

Adopt-A-Stream

The Adopt-A-Stream program is a citizen's volunteer stream monitoring program that assesses the health of local waterways through chemical and biological parameters, including pH, dissolved oxygen, temperature, and macroinvertebrate (streamdwelling bugs, including insects, crustaceans, worms, snails, and clams) surveys. The hands-on activities of the Adopt-A-Stream program can be educational and fun for citizens of all ages, and any level of involvement is welcomed. Adopt-A-Stream is a state-wide program administered through the

Georgia Environmental Protection Division of the Department of Natural Resources. Fulton County is certified by the state to offer training and certification to our citizens in this program. All data collected by our volunteers is entered into the state's database and is accessible on their website.

What do volunteers do? Adopt-A-Stream volunteers look out for their local streams. They visit them on a regular basis, report problems, and collect water quality data. Fulton County Public Works provides the training and most supplies needed for both chemical and biological monitoring. Chemical testing is done on a monthly basis. Volunteers use field kits to collect air and water temperatures, pH, and dissolved oxygen readings. This data is sent on to the county and input into a statewide database maintained by the Georgia Environmental Protection Division.

Biological monitoring is conducted quarterly and is an even better chance to get up close and personal with your adopted stream section. Volunteers don wading boots and use nets and buckets to sample the macroinvertebrate life of the stream. One of the best measures of stream health is looking at the life that the stream is supporting. We use aquatic macroinvertebrates as indicators because they are easy to collect and identify.

Coming soon! We are expanding our program to include bacterial monitoring. Monitoring the bacterial levels of our waterways will give us an even better snapshot of what is happening in our watersheds. Citizen volunteers are regular people like you who want to be involved in protecting and enjoying the precious water resources throughout the county. All training, supplies, and support are provided for you. The contribution of your time can make a very big difference to the water quality in your neighborhood.

Fulton County Department of Public Works

141 Pryor Street, SW, Suite 6001, Atlanta, GA 30303 http://www.fultoncountyga.gov/fcwr-home (404) 612 - 7400

Water testing performed from Jan. 1 to Dec. 31, 2017.

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

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FULTON COUNTY

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Annual **Nater Quality** Report 2018 Provide | Protect | Promote WSID 1210005



The Facts About Contaminants In Drinking Water

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, that 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;

<u>Pesticides and herbicides</u>, 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.

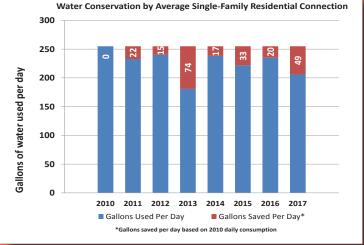
Fulton County Residential Water Consumption

Water usage in Fulton County varies depending on the year, and with the metro-Atlanta region population growing each year, our efforts for water conservation have to adjust to reflect this. Some years, we do well, and residents have saved over the last eight years an average of 31 gallons per household each day. The average person in the U.S. uses 100 gallons of water per day, but we only actually need about 13 gallons for washing. brushing, drinking, and flushing. Fixing leaks, turning off the faucet when washing your hands or brushing your teeth, and watering plants or your lawn during cool times of the day will greatly reduce the amount of water used and can help to make 2018 a banner year for water saved by Fulton County residents.

Where Your Water Comes From

The source of drinking water for the North Fulton water system is the Chattahoochee River, 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.

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 http://www.fultoncountyga. gov/images/stories/WR/water/CCR/ SWAP_summary.pdf or upon written request.





Sang Kim Water Resources Staff Engineer

"I manage various construction projects for Public Works related to the drinking water system. This entails fixing defects that have been found, which is essential to keeping the system operating efficiently and ensuring that drinking water is available to citizens of Fulton County."

Taryn Edwards *Environmental Water Technician*

"As an Environmental Water Technician, I am mandated to exercise data integrity. The citizens of North Fulton County rely on ethical, scientifically defensible information. Because they are our customers, we must protect them and our greatest natural resource, water."



Safe Drinking Water, Our Mission

We are pleased to present you with Fulton County's 2018 Water Quality Report. As your water provider, Fulton County is committed to delivering clean, safe and reliable drinking water to you, your family and the community. We are especially happy to report that the quality of our water is excellent and safe, having met or exceeded all state and federal regulations.

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 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, and the employees spotlighted in this report represent a few of the approximately 250 dedicated professionals who work diligently every day to manage this resource and to ensure customers receive outstanding service.

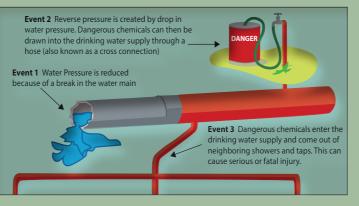
In this report you will find information on our drinking water source; regulations and programs that protect the high quality of our water; 2017 laboratory analysis results; volunteer opportunities and other helpful information and resources from the Public Works Department. As we continue to make water quality our first priority, we will focus on the key elements of water quality: water source protection, treatment, filtration, testing and system maintenance.



System Overview

- 11 elevated storage tanks
- 3 ground storage tanks
- 2 high pressure zones
- 3 pump stations
- 16mg reserve capacity
- 243,000 population served
- 85,274 water meters
- 27,385 water quality tests
- 25,000 fire hydrants
- 1,200 miles of water mains
- Cities served: Alpharetta, Johns Creek, Milton, Roswell

Cross-Connection Control Program



Cross-connections that can potentially contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to industrial equipment containing chemicals (such as air conditioning systems, fire sprinkler systems, and irrigation systems, or water sources of questionable quality). Cross-connection contamination can occur when the pressure in the drinking water line is lowered due to a broken water main pipe, widespread power outages, or during the use of hydrants for fire extinguishing. With this lower pressure in the drinking water line, contaminants could potentially backflow from the equipment or other contaminated source and into the drinking water system.

Did you know that your irrigation can cause contamination to your and your neighbor's drinking water?

An irrigation system makes watering lawns and gardens easier. However, improperly installed or maintained systems may contaminate your private water system with weed killers, fertilizers and other harmful pollutants. If your home's drinking water supply becomes contaminated, your neighbor's water is at risk as well. To prevent contaminated water from backflowing into the public water system it is important that you install a backflow device. Contact the Fulton County Backflow Prevention Section with questions and concerns: Jason Depas, Backflow Prevention Coordinator, at 404-612-4232 or Jason.Depas@fultoncountyga.gov.



Rashaad Mincey Backflow Prevention Inspector

"I oversee enforcement, use, and maintenance of backflow prevention devices. Proper use prevents contaminants and other pollutants from flowing back into the drinking water system. I am gratified to know that I have an essential role in protecting our potable water system for Fulton County citizens."



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. 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 (800-426-4791) or at http://www.epa.gov/safewater/lead.

Shelley Lange Environmental Education

Coordinator "One of the jobs I have as Environmental Education Coordinator is speaking to residents about water stewardship.

We provide programs to all of

Fulton County's residents so that they can know and appreciate our

waterways as the vital resources

that they are. The Chattahoochee

River is Atlanta's lifeline: our

citizens can help us sustain it."

John Henderson

Senior Crew Leader

"I have worked for the Fulton County Water Resources Division for 30 years maintaining the 25,000 fire hydrants in the drinking water distribution system."



What's in Our Water

The results of our monitoring in 2017 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, 2017 - December 31, 2017)						
EPA Regulated Substances or Contaminants Monitored in the Water Plant						
Substance (units)	Maximum Residual Disinfectant Level (MRDL)	Maximum Residual Disinfectant Level Goal (MRDLG)	Highest Amount Detected	Range Detected (lowest to highest)	Does water meet 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 (ppm) (measured as Nitrate-Nitrite)	10	10	0.60	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)	Does water meet EPA standard?	Typical Source
Total Organic Carbon [TOC] (ratio)	Π	$TT = \ge 1$	1.00	1.00 – 1.00	YES	Naturally present in the environment
Turbidity (NTU)	TT	TT = 1	0.19	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 (MRDL)	Maximum Residual Disinfectant Level Goal (MRDLG)	Highest Amount Detected	Range Detected (lowest to highest)	Does water meet EPA standard?	Typical Source
Chlorine (ppm)	4	4	1.26	0.231.26	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 (MCLG)	90th percentile (90% of samples taken were below this amount)	# of samples above action level (AL) (No more than 5 samples above AL allowed)	Does water meet EPA standard?	Typical Source
Copper (ppb) (collected in July 2015)*	1300	1300	100	0 out 50 samples taken	YES	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb) (collected in July 2015*	15	0	2.5	1 out 50 samples taken	YES	Corrosion of household plumbing systems; Erosion of natural deposits
Substance (units)	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Highest Number of Positive Samples Reported	% of Positive Samples in the Total Number of Samples Collected	Does water meet EPA standard?	Typical Source
Total Coliform (% positive samples in total # of samples collected per month)	5% of monthly samples are positive	0	5	3.3	YES	Naturally present in the environment
Fecal Coliform or E. coli bacteria (# of positive samples)	0	0	1	N/A	YES	Human or animal fecal waste
Substance (units)	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Highest Level Detected Average	Range Detected (lowest to highest)	Does water meet EPA standard?	Typical Source
Haloacetic Acid HAA5** (ppb)	60	N/A	22.8	4.8-29.1	YES	Byproduct of drinking water chlorination
Trihalomethane** TTHM (ppb)	80	N/A	54.0	16.9 – 81.7	YES	Byproduct of drinking water chlorination

*Next lead and copper sampling is scheduled for June 2018

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

Waivers (exemptions) were extended to the county by the state in January 2017 through December 2019 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.