

City of Forsyth Water Dept. I.D.# GA2070001

2016 Water Quality Report

Your Water is Safe to Drink

The City of Forsyth is proud to report that your drinking water exceeded all safety and quality standards set by the State of Georgia and EPA. The 2016 Water Quality Report provides you with a snapshot account of the monitoring and testing results gathered from water quality analysis during the 2016 calendar year. The employees Utility Partners, LLC are committed to providing you with safe, dependable drinking water and are proud to serve the community of Forsyth. For more information about your water call 478/994-3423 and ask for Barry Walker, Patrick Wright, or Craig Helms.

Special Population Advisory

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/Center For Disease Control guidelines on how to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline 800/426-4791.

Drinking Water Sources

Your water comes from the Tobesofkee Creek Reservoir. This is a surface water source located approximately two (2) miles south of the city limits. Source water assessment information may be obtained by calling the Georgia Environmental Protection Division at 404/651-5167 or visiting their website at www.gaepd.org.

Public Participation Opportunities

If you are interested in participating in water policy decisions, the Forsyth City Council meets the first and third Tuesday of each month. These meetings are open to the public. For more information call City Hall at 478/994-5649. For additional information concerning your drinking water, visit Forsyth's website @ www.cityofforsyth.net.

Contaminants in 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 EPA's Safe Drinking Water Hotline 800/426-4791 or visiting the EPD's website at www.gaepd.org.

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 can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before we treat it include:

- *Microbial contaminants*, such as viruses and bacteria, which 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- *Pesticides & herbicides*, which may come from a variety of sources such as agriculture and residential use.
- *Radioactive contaminants*, which are naturally occurring.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban storm water runoff, and septic systems.

Water Quality Monitoring

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. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Water Quality Data

The table in this report represents the annual average of the contaminants listed. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table are from testing done January 1 through December 31, 2016. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Terms & Abbreviations

- **AL:** Action Level - the concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.
- **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.
- **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.
- **N/A:** not applicable
- **nd:** not detectable at testing limit
- **NTU:** Nephelometric Turbidity Units
- **ppm/mg/L:** parts per million or milligrams per liter – (corresponds to one minute in two years)
- **ppb:** parts per billion – (corresponds to one minute in 2,000 years)
- **ug/L:** micrograms per liter
- **TT:** Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water
- **MRDL:** Maximum Residual Disinfectant Level - The highest residual disinfectant level allowed.
- **MRDLG:** Maximum Residual Disinfectant Level Goal - The level of residual disinfectant below which there is no known or expected risk to health.

Substance	MCL or RL In mg/L or ug/L	MCLG	Level Detected	Violation (Y or N)	Typical Source of Contamination
Microbiological Contaminants					
Turbidity (NTU)	1.0	N/A			Soil Runoff.
% of samples < 0.3 NTU		100%	99.74%	N	
Highest single daily average		0.00	.60	N	
Yearly Average		0.00	.025	N	
Total Organic Carbon (ppm)	TT	N/A			Naturally present in the environment. Has no health effects. Provides a medium for the formation of Trihalomethanes and Haloacetic Acids.
Yearly Average			1.39	N	
Inorganic Contaminants					
Copper (ppb)	AL=1300	0	.42 in 2014 (90 th percentile)	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Fluoride (ppm)	4	.85			Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Highest Monthly Average			.92	N	
Lowest Monthly Average			.84	N	
Yearly Average			.88	N	
Lead (ppb)	AL=15	0	0.00 in 2014 (90 th percentile)	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Sodium 23 (ug/L)	RL=1000	0	8200 or 8.2 mg/L	N	Naturally occurring. The use of Sodium Hydroxide to balance the pH of the water.
Manganese 55 (ug/L)	RL=25	0	37 or .037 mg/L	N	Naturally occurring.
Volatile Organic Contaminants					
Haloacetic Acids (ppb)	60	0			By-product of drinking water disinfection.
Highest Individual HAA Result			37	N	
Highest Running Annual Average			38.25	N	

Total Trihalomethanes (ppb)	80	0			By-product of drinking water disinfection.
Highest Individual THM Results			50.4	N	
Highest Running Annual Avg.			55.125	N	
Chloroform	RL=0.5	0	13	N	A trihalomethane. By-product of chlorination
Bromodichloromethane	RL=0.5	0	4.5	N	A trihalomethane. By-product of chlorination
Chlorodibromomethane	RL=0.5	0	1.1	N	A trihalomethane. By-product of chlorination

Residual Disinfectants					
Free Residual Chlorine (ppm)	MRDLG 4	MRDL 4	Highest annual individual measurement 1.71	N	Water additive used to control microbes. A disinfectant/oxidizer.

The City of Forsyth has ninety-six(96) microbiological samples tested annually by the EPD. Out of these ninety-six samples, zero samples tested positive for total coliform bacteria and Ecoli. The water provided to you by the City of Forsyth was bacteria free throughout the year of 2016.

- MCL: For systems that collect less than 40 samples per month (The City of Forsyth is required to collect 8 samples per month), the MCL is one(1) positive sample per month.
- Total Coliform and Ecoli are naturally present in the environment.
- Coliforms are bacteria used as an indicator that other, potentially harmful, bacteria may be present.

The City of Forsyth participated in the monitoring of unregulated contaminants in 2014, aka UCMR3. Unregulated contaminant monitoring helps the EPA to determine where certain contaminants occur and whether the contaminants need to be regulated. The last samples collected and analyzed for these contaminants was December 2014 and was found to meet all applicable standards. A detection of a UCMR3 analyte above the MRL(Minimum Reporting Limit) does not represent cause for concern. The implications of the detection should be judged considering health effects information, which is often still under development. For more information, consult "UCMR 3 Data Considerations, Definitions, Reference Concentrations and Summary PDF" at <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/data.cfm#ucmr2013>.

Health Effects

Turbidity: Turbidity is the measurement used to describe the cloudiness of water. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms.

Total Organic Carbon. Total organic carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and Haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short period of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. When your water has been sitting for several hours, you can minimize the potential for copper exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

Fluoride: Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

Lead: 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 line and home plumbing. The City of Forsyth 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>.

Haloacetic Acids. Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Total Trihalomethanes. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Free Residual Chlorine: The portion of available chlorine remaining in the water after disinfection has occurred. It is important to have a free chlorine residual in the distribution system all the way to the customers tap. This protects the consumer from the introduction of microbes after the water treatment plant process. Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose, as well as stomach discomfort.

Sodium: Sodium salts are found in virtually all food (the main source of daily exposure) and drinking water. Sodium levels in the latter are typically less than 20 mg/litre. The City of Forsyth's water supply was analyzed and found to be at 8.2 mg/L. It is generally agreed that sodium is essential to human life, but on the basis of existing data, no firm conclusions can be drawn concerning the possible health effects of sodium in drinking-water. However, sodium may affect the taste of drinking-water at levels above about 200 mg/L.

Manganese: Manganese is one of the most abundant metals in Earth's crust and is naturally occurring in surface water. Manganese is essential to the proper functioning of humans. Manganese is an essential element utilized by antioxidants. It should be noted that the presence of manganese in drinking-water will be objectionable to consumers if the manganese is deposited in water mains and causes a darkening discoloration in the water. Concentrations below 0.05 mg/l are usually acceptable to consumers.

This water quality report was prepared by Utility Partners, LLC, as a service to the City of Forsyth.