2018 WATER QUALITY REPORT

Gwinnett County Department of Water Resources is pleased to present the annual water quality report. This Consumer Confidence Report contains important information about the quality of your drinking water, including detailed results of state and federally mandated tests for various contaminants. We are proud to say that in 2018, there were no EPA Safe Drinking Water Act violations to report. A safe and reliable drinking supply is essential to a growing, progressive community like Gwinnett. Our staff is committed to researching and implementing innovative ways to deliver high quality water at an excellent value.

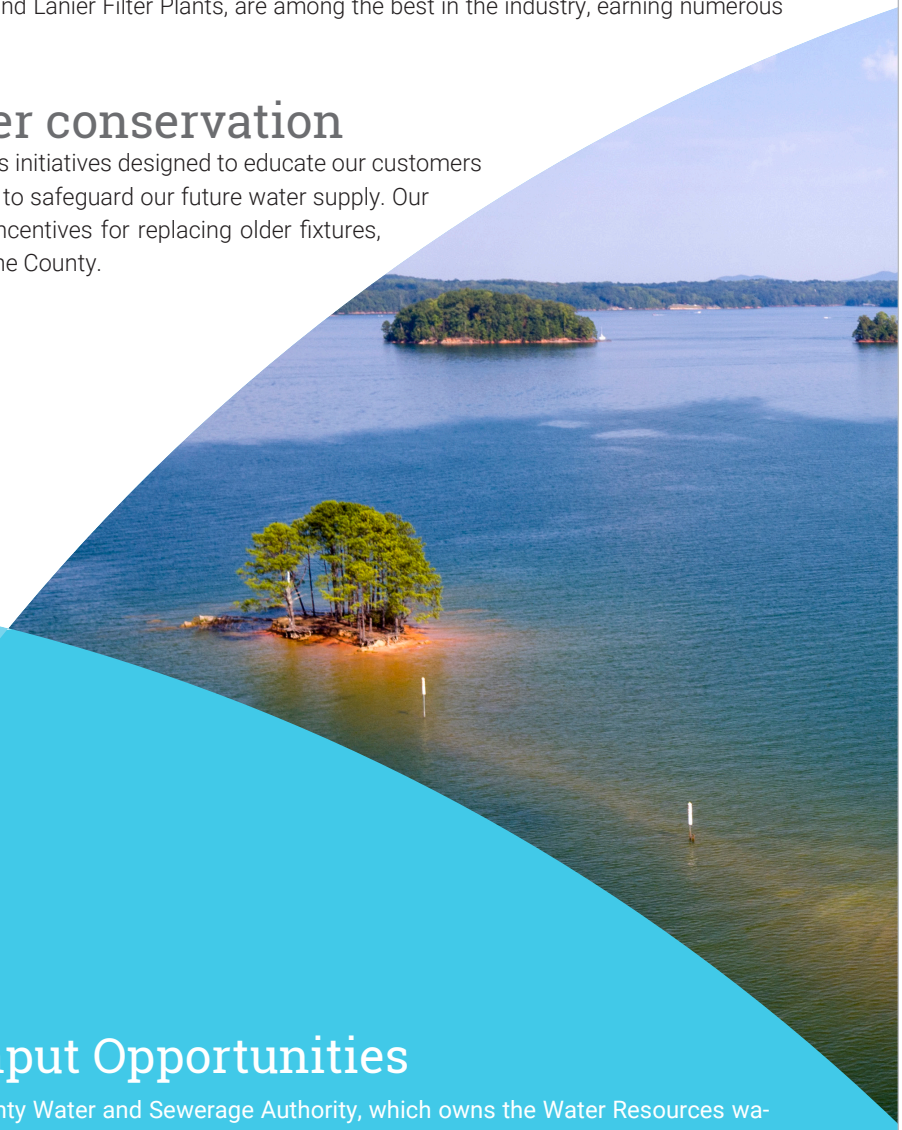
Lake Lanier provides excellent water

Gwinnett County receives its drinking water supply from Lake Sidney Lanier located just north of Buford. Lake Lanier is a part of the Chattahoochee River system, which provides drinking water for more than 60 percent of Georgia's population. The Lake Lanier watershed comprises more than 1,000 square miles in 10 Georgia counties, including the headwaters of the Chestatee and Chattahoochee Rivers.

Gwinnett's two water production facilities, Shoal Creek and Lanier Filter Plants, are among the best in the industry, earning numerous awards for flawless yearly plant operation.

Gwinnett focuses on water conservation

Gwinnett County's Water Conservation Program includes initiatives designed to educate our customers and the community about water efficient behaviors and to safeguard our future water supply. Our efforts include public outreach activities, rebates and incentives for replacing older fixtures, and efficient water management practices throughout the County.



GWINNETTH2O.COM /
DWRCARE@GWINNETTCOUNTY.COM

Public Input Opportunities

The Gwinnett County Water and Sewerage Authority, which owns the Water Resources water and wastewater system, acts as an advisory agency to the Gwinnett County Board of Commissioners. The authority meets monthly at the DWR Central Facility. For a schedule of meetings, visit the County's website at **www.gwinnettcounty.com**.

Gwinnett

Gwinnett County Drinking Water Quality Data 2018

EPA Regulated Inorganic Substances or Contaminants

Substance (Unit)	Analysis Frequency	MCL	MCLG	Average	Range	Major Sources	Violation
Fluoride1 (ppm)	Daily	4	4	0.81	0.56-1.03	Erosion of natural deposits; water additive which promotes strong teeth	No
Nitrate/Nitrite2 (ppm)	Annually	10	10	0.475	0.43 - 0.52	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	No

[1] Fluoride is added to water to help promote dental health in children. [2]Nitrate and Nitrite are measured together.

Gwinnett County Water Distribution System – Lead and Copper Levels at Residential Taps

Substance (Unit)	Action Level 90%	90th Percentile sample result	Number of sites exceeding Action Level (AL)	Major Sources	Violation
Lead[3] (ppb)	15	1.1	1	Corrosion of household plumbing systems	No
Copper[4] (ppm)	1.30	0.16	0	Corrosion of household plumbing systems	No

Gwinnett is required to test a minimum of 50 homes for lead and copper every three years. The last testing occurred in 2017, and the next testing will take place in 2020. Compliance with the Lead and Copper Rule is based on obtaining the 90th percentile of the total number of samples collected and comparing it against the lead and copper action levels. To have an exceedance, the 90th percentile value must be greater than 15 ppb for lead or 1.3 ppm for copper.

[3]Of the 50 homes tested in 2017, one site exceeded the action level (AL) for lead.
[4]Of the 50 homes tested in 2017, no sites exceeded the action level (AL) for copper.

Disinfection By-Products, By-Product Precursors, and Disinfectant Residuals

Substance (Unit)	Analysis Frequency	MCL (LRAA)	MCLG (LRAA)	Highest Detected LRAA[5]	Range	Major Sources	Violation
TTHMs (Total Trihalomethanes) (ppb) - Stage 2	Quarterly	80	0	59.25	9.95 - 59.25	By-products of drinking water disinfection	No
HAA5s (Haloacetic Acids) (ppb) - Stage 2	Quarterly	60	0	25.925	8.125 - 25.925	By-products of drinking water disinfection	No
TOC (Total Organic Carbon) (ppm)	Monthly	TT	N/A	Average=1.13	0.91 - 1.4	Decay of naturally-occurring organic matter in the water withdrawn from sources such as lakes and streams	N/A
Chlorine (ppm)	Monthly	MRDL=4	MRDLG=4	2.19	0.26-2.19	Drinking Water Disinfectant	No
Bromate (ppb)	Monthly	10	0	Average=<5.0	<5.0 - 7.7	By-product of drinking water disinfection utilizing ozone	No

[5]LRAA= Locational Running Annual Average

Turbidity

Substance (Unit)	Analysis Frequency	MCL	MCLG	Highest value reported	Lowest % of samples meeting limit	Major Sources	Violation
Turbidity (NTU)	Continuous	TT, <0.3 in 95% of monthly samples	0	0.22	100%	Soil Runoff	No

Note: Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Microbiological Contaminants

Substance (Unit)	Analysis Frequency	MCL	MCLG	Highest % positive samples (monthly)	Range	Major Sources	Violation
Total Coliform Bacteria6 (+/-)	Monthly	<5% positive samples (monthly)	0	0.36%	0-0.36%	Naturally present in the environment	No

[6] 270 samples taken monthly

Understanding the Water Quality Chart

As in previous years, the Water Quality Report compares the quality of your tap water to state drinking water standards. The report includes information on all regulated and unregulated drinking water contaminants that were detected during calendar year 2018. Contaminants that were tested for, but not detected, are not included in this report.

PPM and PPB: Simply put, "ppm" means "parts per million" and "ppb" means parts per billion." PPM corresponds to one penny in $10,000 or one minute in two years. PPB corresponds to one penny in $10,000,000 or one minute in 2,000 years.

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 are set by the U.S. Environmental Protection Agency.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as technologically feasible.

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 for control of microbial contaminants.

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

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

Nephelometric Turbidity Unit (NTU): A measure of suspended material in water. Turbidity is measured by shining a beam of light through water and measuring the angle at which the light is scattered by the suspended material. An instrument called a Turbidimeter is used for this purpose.

Maximum Residual Disinfectant 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.

Efficient water management

Through best management practices such as an aggressive leak-detection program, a pricing structure that encourages water conservation, and a range of progressive County ordinances, DWR strives to maximize water efficiency and serve as a water conservation leader in the region. Gwinnett has also made a concerted effort to reduce water usage in County-owned facilities. All departments have taken positive steps to conserve water.

Gwinnett County is a pioneer of reclaimed water use in the state of Georgia. At the state-of-the-art F. Wayne Hill Water Resources Center, wastewater undergoes a stringent treatment process that cleans it to an almost pristine state before being discharged into the Chattahoochee River or Lake Lanier.

To learn more about water conservation in Gwinnett, please visit www.DWRconserve.com or email dwrconserve@gwinnettcounty.com.

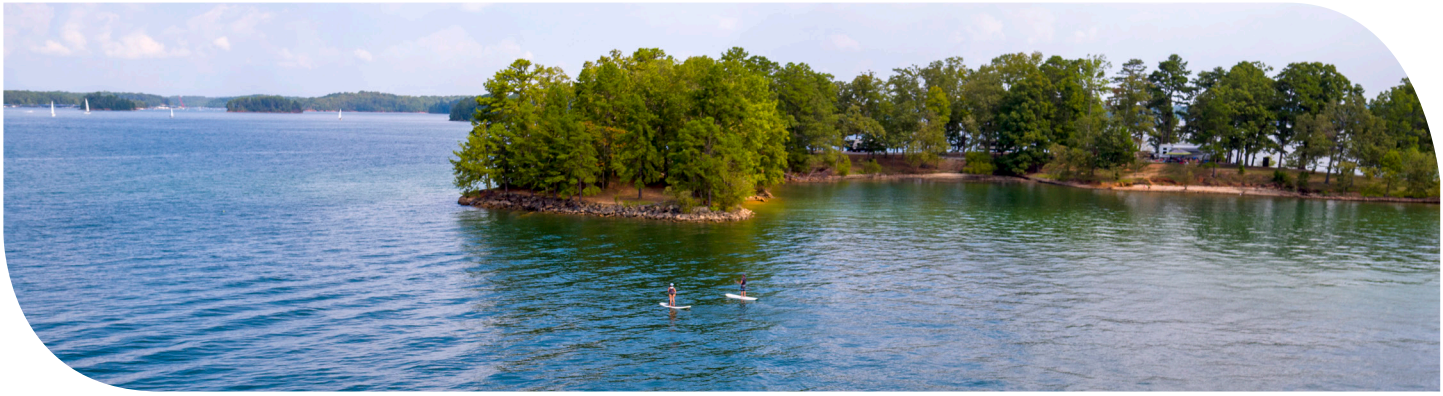
Getting involved

The Department of Water Resources offers many opportunities for residents to get involved. Throughout the year, the department hosts classes and events focused on conservation and protection of our water supply. Examples of these workshops include rain barrel making, fix-a-leak, outdoor water conservation and many more. A full calendar of these events can be found on the department's website, www.gwinnetth2o.com.

The department also offers opportunities to get more exposure at several festivals and events throughout the year.

Residents can also participate in programs such as the high-efficiency toilet rebate program, which offers rebates to qualified homeowners for replacing old, inefficient toilets. Information on this program can be found at www.gwinnetth2o.com.

To schedule an educational program or tour for your group, please contact DWR Outreach and Education at dwrschools@gwinnettcounty.com or 678.376.6722. All public outreach programs are offered free of charge to Gwinnett County residents, schools, and businesses.



Notes about contaminants

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 land or through the ground, it dissolves naturally occurring minerals and, in some cases, can pick up substances resulting from the presence of animal or human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from septic systems, agriculture, livestock operations, wildlife, and sewage treatment plants
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, and septic systems
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil or gas production, mining, or farming
- Radioactive contaminants, like radon, can be naturally occurring or the result of oil and gas production and mining activities

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which provide the same protection for public health.

A note about lead

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 Gwinnett Department of Water Resources is responsible for providing high quality drinking water, but it 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 two 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 online at www.epa.gov/safewater/lead.

Contaminants and health risks

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 USEPA's *Safe Drinking Water Hotline* at 800.426.4791.

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 people, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers.

USEPA/Centers for Disease Control 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.

For more information

For additional information or questions about this report, contact the Gwinnett County Department of Water Resources Environmental Laboratory at 678.376.4272. The Water Production section manager may be reached at 678.376.4200.

What is Cryptosporidium?

Cryptosporidium (Crypto) is a one-celled parasitic protozoan often found in water sources that receive runoff from animal waste. Crypto can infect humans and have severe impacts on certain people, including organ transplant recipients, immunocompromised persons, young children, and persons undergoing cancer treatment. Water Resources has a monthly sampling and analysis program for Crypto and Giardia, another protozoan often found in water. Samples of both lake water and finished drinking water are analyzed each month. No Cryptosporidium or Giardia was detected in the lake water or drinking water.

Gwinnett
Water Resources

Lawrenceville, Georgia
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