organisms.



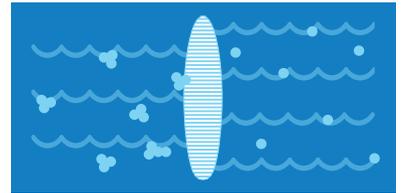
4. Coagulation and Flocculation

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".



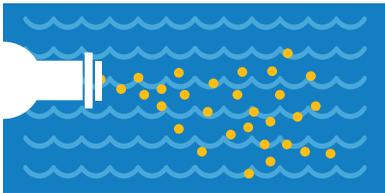
5. Sedimentation (Gravity Settling)

The newly formed "floc" settles by gravity and is removed from the bottom of the settling tanks.



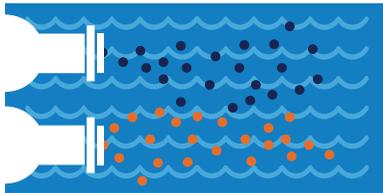
6. Filtration

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 are fed to protect pipes from corrosion.



And then the water arrives at your faucet, ready to drink!

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 www.fultoncountyga.gov.

The results of our monitoring in 2020 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.

Testing Period: January 1, 2020 – December 31, 2020

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	0.71	0.68 - 0.71	YES	Erosion of natural deposits; Water additive that promotes strong teeth
Nitrate (measured as Nitrate – Nitrite)	10	10	0.58	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)	TT	TT ≥ 1	1.07	1.00 - 1.07	YES	Naturally present in the environment
Turbidity (NTU)	TT	TT = 1	0.06	N/A	YES	Soil runoff
	N/A	TT + % samples less than 0.3 NTU	100% (lowest monthly percentage)	N/A	YES	Soil runoff

EPA REGULATED SUBSTANCES OR CONTAMINANTS MONITORED 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	1.98	0.01 – 1.98	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 Contaminant 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	4***	2.2	YES	Naturally present in the environment
Fecal Coliform or E. coli bacteria (number of positive samples)	0	0	2***	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	32.3	18.1 - 48.0	YES	By-product of drinking water chlorination
Trihalomethane** TTHM (ppb)	80	N/A	57.1	16.6 - 65.6	YES	By-product of drinking water chlorination

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

***The two E. coli positives were not true positives. They were caused by an instrument malfunction; however Georgia EPD requires reporting.

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, Ethylene Dibromide (EDB), Glyphosate, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, 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

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.

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 www.epa.gov/safewater/lead.

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).

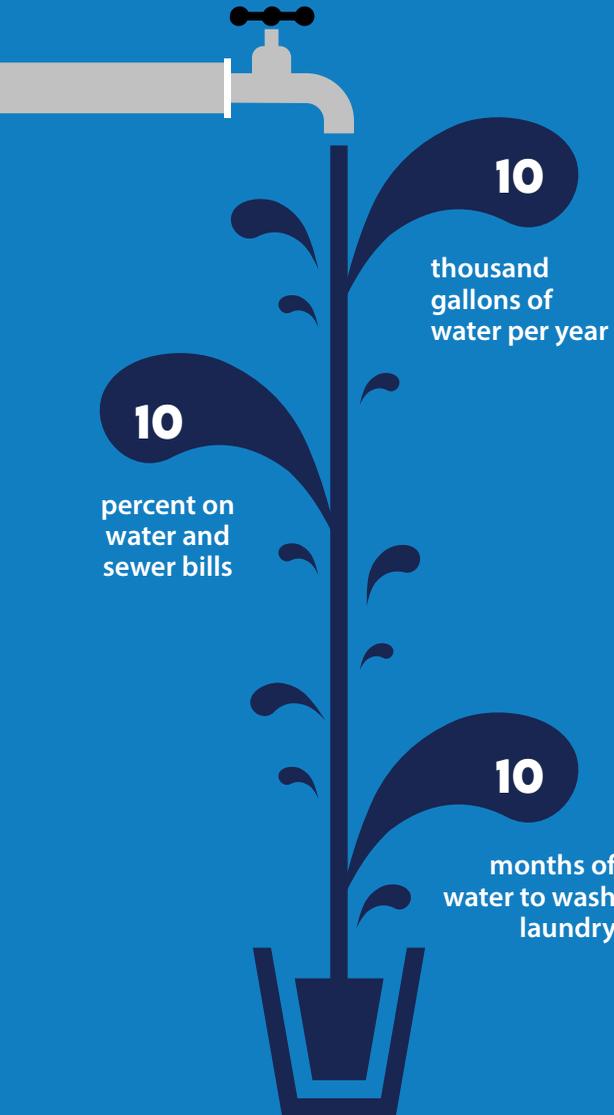
SHOULD I BE CONCERNED ABOUT LEAD IN MY WATER?

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.



WATER CONSERVATION: IT STARTS WITH YOU

Take the EPA WaterSense 10-minute leak challenge and you could save:



SEASONAL TASTE AND ODOR CHANGES IN YOUR WATER SUPPLY

In the fall of 2020, some North Fulton County customers reported taste and odor changes associated with water from the distribution system. Changes in water taste and odor are often part of a natural seasonal phenomenon called “lake turnover”. When temperatures drop in the fall and warmer surface water cools, it cause a mixing effect on the body of water. Natural algae accumulated in the lower level can release chemical compounds that produce taste and odors. While the temporary smell and taste may not be pleasant to the nose or palette, the water still meets our high safety standards for drinking water.

To address these concerns, operators at the Tom Lowe Atlanta-Fulton County Water Treatment Plant added activated carbon and copper sulfate in the raw water reservoir to improve odor and taste. Additionally, our Fulton County Operations crew flushed the distribution system to clear-out the odorous water.

While unpleasant for those impacted, our water professionals want to reassure you that your water remains safe for consumption and daily usage. If you have any questions or concerns about your drinking water, please contact 404-612-7400.



To learn how you can take the
10-minute challenge, visit
www.epa.gov/watersense

KEEP IT CLEAN GEORGIA

The Chattahoochee River is the source of drinking water for residents within the North Fulton County service area. Although our water professionals work tirelessly to deliver safe, reliable water to our customers, we need your help in keeping trash and other debris out of our waterways. Littering is one of the most challenging issues to take on in Fulton County, which is the most populated county in the state of Georgia. To fight litter, the Fulton County Department of Public Works has partnered with the Georgia Department of Transportation (GDOT) to get the word out about littering in our County.



In 2020, the Fulton County Department of Public Works removed more than 4500 pounds of trash from our County's creeks and streams. That's roughly the size of a rhinoceros! If you see trash, litter, or debris in your local creeks or streams and wish to organize a community cleanup, please contact Kelli Edwards at Kelli.Edwards@fultoncountyga.gov or call 404-612-7400. **Together, let's Keep It Clean Georgia!**

THOSE WIPES CLOG PIPES

The onset of the COVID-19 pandemic, created a surge in water demand and usage throughout Fulton County and across the country. As most people rushed to clean and sterilize countertops, doorknobs, faucets and other frequently touched surfaces in their homes, the usage of "disposable" wipes surged, and created a wastewater treatment nightmare. Even wipes that say "flushable" on the package can cause major problems in our wastewater system, causing blockages that can lead to sewage backups in our homes and businesses.

HELP FULTON COUNTY KEEP OUR PIPES CLEAR BY REMEMBERING THE FOLLOWING:

- Only flush toilet paper and human waste
- NEVER flush the following:
 - Disposable wipes or paper towels
 - Feminine Products
 - Cotton Balls
 - Dental Floss
 - Diapers
 - Rags or Cloths



Paper towels and wipes removed from the Big Creek Water Reclamation Facility
– March 2020



ALWAYS THERE WHEN YOU NEED IT

As our community and region continue to grow, our water and wastewater needs continue to evolve.

The systems which protect our health, families, environment, and the infrastructure that provides these services, are the backbone of our communities.

We want to say THANK YOU to our frontline workers for all of your continued dedication and commitment to protecting our community. Our highly trained and specialized staff keep the water treatment system running smoothly, 24 hours a day, 7 days a week, 365 days a year. Remember, no matter how often you wash your hands, there is always clean, healthy water!

CELEBRATING 30 YEARS OF AWARD-WINNING WATER

On May 15, 2021, the Tom Lowe Atlanta-Fulton County Water Treatment Plant, celebrated 30 years of operation. Nestled in the city of Johns Creek, the water treatment facility has been instrumental in providing safe, clean, and reliable drinking water to customers within the North Fulton Water System. In addition to serving our 315,000 commercial and residential customers, the facility has consistently been recognized among the water industry for its award winning water.

American Water Works Association (AWWA) President's Award: 2015–2020

American Water Works Association (AWWA) Partnership for Safe Water Director's Award: 2009–2020

Georgia Association of Water Professionals (GAWP) Platinum Award: 2005–2020

United States Department of Health and Human Services: 2019 Water Fluoridation Quality Award

National Safety Council Occupation Excellence Achievement Award: 2020

Georgia Department of Award of Excellence: 2020



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, 2020

WSID 1210005

Important information about your drinking water.

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

FULTON COUNTY BOARD OF COMMISSIONERS

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

Dick Anderson, *County Manager*

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