2014 Annual Water Quality Report

FULTON COUNTY

Fulton County Department of Water Resources
141 Pryor St SW, Suite 6001
Atlanta, GA 30303
http://www.fultoncountyga.gov/

Water testing performed from January 1, 2013 to December 31, 2013
WSID GA 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.

Help Us Serve You Better

Water quality and safety are sometimes difficult to understand and the information in this brief report may not answer all of your questions. For additional information, questions or concerns, please contact Corlette Banks at 404-612-7400 or email us at director.dwr@fultoncountyga.gov during normal business hours. Additional copies of this report are available at your public library.

Fulton County's Water ... Same Great Quality, Same Low Cost

The federal Environmental Protection Agency (EPA) sets regulations on water quality and ensures that you are informed about your community's water quality through this annual water quality report. This year's report shows that we continue to enjoy safe, high quality and great tasting water at a very low cost. Fulton County's tap water is one of the best deals around - having the lowest combined water/sewer rates in metro Atlanta.

Since water is an essential component of a healthy community and economy, Fulton County offers the "platinum standard" in water quality. For calendar year 2013, our treatment facility received the Georgia Association of Water Professionals (GAWP) Platinum Award in recognition of 10 years of complete and consistent compliance with the Safe Drinking Water Act. For 365 days of the year, rain or snow, approximately 250 Water Resources employees strive to excel in everything they do; from the installation of pipes to engineering services to laboratory testing, and most importantly, customer service.

Informed customers are our best allies, and we are dedicated to giving you the information you need to make knowledgeable decisions. You can participate through public hearings, notice of which is posted at the Government Center and on our website at www.fultoncounutyga.gov.

For questions or problems regarding water services, please call 770-640-3040; for sewer system problems or questions, call 404-612-3061 (North Fulton) or 404-612-3163 (South Fulton). For billing or reconnection questions, please contact the Finance Department's main customer service line at 404-612-6830.

The Facts About 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 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 stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming;
- Pesticides and herbicides, which 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, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems;
- Radioactive contaminants, 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 (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Wise Water Planning

Fulton County delivers great-tasting, safe, dependable tap water for pennies a gallon. Great water quality is derived from sound management of our infrastructure. The money you pay for water services goes towards maintaining our water system, from protecting, storing, treating and delivering water to your tap, to customer service and administration.

Our Capital Improvement Program (CIP) keeps the water and wastewater assets maintained in good working order. The CIP projects are designed to replace aging equipment at the treatment facilities, expand treatment capacity to accommodate population growth, improve treatment processes to comply with more stringent standards, and rehabilitate water and sewer piping systems.

Below are some of the projects we've undertaken to ensure both water quality and quantity, both today and in the future:

- New water transmission pipelines installed along Crabapple Road, McGinnis Ferry, and Haynes Bridge Road to provide increased water pressure and capacity. The combined cost for these projects totaled $3.7 million.
- The ongoing large water transmission main construction project, totaling $16 million, will accommodate the projected population growth in North Fulton, and provide increased water system reliability.
- Began construction of Water Resources Operation Center for the North Fulton operations. This facility will provide a central location for the water and sewer operations crews serving North Fulton, and a convenient location for water customers to handle business needs (permitting, billing issues, etc).
- AFCWRC Plate Settlers Project involves the installation of new equipment to replace ageing equipment and also increase the clarifier performance.

Conservation: Waste Not, Want Not

Top 6 things you can do indoor and outdoors to increase your water use efficiency

Replace Water Wasting Toilets
Replacing an older toilet with a WaterSense model can save an average household 30 gallons a day and up to $260.00 per year. Participate in Fulton County's toilet rebate program. For more information: visit our website http://fultoncountyga.gov/fcwr-education

Upgrade your Showerhead
If you have a 2.5 gpm showerhead, investing in a water-saving 2.0 gpm unit could save you up to $25 per year. Look for the WaterSense label when replacing any appliance. www.epa.gov/watersense/product_search.html

Find Leaks
Conduct a home water audit to find leaks. Fixing leaks can on average save 10 gallons per day per household. To check for leaks in the toilet, put a few drops of food coloring in toilet tank. If the color appears in the bowl, without flushing within 30 minutes, you have a leak that should be repaired immediately.

Reduce Amount of Turf
Replace turf with mulch or select the right plant for the right place. If you have full sun make sure to install plants that love the sun and heat. For shady and moist locations pick plants that tolerate those conditions.

Adjust the Mower
Adjust your mower to a higher setting. Consider leaving clippings on the lawn. Longer grass blades provide shade and help hold in moisture longer. Adjust your lawn and/or gardening watering schedule for optimum efficiency.

Install a Rain Barrel
Lawn and garden watering make up nearly 40% of total household water use during the summer. Diverting water from storm drains also decreases the impact of runoff to streams. A rain barrel is an easy way to have a consistent supply of fresh water for outdoor use.

Protecting The "Hooch"

Fulton County's drinking water supply comes from a surface water source, the Chattahoochee River. A source water assessment has ranked the Chattahoochee watershed as having a medium risk of potential pollutant loads. The complete report is available for review on our website at http://www.fultoncountyga.gov/fcwr-education/5585-annual-drinking-water-quality-reports.

As metro-Atlanta's population continues to grow, so does the demand for fresh water. The availability of a clean and ample water supply is one of the key factors in maintaining our quality of life. More than 450 million gallons per day (MGD) is pumped from the Chattahoochee River by many different local utilities, including the Atlanta-Fulton County drinking water plant, located in Johns Creek.

The water quality of the Chattahoochee River is impacted by our everyday actions. Runoff pollution from the land and roadways is washed into the river every time it rains, carrying our litter, leaking vehicle fluids, and yard chemicals. One of our biggest transgressions, though, is using our toilets and drains to dispose of unwanted items improperly.

The wastewater treatment process does not entirely remove unwanted medications that get flushed down the toilet. These chemical compounds are often released back into the river with the treated wastewater. Fats, Roots, Rags, Oils and Grease (FROGs) in the sewer system can all lead to clogged pipes, which in turn lead to sewer spills. Raw sewage backing up in the sewer line can overflow into the environment, oftentimes into a nearby waterway. Keeping Fulton County's water resources flowing depend on all of us doing our part to use water efficiently and realizing that our daily habits affect everyone that rely on the Chattahoochee River.

Moving Toward Tap Water

Your System at a Glance

- 45 MGD
- Serves Alpharetta, Johns Creek, Milton, and 80% of Roswell
- 16.7 million gallons of total storage capacity
- 246,500 population served
- 1,200 miles of 8-to 54-inch diameter water mains, service connectors, etc.
- 11 elevated storage tanks
- 3 ground storage tanks
- 15,000 fire hydrants, valves, and related appurtenances

More and more consumers are choosing bottled water over tap water because of convenience. However, in these economic times, as we're exploring ways to save money, making the switch to tap water is a smart choice both financially and environmentally. Consider the following:

- Tap water is as safe, if not safer, than bottled water. Water utilities must monitor for over 100 contaminants and must meet almost 90 regulations for water safety and quality.
- Tap water is thousands of times cheaper than bottled water. Compare $0.002 per gallon for most tap water to a range of $0.89 to $8.26 per gallon for bottled waters.
- Tap water is better for the environment. Millions of barrels of oil are used to produce and ship plastic water bottles, 75% of them land in the garbage or our waterways.

Making Sure Your Water Is Safe

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, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers 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 (800-426-4791).

Keeping the Lead Out

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. AFCWRC 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 or at http://www.epa.gov/safewater/lead.

Our Results

The results of our monitoring in 2013 are shown in the table below. The most important information contained in this report is that Fulton County's drinking water quality continues to meet or exceed state and federal regulations.

Water Quality Monitoring Results
(Testing Period: January 1 - December 31, 2013)

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	0.70	0.67 - 0.70	YES	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate (ppm) (measured as Nitrate-Nitrite)	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)**	**Does Water meet EPA standard?**	**Typical Source**
Total Organic Carbon [TOC] (ratio)	TT	TT = > 1	1.11	1.00 – 1.11	YES	Naturally present in the environment
Turbidity (NTU)	TT	TT = 1	0.13	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	1.29	0.20--1.29	YES	Water additive used to control microbes
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**
Copper (ppb) (collected in June 2012)	1300	1300	170	0 out 50 samples taken	YES	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb) (collected in June 2012)	15	0	2.5	0 out 50 samples taken	YES	Corrosion of household plumbing systems; Erosion of natural deposits
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**
Total Coliform (% positive samples in total # of samples collected per month)	5% monthly samples are positive	0	0	0	YES	Naturally present in the environment
Fecal Coliform or E. coli bacteria (# of positive samples)	0	0	0	N/A	YES	Human or animal fecal waste
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**
Haloacetic Acid HAA5 (ppb)	60	N/A	26.7	16.3 – 46.0	YES	By-product of drinking water chlorination
Trihalomethane TTHM (ppb)	80	N/A	48.5	10.0 – 66.1	YES	By-product of drinking water chlorination

***For TTHM/HAA5, the Highest Level Detected is the highest locational running average (LRAA) for all sites (as per Stage 2 DBPR).**

Waivers (exemptions) were extended to the County by the State in 2011 through 2013 for the following contaminants: Arsenic, Asbestos, Cyanide, Radium and Synthetic Organic Compounds. Synthetic Organic Compounds (SOCs) are man made products such as pesticides, gasoline components, PCB (Polychlorinated bi-phenyls; formerly used in rubber, dyes, heaters, etc.), phenols, and dioxin.

What's In Our Water?

Included in this report are tables depicting contaminants that have been detected in our water. They are, in all cases, below the levels prescribed by the EPA but, nevertheless, are present. They pose no known health risk at these levels. We have listed a few definitions to help you understand the information in the tables.

- **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 which a water system must follow.
- **Exemptions:** A State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- **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 feasible using the best available treatment technology.
- **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 for control of 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.
- **NTU (Nephelometric Turbidity Unit):** The unit used to express a measurement of turbidity.
- **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.
- **TT (Treatment Technique):** 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.