

# Annual Water Quality Report

## Fayette County Water System

P.O. Box 190, 245 McDonough Road, Fayetteville, Georgia 30214 / 770-461-1146  
*This report includes data collected between January 1, 2010 and December 31, 2010*

**Source of Water:** Fayette County Water System gets its water from several sources. The surface water sources are: Lake Kedron, Lake Peachtree, Lake Horton, Line Creek, Starr=s Millpond and the Flint River. The well water sources are all in the crystalline aquifer. The purchase water sources can be the City of Atlanta, City of Fayetteville and Clayton County Water Authority.

**Treatment Process:** Alum and lime are added to the water taken from the surface water sources to cause the finely divided mud particles to clump together so that the mud and other particles will settle to the bottom of the settling tanks by gravity. The clear water is filtered and disinfected with chlorine to make the water biologically safe. The pH is adjusted by adding lime, phosphate is added to make the water non-corrosive, and fluoride is added to prevent dental cavities. The groundwater from wells is treated with chlorine, soda ash, and phosphate. Fluoride is also added.

### **Important Information About the Safety of Your Drinking**

**Water:** All water sources, including lakes such as ours, are fed by water that passes over the surface of the land or through the ground. The water dissolves naturally occurring minerals and materials and can pick up substances resulting from the presence of animals or from human activity. In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain substances in water provided by public water systems.

The Atlanta Regional Commission prepared a Source Water Assessment, an assessment for potential pollution of surface drinking water supply sources, for the Water System. This assessment showed the Horton Creek watershed, our major source for drinking water, to be low for pollution susceptibility, and Line Creek, Flat Creek and Whitewater Creek to be medium for pollution susceptibility. A copy of a summary of this report is available upon request and the entire report is available for review at our office during regular business hours.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some substances (contaminants). The presence of contaminants does not necessarily indicate the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

The table inside shows that the drinking water in Fayette County gets a good report when compared to health standards. As health scientists learn more about our environment and the effect of substances in the environment on human health, new standards will continue to be set for drinking water. The Fayette County Water System will continue to add new technology in order to be able to meet present and future standards.

### **BLENDING OF THE WATER SUPPLY**

<b>Supplier</b>	<b>Gallons</b>	<b>Percent</b>
City of Atlanta	6,766,286	0.2%
Fayetteville	1,443,780	0.0%
Clayton County	0	0.0%
Wells (4)	45,189,700	1.4%
Water Plants (2)	3,155,701,000	98.3%
<b>Total</b>	<b>3,209,100,766</b>	<b>100.0%</b>

*Copies of the City of Atlanta, City of Fayetteville and Clayton County Water Authority water quality reports are available upon request.*

### **Additional Information Sources (web sites about water quality):**

- **EPA Office of Water - [www.epa.gov/ow](http://www.epa.gov/ow)**
- **Georgia Department of Natural Resources - [www.gadnr.org](http://www.gadnr.org)**
- **American Water Works Association - [www.awwa.org](http://www.awwa.org)**

## Drinking Water Analysis

Substance	Sample Frequency	Maximum Level (MCL)	Ideal Goal (MCLG)	Level Found	Range	Likely Sources	Violation
<b>INORGANIC CONTAMINANTS</b>							
Fluoride (mg/L) (a)	Daily 2010	4	4	0.87	0.7 - 1.1	Water additive that promotes strong teeth	No
Lead (ppb) (b)	2010	AL = 15	0	2.5	0 sample sites above AL	Corrosion of household plumbing systems	No
Copper (mg/L) (b)	2010	AL = 1.3	1.3	0.19	0 sample sites above AL	Corrosion of household plumbing systems	No
Nitrate (mg/L)	Annually 2010	10	10	0.87	n/d - 0.87	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits	No
<b>DISINFECTION BY-PRODUCTS, BY-PRODUCT PRECURSORS AND DISINFECTANT RESIDUALS</b>							
Total Trihalomethanes (TTHMs) (ppb) (c)	Quarterly 2010	80	n/a	64	9 - 118	By-product of drinking water chlorination	No
Total Haloacetic Acids (HAA=s) (ppb) (c)	Quarterly 2010	60	n/a	54	4 - 94	By-product of drinking water chlorination	No
Total Organic Carbons (TOC) (d)	Monthly 2010	TT ≥ 1	n/a	1.01	n/a	Decay of organic matter in the water withdrawn from water sources such as lakes and streams	No
Chlorite (mg/L)	Monthly 2010	1.0	0.8	0.23	0.01 - 0.32	By-product of drinking water chlorination	No
Chlorine, free (mg/L)	Daily 2010	MRDL = 4	MRDLG = 4	1.49	0.1 - 2.2	Drinking water disinfectant	No
Chlorine Dioxide (ppb)	Daily 2010	MRDL=800	MRDLG = 800	30	0 - 1000	Drinking water disinfectant	No
<b>MICROBIOLOGICAL CONTAMINANTS</b>							
Total Coliforms (e)	Daily 2010	5% positive samples during a monthly sampling period	0 positive samples during a monthly sampling	1 sample positive 7/19/10 (1.7%)	n/a	Bacteria naturally present in the environment; used as an indicator that other potentially harmful bacteria may be present	No
Turbidity (NTU) (f)	Daily 2010	TT = 1 NTU	n/a	0.32	n/a	Soil runoff	No
		TT = 95% of samples ≤ 0.3 NTU each month	n/a	100	n/a		

- Notes:
- Fluoride is added in treatment to bring the natural level to the CDC and the Georgia Department of Community Health optimum of 0.85 mg/L. EPA established the maximum concentration level for natural fluoride in drinking water at 4 mg/L.
  - Water from the treatment plant does not contain lead and copper. However under EPA test protocol, water is tested at the tap. Tap tests show that where a customer may have lead pipes or lead-soldered copper pipes, the water is not corrosive. This means the amount of lead and copper absorbed by the water is limited to safe levels.
  - The detected level found is the highest running annual average of the most recent quarterly system-wide sample sets covering twelve months, as required by EPA testing protocol. The range is the lowest and highest values reported for the twelve month period.
  - TOC is a calculated removal ratio and is reported for compliance as a running annual average, computed quarterly (35% removal required).
  - More than 60 samples are tested each month. No more than 5% can be positive for Total Coliforms.
  - Turbidity is a measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.

### Information about Lead in Drinking 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 Fayette County Water System 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>.

### Notice to Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people (such as those with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some older adults and infants) may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and the Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the **Safe Drinking Water Hotline (1-800-426-4791)**.

### *How to Read the Report*

#### IMPORTANT DRINKING WATER DEFINITIONS

<b>MCL</b>	<b>Maximum Contaminant Level</b> or Maximum Allowed is the highest level of a contaminant allowed in drinking water by EPA. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. Highest levels are reported to determine compliance. Some are individual readings. Others that are running averages are noted.
<b>MCLG</b>	<b>Maximum Contaminant Level Goal</b> or Goal is 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.
<b>TT</b>	<b>Treatment Technique</b> means a required treatment or process intended to reduce the level of a contaminant in drinking water.
<b>AL</b>	<b>Action Level</b> means the concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.
<b>MRDL</b>	<b>Maximum Residual Disinfectant Level</b> is the highest level of a disinfectant allowed in drinking water by EPA. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
<b>MRDLG</b>	<b>Maximum Residual Disinfectant Level Goal</b> is 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 contamination.

#### DATA TABLE KEY: UNIT DESCRIPTIONS

<b>mg/L</b>	<b>Milligram per liter</b> is the number of milligrams of a substance in one liter of water. One liter is slightly more than a quart.
<b>ppm</b>	<b>Parts per million</b> means 1 part per 1,000,000 (same as milligrams per liter)
<b>ppb</b>	<b>Parts per billion</b> means 1 part per 1,000,000,000 (same as micrograms per liter)
<b>NTU</b>	<b>Nephelometric Turbidity Unit</b>
<b>n/a</b>	<b>Not applicable</b>
<b>n/d</b>	<b>Not detected</b>
<b>≤</b>	<b>Less than or equal to</b>
<b>≥</b>	<b>Greater than or equal to</b>

## ABOUT FAYETTE COUNTY WATER SYSTEM

The Fayette County Water System (ID# 1130001) is operated as an enterprise fund by the Fayette County Board of Commissioners. The revenue generated by the Water System from water payments and meter charges is used to operate the Water System to ensure safe and adequate drinking water for Fayette County customers. The Board has appointed a Water Committee to review and make recommendations concerning the Water System. The Water Committee meets on the 2<sup>nd</sup> and 4<sup>th</sup> Wednesday of each month at 8:00 a.m. at 245 McDonough Road, Fayetteville. Approval of the budget, projects and operations of the Water System is by the Board of Commissioners at their regularly scheduled meetings, which are on the 2<sup>nd</sup> and 4<sup>th</sup> Thursday of each month at 7:00 p.m., and the first Wednesday at 3:30 p.m.

The Water System currently has 61 employees managed by the Director and a staff of assistants. State certified operators and lab analysts perform a variety of laboratory tests to ensure the safety of our drinking water. The Distribution team maintains and repairs a variety of different size water lines in the County. They also install new services and run water line extensions as necessary. The administrative office handles all customer related issues such as payment collection, processing and mailing bills to our more than 27,000 customers, answering customer questions and complaints and tracking construction projects. Meter reading and billing are done monthly. Most meters are read by our drive-by radio read system.

The Water System purchased water from the City of Atlanta and Fayetteville in 2010. Copies of their Consumer Confidence Report will be available at the Water System office for public information.

The Water System operates three reservoirs that are open to the public. Lake Kedron is in Peachtree City, Starr=s Millpond is on Highway 85 South of Fayetteville and Lake Horton is in South Fayette County. Sailboats, row boats and canoes are allowed in Lake Kedron and Lake Horton. Only electric motors are allowed. Fishing license is required and all Georgia Fish and Game rules apply. Docks and boat ramps are available at Lake Kedron and Lake Horton. There are 2.8 miles of scenic walking trails at Lake Horton.

The Georgia Water Stewardship Act went into effect statewide on June 2, 2010. It allows daily outdoor watering for purposes of planting, growing, managing, or maintaining ground cover, trees, shrubs or other plants only between the hours of 4 p.m. and 10 a.m. by anyone whose water is supplied by a water system permitted by the Environmental Protection Division.

Outdoor water use for any purposes other than watering of plants, such as power washing or washing cars, is still restricted to the current odd/even watering schedule.

- Odd-numbered addresses can water on Tuesdays, Thursdays and Sundays.
- Even-numbered and unnumbered addresses are allowed to water on Mondays, Wednesdays and Saturdays.

More information about the outdoor water use schedules can be found on the EPD web site at [www.georgiaepd.com](http://www.georgiaepd.com).

The Water System is preparing to meet future demand. The plan is to increase production at the South Fayette Water Treatment Plant to 9 million gallons per day. Sites are being investigated to erect a one million gallon water tank in northwest Fayette County. The Water System has acquired two additional water tank sites. The ground breaking for Lake McIntosh has been held. The contractor is on site continuing construction of the dam. Lake McIntosh will be a 650 acre reservoir on Line Creek. The lake will yield 10.4 million gallons of water per day for treatment at the Crosstown Water Plant.

The Water System has additional information available on the Web at [www.fayettecountyga.gov](http://www.fayettecountyga.gov). If you have questions about this Consumer Confidence Report, you can call Tony Parrott at 770-461-1146 ext. 6016 or Customer Service at 770-461-1146, option 5.