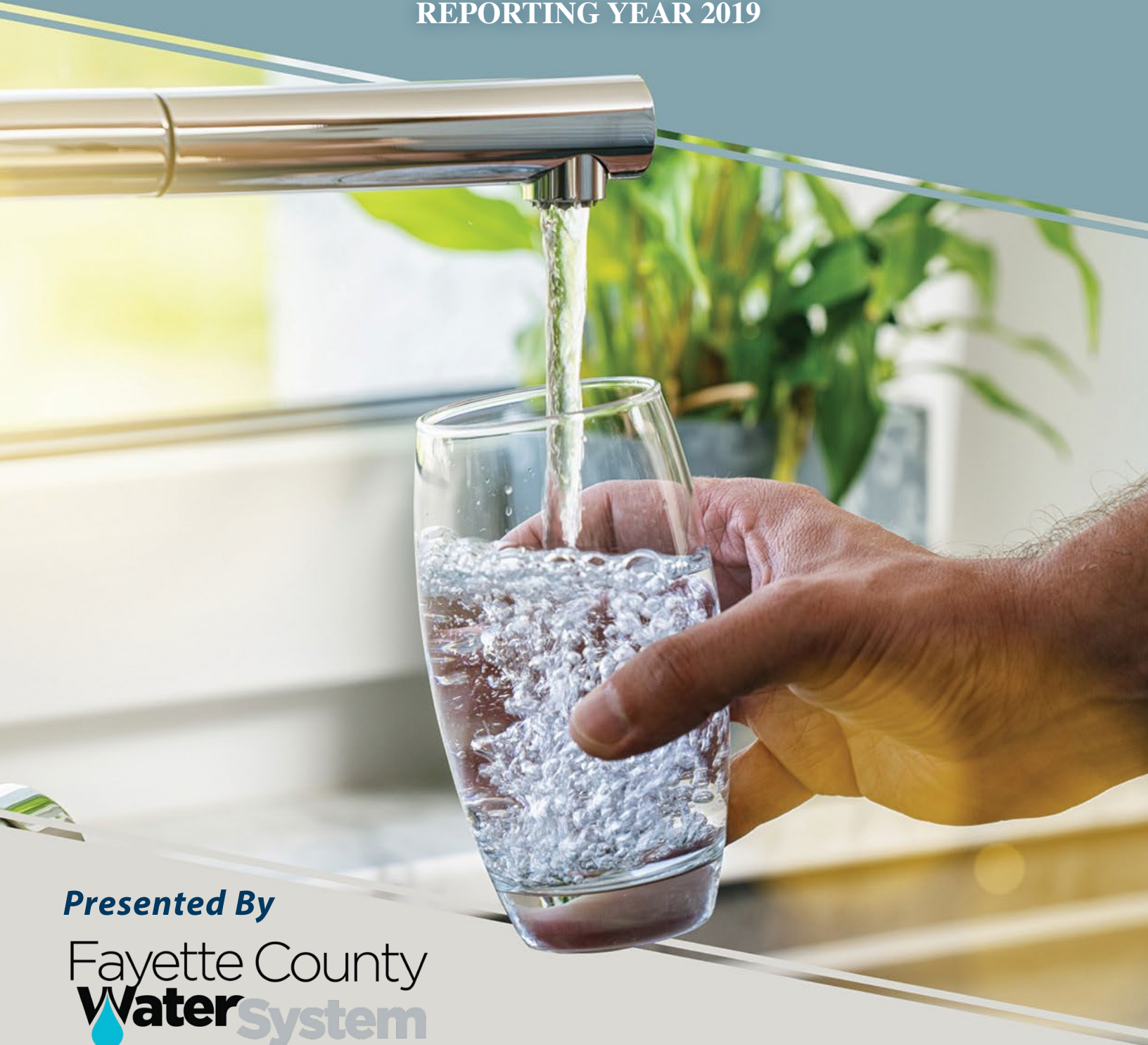


ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2019



Presented By

Fayette County
WaterSystem

PWS ID#: 1130001; Town of Brooks PWS ID#:1130000

Dear Valued Customer,

Every year Fayette County publishes drinking water quality test results and related information as part of our commitment to being open, transparent, and accountable to you, our customer, and ensuring you are fully informed about the water we provide.

Water's vital role is most apparent during an emergency or disaster. Staff's dedication to producing drinking water that meets all state and federal standards is more apparent than ever during the COVID-19 emergency.

We remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Source Water Assessment

An updated Source Water Assessment Plan (SWAP) is available at our office or online. It lists and locates sources of potential contaminants in the four water-supply watersheds. Potential contaminant source locations and developed areas determine the contamination susceptibility rating for each watershed.

Watershed Susceptibility Rating

WATERSHED LOCATION	SUSCEPTIBILITY RATING
Flat Creek	Med-High
Flint River	Med-High
Horton Creek	Medium
Line Creek	Low-Med

It is important to understand that a high susceptibility rating does not imply poor water quality, only the system's potential to become contaminated within the assessment area.

Testing for *Cryptosporidium*

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctors regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

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, 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>.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. The Water Committee schedule and minutes from each meeting are posted at www.fayettecountyga.gov under Agendas/Minutes.

QUESTIONS?

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

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.

Water Treatment Process

The Fayette County Water System has two water treatment plants. Both plants have the ability to add Sodium Permanganate at the beginning of the treatment process to oxidize Iron, Manganese, and some organics. 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 they settle with other particles to the bottom of the settling tanks by gravity. The clear water is collected from the top of the basins, filtered, and disinfected with chlorine to make the water biologically safe. The pH is adjusted by adding lime, and phosphate is added to make the water non-corrosive. Fluoride is added to prevent dental cavities. Treated drinking water is pumped through large pressure pumps to other pumping stations and tanks within the local distribution system. Distribution systems are comprised of large pipes known as trunk mains to deliver drinking water. Smaller diameter branch mains feed individual streets and subdivisions. Service connections to branch mains deliver water into residences. Pumping stations are used to increase pressure and to maintain adequate supply flows. Water distributed to elevated water tanks ensures stable water pressure. An adequate supply of water is maintained to meet peak water demands and/or emergencies such as fires, water main breaks, power outages, and pump failures.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only those substances that were detected in our water. (A complete list of all our analytical results is available upon request.) Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring 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.

REGULATED SUBSTANCES									
				Fayette County Water System		Brooks			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine Dioxide (ppb)	2019	[800]	[800]	360	0.00–360	NA	NA	No	Water additive used to control microbes
Chlorine (ppm)	2019	[4]	[4]	1.34	0.20–2.40	NA	NA	No	Water additive used to control microbes
Chlorite (ppm)	2019	1	0.8	0.50	0.01–0.50	NA	NA	No	By-product of drinking water disinfection
Fluoride (ppm)	2019	4	4	0.96	0.0–0.96	NA	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2019	60	NA	49.8	20.0–49.8	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2019	10	10	NA	NA	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2019	80	NA	70.7	16.2–79.1	NA	NA	No	By-product of drinking water disinfection
Total Coliform Bacteria (Positive samples)	2019	TT	NA	0	NA	0	NA	No	Naturally present in the environment
Total Organic Carbon ¹ (removal ratio)	2019	TT	NA	1.20	1.2–1.3	NA	NA	No	Naturally present in the environment
Turbidity ² (NTU)	2019	TT	NA	0.18	0.00–0.18	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2019	TT = 95% of samples meet the limit	NA	99.7	NA	NA	NA	No	Soil runoff

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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 the highest 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

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.

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

				Fayette County Water System		Brooks			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper³ (ppm)	2019	1.3	1.3	0.21	0/30	0.64	0/10	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead³ (ppb)	2019	15	0	0	1/30	0	0/10	No	Corrosion of household plumbing systems; Erosion of natural deposits

¹TOC 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.

²Turbidity 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.

³Water from the treatment plants does not contain lead or copper; therefore, water is tested at the tap. Fayette County Water System is on a Reduced Monitoring schedule.

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 (i.e., pink and black slime growth) 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

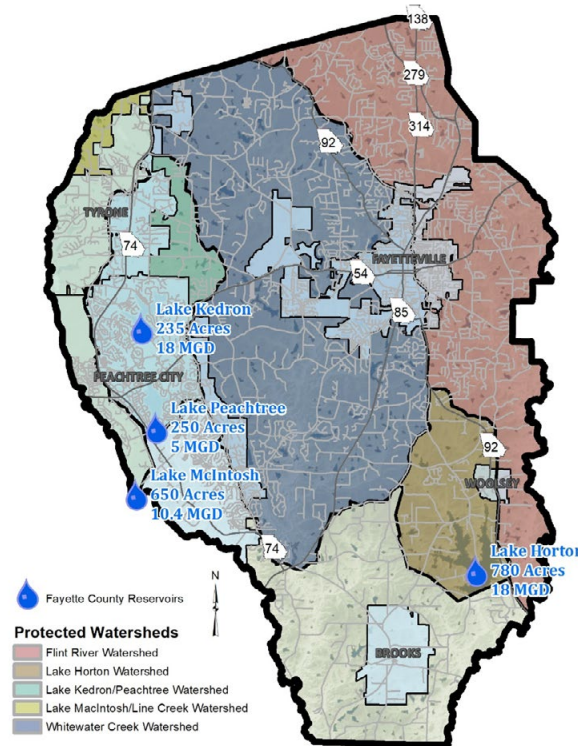
Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets, and can collect particles like sediment and minerals, resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis.

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!)

Where Does My Water Come From?



In 2019 Fayette County Water System produced 3,674,430,660 gallons of drinking water from Lake Kedron, Lake Peachtree, Lake Horton and Lake McIntosh.

Water from the Flint River is pumped to Lake Horton when needed.

This year, an additional 8,635,660 gallons was purchased from the City of Atlanta.

*Copies of the City of Atlanta water quality report are available upon request

SUPPLIER	GALLONS	PERCENT
City of Atlanta	8,635,660	0.3%
Fayetteville	0	0.0%
Clayton County	0	0.0%
Water Plants (2)	3,665,795,000	99.7%
Total	3,674,430,660	100.0%

Go to our website for more information. Reports are available at the Water System Office.

2019 CCR Data for Wholesalers of the
Atlanta Water System (WSID# GA1210001)

Information for your CCR from the Chattahoochee WTP, Hemphill WTP, and consecutive system monitoring

2019 Regulated Contaminants monitored at the Treatment Plants

Parameter (units)	MCL	Result	Range of Detections	Represents	Violation
Fluoride (ppm)	4	0.74	0.61 - 0.81	Highest Monthly Average	No
Nitrate as Nitrogen (ppm)	10	0.62	0.43 - 0.73	Yearly Average	No
Total Organic Carbon (ratio)	Treatment Technique	1.29*	1.0 - 1.29	Highest Monthly Ratio	No
Turbidity (NTU)	TT =1 NTU	0.09	0.02-0.48	Highest Monthly Average	No
Turbidity (% of samples <0.3 NTU)	95	100	NA	Lowest Monthly Percentage	No
Chlorine (ppm)	MRDL=4	1.46	0.95 - 1.70	Highest Monthly Average	No

*TOC is a calculated removal ratio

2018 Regulated Contaminants monitored at Customer Taps (including consecutive systems)

Parameter (units)	MCL	Result	Range of Detections	Represents	Violation
Copper (ppm)*	AL= 1.3	0.152	1 of 66	90 th Percentile	No
Lead (ppb)*	AL= 15	6.1	6 of 66	90 th Percentile	No

*Triennial Monitoring

2018 Unregulated Contaminants monitored at the Treatment Plants

Parameter (units)	MCL	Result	Range of Detections	Represents	Violation
Quinoline (ug/L)	Not regulated	0.046	0.026-0.046	Highest Detected	No
Manganese (ug/L)	Not regulated	1.18	0.445-1.18	Highest Detected	No

2018 Unregulated Contaminants monitored at the source

Parameter (units)	MCL	Result	Range of Detections	Represents	Violation
Bromide (ug/L)	Not regulated	32.6	21.2-32.6	Highest Detected	No

2019 Regulated Contaminants monitored in the Distribution System

Parameter (units)	MCL	Result	Range of Detections	Represents	Violation
Total Trihalomethanes (ppb)	80	69	29-69	Highest Quarterly LRAA	No
Haloacetic Acids (ppb)	60	69	29-69	Highest Quarterly LRAA	Yes
Total Coliform (% of Samples)	5	1.4	0.0 - 1.4	Highest Monthly Percentage	No