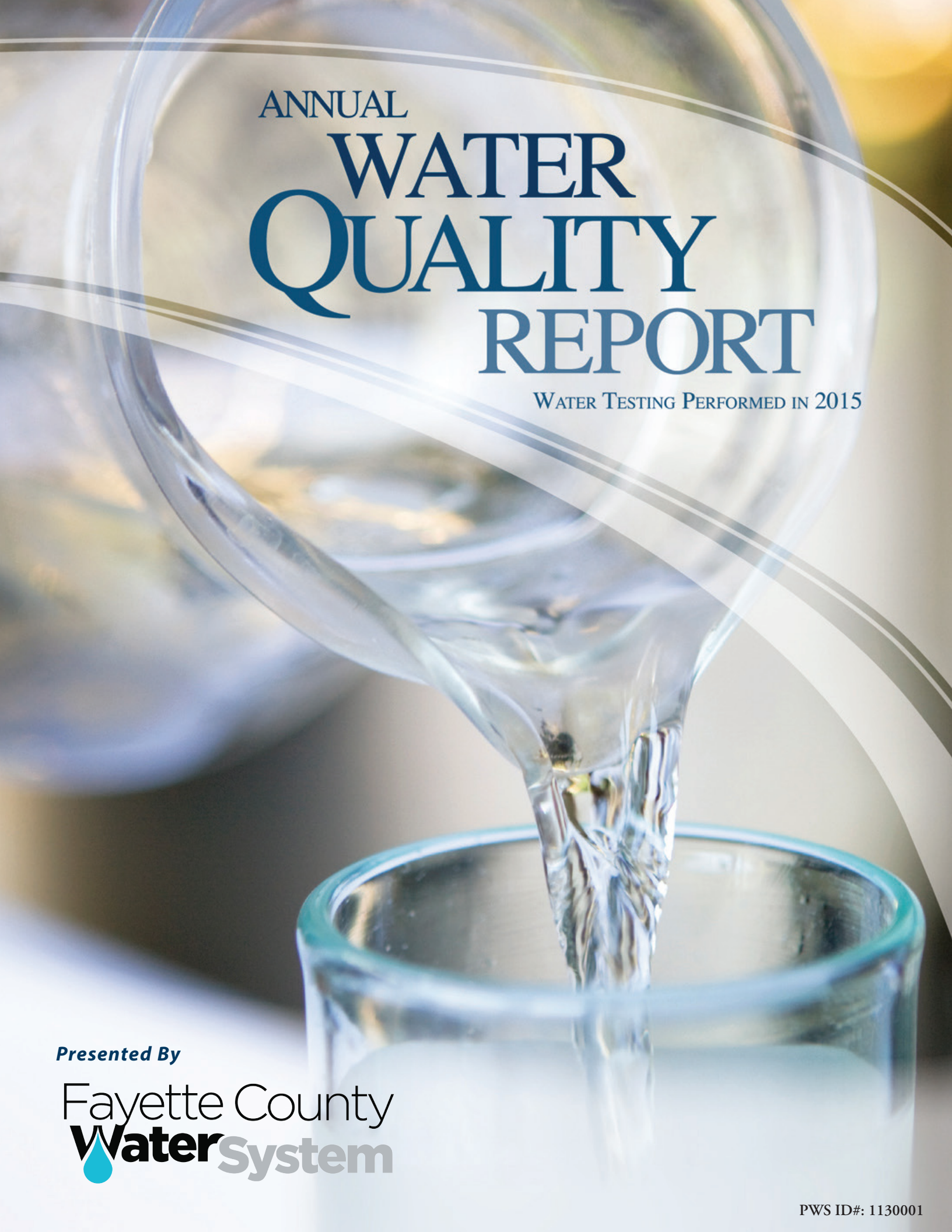


ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2015

Presented By

Fayette County Water System

PWS ID#: 1130001

From the Director's Desk

Let me thank you all for being loyal Fayette County Water System customers. As we all know, water is vital to the success of our community. During 2015 our Water System has charted a new course. We have taken a vow to produce water that not only meets requirements but will exceed all areas of compliance. In recent years, the system has struggled with compliance in the areas of Trihalomethane and Haloacetic acid (THM/HAA) results. By improving the technology to effectively target possible contaminants in the raw water, we can produce an excellent quality of water here in Fayette County. During the last year, we began to make some major improvements at our water plants to continue providing exceptional water quality. Please take the time to review our 2015 accomplishments to improve our service to you:

- Implemented Citizen Self-Serve, an online tool for customers to access their account online
- Added a new Sodium Permanganate feed system to assist in removal of organics and piped chlorine to the filters at the Crosstown WTP and to assist with oxidation of manganese
- Installed new actuators at the Lake Horton Pump Station, which allow us to operate pumps from the plant
- Installed a Liquid Lime feed system for better efficiency and pH adjustment at both treatment plants
- Replaced benchtop equipment at both water treatment plants for water treatment testing
- Developed an RFP for ongoing tank maintenance
- Developed and implemented routine basin cleaning
- Improved the USGS Monitoring to allow better management of raw water reservoirs
- Conducted the largest Dredging Project at Lake Peachtree to improve storage and water quality
- Conducted spillway repairs at Lake Peachtree
- Began providing Fayette County's bottled water, which is treated at the Crosstown Water Treatment Plant, for county meetings and events
- Continued to develop SEMS, a new asset management software, to track preventative maintenance at the water plants, water system assets, backflow testing, inventory, and fire hydrant flushing
- Added a Senior Billing Representative to improve storm water billing efficiency
- Added one Distribution worker and a Distribution Crew Leader to allow startup of Valve Exercise/Leak Detection programs
- Developed a 5-year Capital Improvement Plan
- THM/HAA now passing/system in compliance for the first time in many years
- Installed Online THM Analyzers (only 2 in Georgia, both in Fayette County Water System)
- Received the Gold Award for 100% compliance at both Water Treatment Plants and Distribution
- Improved TOC Removal from 35% to over 50%
- Implemented Daily TOC analyzation
- Purchased and installed DeltaTox Analyzer to develop baseline toxin monitoring on all raw water sources
- Cut overall operating expenses and improved bond coverage
- Repaired and reinstalled particle counters at South Fayette WTP
- Installed online streaming current detectors at both water treatment plants (handled by the in-house Maintenance Team)
- Purchased and installed new coagulant feed skids at the Crosstown WTP (handled by the in-house Maintenance Team)
- Purchased and developed testing using new Flow-Cam technology for algae monitoring (We are the only water plant in Georgia with this kind of unit. The only other one is at the UGA lab.)
- Created new Water System logo

Please be patient as we continue to take the necessary steps to improve your water system's quality and efficiency. Feel free to contact us with any questions or concerns about your water, as we chart the course to take care of your demands today and tomorrow.

The Water System purchased water from the City of Atlanta in 2015. Copies of their Water Quality Reports will be available at the Water System office for public information.

Sincerely,

Lee Pope, Director
Fayette County Water System

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA'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 those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 or http://water.epa.gov/drink/hotline.

Water 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 the well is treated with chlorine, soda ash, and phosphate. Fluoride is also added.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call the Fayette County Water System, at (770) 461-1146.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. The Water Committee meets the 2nd and 4th Wednesdays of each month beginning at 8 a.m. at the Water System Office, 245 McDonough Road, Fayetteville, GA 30214.

Tip Top Tap

The most common signs that your faucet or sink is affecting the quality of your drinking water are discolored water, sink or faucet stains, a buildup of particles, unusual odors or tastes, and a reduced flow of water. The solutions to these problems may be in your hands.

Kitchen Sink and Drain

Hand washing, soap scum buildup, and the handling of raw meats and vegetables can contaminate your sink. Clogged drains can lead to unclean sinks and backed up water in which bacteria (e.g., pink and black slime) can grow and contaminate the sink area and faucet, causing a rotten egg odor. Disinfect and clean the sink and drain area regularly. Also, flush regularly with hot water.

Faucets, Screens, and Aerators

Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets and can collect particles like sediment and minerals resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis.

Check with your plumber if you find particles in the faucet screen as they could be pieces of plastic from the hot water heater dip tube. Faucet gaskets can break down and cause black, oily slime. If you find this slime, replace the faucet gasket with a higher-quality product. White scaling or hard deposits on faucets and shower heads may be caused by hard water or water with high levels of calcium carbonate. Clean these fixtures with vinegar or use water softening to reduce the calcium carbonate levels for the hot water system.

Water Filtration and Treatment Devices

A smell of rotten eggs can be a sign of bacteria on the filters or in the treatment system. The system can also become clogged over time so regular filter replacement is important. (Remember to replace your refrigerator filter!)

Failure in Flint

The national news coverage of water conditions in Flint, Michigan, has created a great deal of confusion and consternation over the past year. The water there has been described as being corrosive; images of corroded batteries and warning labels on bottles of acids come to mind. But is corrosive water necessarily bad?

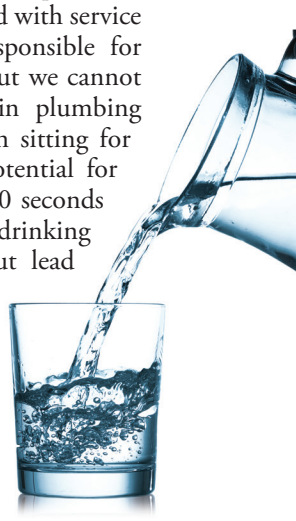
Corrosive water can be defined as a condition of water quality that will dissolve metals (iron, lead, copper, etc.) from metallic plumbing at an excessive rate. There are a few contributing factors but, generally speaking, corrosive water has a pH of less than 7; the lower the pH, the more acidic, or corrosive, the water becomes. (By this definition, many natural waterways throughout the country can be described as corrosive.) While all plumbing will be somewhat affected over time by the water it carries, corrosive water will damage plumbing much more rapidly than water with low corrosivity.

By itself, corrosive water is not a health concern; your morning glass of orange juice is considerably more corrosive than the typical lake or river. What is of concern is that exposure in drinking water to elevated levels of the dissolved metals increases adverse health risks. And there lies the problem.

Public water systems are required to maintain their water at optimal conditions to prevent it from reaching corrosive levels. Rest assured that we routinely monitor our water to make sure that what happened in Flint never happens here. For more information on how corrosivity affects water quality, download this informative pamphlet: http://goo.gl/KpTmXv.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 www.epa.gov/lead.



Source Water Assessment

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 largest source of drinking water, to be low for pollution susceptibility, and Line Creek, Flat Creek and Whitewater Creek to be medium for pollution susceptibility. The entire report is available for review at our office during regular business hours.

Where Does My Water Come From?

Fayette County Water System gets its water from several sources. The surface water sources are Lake Kedron, Lake Peachtree, Lake Horton, Lake McIntosh, Starr's Millpond, and the Flint River. The well water source is in the crystalline aquifer. The purchased water sources can be the City of Atlanta, City of Fayetteville, and Clayton County Water Authority.

BLENDING OF THE WATER SUPPLY

SUPPLIER	GALLONS	PERCENT (%)
City of Atlanta	5,595,426	0.2
City of Fayetteville	0	0
Clayton County	0	0
Well (1)	0	0
Water Plants (2)	3,113,715,000	99.8
TOTAL	**3,119,310,426**	**100**

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

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2015	[4]	[4]	1.29	0.20–2.70	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	2015	[800]	[800]	180	0–680	No	Water additive used to control microbes
Chlorite (ppm)	2015	1	0.8	0.59	0.01–0.59	No	By-product of drinking water disinfection
Fluoride (ppm)	2015	4	4	0.82	0.2–1.44	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2015	60	NA	53.4	13.1–72	No	By-product of drinking water disinfection
Nitrate (ppm)	2015	10	10	ND	ND	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2015	80	NA	69.5	18–80	No	By-product of drinking water disinfection
Total Coliform Bacteria (% positive samples)	2015	5% of monthly samples are positive	0	0	NA	No	Naturally present in the environment
Total Organic Carbon[1] (removal ratio)	2015	TT	NA	1.1	0.81–1.43	No	Naturally present in the environment
Turbidity[2] (NTU)	2015	TT	NA	0.35	0.01–0.35	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2015	TT = 95% of samples < 0.3 NTU	NA	99.7	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community[3]

				Fayette County Water System		Brooks			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper[4] (ppm)	2013	1.3	1.3	0.160	0/30	0.063	0/10	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead[4] (ppb)	2013	15	0	2.5	0/30	2.5	0/10	No	Corrosion of household plumbing systems; Erosion of natural deposits

[1] TOC compliance is a calculated removal ratio of 1 (actual removal is equal to or greater than the required removal) and is reported for compliance as a running annual average, computed quarterly. For our source water, 35% removal is required.

[2] Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

[3] Water from the treatment plants does not contain lead or copper; therefore, water is tested at the tap.

[4] Fayette County Water System is on a Reduced Monitoring schedule for this substance.

Definitions

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

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

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