# FULTON COUNTY Annual Water Quality Report

Water testing performed from January 1, 2009 to December 31, 2009



WSID GA 1210005

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## Message to the Community:

We may take it for granted, but Fulton County's drinking water is one of the many things that help our County flourish and adds to our quality of life. From river to faucet, the award winning Atlanta-Fulton County Water Resources Commission (AFCWRC) Water Treatment Plant delivers some of the best water in the state.

Fulton County Department of Public Works produces this Drinking Water Quality Report every year as mandated by the Environmental Protection Agency (EPA). This report covers all testing completed from January 1, 2009 through December 31, 2009. We are especially happy to be able to report that the quality of our water is excellent, having met or exceeded the standards and requirements set by the EPA. So drink up Fulton County as we share how we protect and maintain your water supply through monitoring, treatment, investment and long-term planning.

## Source Water Assessment Program

The Fulton County Department of Public Works received a source water assessment study and report for our source of drinking water (the Chattahoochee River) for the AFCWRC Water Treatment Plant which supplies drinking water to the majority of north Fulton County. This assessment reviewed the adjacent land uses that may pose a potential risk to the Chattahoochee River, which included, but are not limited to, gas stations, landfills, junk yards, agricultural fields, waste water treatment plants, and mining activities. The assessment has ranked the Chattahoochee River watershed to have a medium risk of potential pollutant loads. This information can help communities understand the potential for contamination of their drinking water supplies and can also be used to prioritize the need for protecting the Chattahoochee River. The complete report is available for review on our website at www.fultoncountyga.gov/county/dpw.





# Where does your water in your faucet come from?

When you are brushing your teeth, do you ever stop to wonder where the water in your bathroom faucet is coming from? Or how it got to your home in the first place? Fulton County provides safe, clean drinking water to more than 70,000 homes and businesses in the north Fulton area. Our water comes from a surface water source, the Chattahoochee River. On average 30-35 million gallons of water per day (MGD) is pumped from the river and treated at the AFCWRC Water Treatment Plant which is located in the city of Johns Creek, and then sent on to your home or business through a series of distribution pipes and water storage plants.

Water towers utilize gravity to normalize system pressure and demand; therefore they are located in the highest points in the community. Using water towers in this way we are able to maintain steady water pressure and flow rates in the distribution lines, averaging about 60 psi throughout most of our system. Our water tanks typically hold about 10 hours worth of water. This means that in the event of a system failure, you will not lose service right away.

Every single person in north Fulton relies on this supply of clean, safe drinking water. The entire system, consisting of 1,200 miles of distribution pipes and 12 water tanks, is maintained by many dedicated Public Works employees on a daily basis.





## **Frequently Asked Questions**

#### Is my water hard or soft?

Water in our distribution system is soft: 1 to 2 grain or about 20 ppm Calcium Carbonate.

#### Is there fluoride in our water?

Yes, a little less than 1 part per million (ppm). It is sufficient to prevent tooth decay in children. No additional fluoride supplements are needed as they may cause mottling of the teeth.

#### My water is milky looking, why?

The most common cause is air in the line. If the pressure is high, it traps lots of small bubbles in the water that give a milky appearance. If the water clears on standing, it is air bubbles.

# What is the black, brown, or reddish ring in my toilet?

It is most probably a ring caused by mold. In humid climates, mold grows really fast. In the toilet bowl at the water surface, chlorine that disinfects the water dissipates leaving a perfect surface for mold to grow. To avoid this issue, pour a little disinfectant in the toilets that you don't use frequently.

#### How can I get my water tested?

Contact our Water Quality Laboratory at 404 612-9429 or 404 612-9427 to schedule a test. Depending on the analysis requested, a fee may apply.



#### Johns Creek Environmental Campus

After more than 40 months of construction, the new Johns Creek Environmental Campus (JCEC) is nearing completion! This state of the art wastewater treatment facility is located on nearly 43 acres in the City of Roswell, adjacent to the Chattahoochee River. JCEC brings together a vision developed through collaboration with the late Fulton County Commissioner Bob Fulton, The Department of Public Works, The City of Roswell, and surrounding neighborhoods.

Our existing plant located in Horseshoe Bend was nearing the end of its useful life. The new facility will operate more efficiently, ensuring adequate wastewater treatment capacity for growing businesses and homes. With its park like appearance, the plant blends into the existing communities, both architecturally and aesthetically. The wastewater process is totally enclosed, including extensive noise and odor controls. The County selected to use membrane biological reactor (MBR) technology in conjunction with biological phosphorus removal, resulting in higher quality treated wastewater being returned to the Chattahoochee River.

The facility will provide learning opportunities for local students and a learning center for a variety of water quality management issues that face us today. Some of the distinguishing features of the facility include: an 8,000 gallon demonstration cistern located at the entrance of the building for collecting rain water; water wise landscaping throughout the entire landscape, which serves as a great learning tool for Georgia gardeners about water tolerant plantings that are beautiful and functional; and reuse water capability. Reuse water (highly treated water) is most commonly used for non potable (not for drinking) purposes, such as landscape and golf course irrigation.

If you are interested in a tour of the facility or would like additional information please contact Corlette Banks @ 404-612-8097 or visit the website at http://www.fultonec.com.



### What's in our water?

This report contains tables depicting contaminants that have been detected in our water. They are all 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 limit, the system is compliant.
- Action Level (AL): 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 a 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):

# Lead in Drinking Water

Elevated levels of lead in drinking water can cause serious health problem, 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.

## Where Do We Get Our Water?

The source of our drinking water 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 AFCWRC treatment plant located in Alpharetta. The facility produces drinking water of the highest quality and has won numerous awards given by the Georgia Department of Natural Resources, the United States Environmental Protection Agency, and the Georgia Association of Water Professionals.

### **Important Health Information**

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).



# **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 (EPA) 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.

# EPA Regulated Substances or Contaminants Monitored in the Water Plant

Substance (units)	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Highest Level Detected	Range Detected (lowest to highest)	Does Water Meet EPA Standards?	Typical Source
Fluoride (ppm)	4	4	0.87	0.86 - 0.88	YES	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate (ppm) (measured as Nitrate-Nitrite)	10	10	0.35	N/A	YES	Run-off 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 amount)	Does Water Meet EPA Standards?	Typical Source
Total Organic Carbon [TOC] (ratio)	π	∏= <u>&gt;</u> 1	1.00	1.00 - 1.00	YES	Naturally present in the environment
Carbon [TOC]	π π	∏= <u>&gt;</u> 1 ∏=0	1.00 0.03	1.00 - 1.00 N/A	YES YES	

# EPA Regulated Substances or Contaminants Monitored in the Distribution System

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 thre 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. It is a good indicator of water quality and effectiveness of disinfectants and our filtration system.

Substance (units)	Maximum Residual Disinfectant Level (MRDL)	Maximum Kesidual Disinfectant Level Goal (MCLG)	Highest Amount Detected		ange Detected west to highest)	Me	s Water eet EPA 1dards?	Typical Source
Chlorine (ppm)	4	4	1.35	0.00 - 1.35			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 percent (90% of sam) taken were be this amoun	ples elow	# of samples ak action level (AL) more than 5 sam above AL allow	)(No 1ples	Does Wate Meet EPA Standards	
*Copper (ppm) (collected in Nov. 2009)	1.3	1.3	0.09		0 out of 50 samples taken		YES	Corrosion of household plumbing systems; Erosion of natural deposits
*Lead (ppb) (collected in Nov. 2009)	15	0	2.5		2 out of 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 Average Reported		ange Detected west to highest)	Ī	oes Water Neet EPA tandards?	Typical Source
Haloacetic Acid HAA5 (ppb)	60	N/A	33		26.7 - 62.8		YES	By-product of drinking water chlorination
Trihalomethane TTHM (ppb)	80	N/A	39		29.2 - 89.8		YES	By-product of drinking water chlorination

Waivers (exemptions) were extended to Fulton County by the State of Georgia from 2007 through 2010 for the following contaminants: Arsenic, Asbestos, Cyanide, Radium and Synthetic Organic Compounds. Synthetic Organic Compounds (SOC's) are man-made products such as: pesticides, gasoline components, PCB (polychlorinated bi-phenyls; formerly used in rubber, dyes, heaters, etc.), phenols and dioxin.

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



Occasionally you may stumble across materials that you're not certain how to dispose of properly. Products such as unused cans of paint, paint thinners, solvents, spray insecticides, liquid fertilizers or a can of gasoline stored in your garage are commonly referred to as Household Hazardous Waste (HHW). Pouring them down your sink or storm drains or putting them directly in the garbage IS NOT the best course of action for disposal. How best are you supposed to rid yourself of these chemicals? The first step would be to only purchase the amount you need, but if you do find you have an excess, the following tips will help you dispose of it safely.

As a resident of Fulton County you can legally throw some materials in the garbage, such as paint and motor oil. **However, the material must be in a solid form**. Adding kitty litter, sawdust, or shredded newspaper into unused paint will solidify it. Used motor oil can be taken to many auto parts stores for recycling. Visit Earth911.com for specific recycling locations. If this option is not available, you can solidify the oil using "oil dry" found at any auto parts store. Once you have solidified your materials, double bag them in garbage liners, tie them tightly and place them in your garbage can.

These are just two examples. There are hundreds of products that are hazardous and must be disposed of safely. For more information on proper waste disposal or for more information on the Fulton County Household Hazardous Waste program contact

> Fernell Patterson at fernell.patterson@fultoncountyga.gov or 404-612-8110.

# You're Invited!

Fulton County Public Works believes that 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 meetings, programs, and volunteer opportunities. Notice of upcoming meetings and events is posted at the Government Center and posted on our web site at www.fultoncountyga.gov.

# **Need More Information?**

Water quality and safety are increasingly complex and the information in this brief summary may not answer all of your questions. For additional information, questions, or concerns please contact Corlette Banks at (404) 612-8097 during normal business hours. An online version of this report is available at www.fultoncountyga.gov.

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Artwork for Report by Clarice Allgood

#### 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.