

Buford Drinking Water Quality Data 2019

EPA Regulated Inorganic Substances or Contaminants							
Substance (Unit)	Analysis Frequency	MCL	MCLG	Average	Range	Major Sources	Violation
Fluoride ¹ (ppm)	Daily	4	4	0.78	0.46-1.00	Erosion of natural deposits; water additive which promotes strong teeth	No
Nitrate/Nitrite ² (ppm)	Annually	10	10	0.3	0.3-0.3	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	No

¹ Fluoride is added to water to help promote dental health in children.

² Nitrate and Nitrite are measured together

Gwinnett County Water Distribution System - Lead and Copper Levels at Residential Taps					
Substance (Unit)	Action Level 90%	90th Percentile sample result	Number of sites exceeding Action Level (AL)	Major Sources	Violation
Lead ³ (ppb)	15	0	0	Corrosion of household plumbing systems	No
Copper ⁴ (ppm)	1.3	0.14	0	Corrosion of household plumbing systems	No

Buford is required to test a minimum of 20 homes for lead and copper every three years. The last testing occurred in 2019, and the next testing will take place in 2022. Compliance with the Lead and Copper Rule is based on obtaining the 90th percentile of the total number of samples collected and comparing it against the lead and copper action levels. To have an exceedance, the 90th percentile value must be greater than 15 ppb for lead or 1.3 ppm for copper.

³Of the 50 homes tested in 2019, no sites exceeded the action level (AL) for lead.

⁴Of the 50 homes tested in 2019, no sites exceeded the action level (AL) for copper.

Disinfection By-Products, By-Product Precursors and Disinfectant Residuals							
Substance (Unit)	Analysis Frequency	MCL (LRAA)	MCLG (LRAA)	Highest Detected LRAA ⁵	Range	Major Sources	Violation
TTHMs (Total Trihalomethanes) (ppb) - Stage 2	Quarterly	80	0	29.8	20.3-35.2	By-products of drinking water disinfection	No
HAA5s (Haloacetic Acids) (ppb) - Stage 2	Quarterly	60	0	23.2	17.3-33.0	By-products of drinking water disinfection	No
TOC (Total Organic Carbon) (ppm)	Monthly	TT	N/A	Average=1.1	0.97-1.4	Decay of naturally-occurring organic matter in the water withdrawn from sources such as lakes and streams	N/A
Chlorine (ppm)	Monthly	MRDL=4	MRDLG=4	0.92	0.5-1.4	Drinking Water Disinfectant	No

⁵LRAA= Locational Running Annual Average

Turbidity							
Substance (Unit)	Analysis Frequency	MCL	MCLG	Highest value reported	Lowest % of samples meeting limit	Major Sources	Violation
Turbidity (NTU)	Continuous	TT, <0.3 in 95% of monthly samples	0	0.07	100%	Soil Runoff	No
Note: Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.							

Microbiological Contaminants							
Substance (Unit)	Analysis Frequency	MCL	MCLG	Highest % positive samples (monthly)	Range	Major Sources	Violation
Total Coliform Bacteria ⁶ (+/-)	Monthly	<5% positive samples (monthly)	0	0.00%	0-0%	Naturally present in the environment	No
⁶ 9 samples taken monthly							

Understanding the Water Quality Chart

As in previous years, the Water Quality Report compares the quality of your tap water to state drinking water standards. The report includes information on all regulated and unregulated drinking water contaminants that were detected during calendar year 2018. Contaminants that were tested for, but not detected, are not included in this report.

PPM and PPB: Simply put, "ppm" means "parts per million" and "ppb" means parts per billion." PPM corresponds to one penny in \$10,000 or one minute in two years. PPB corresponds to one penny in \$10,000,000 or one minute in 2,000 years.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

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 technologically feasible.

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 microbial contaminants.

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

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

Nephelometric Turbidity Unit (NTU): A measure of suspended material in water. Turbidity is measured by shining a beam of light through water and measuring the angle at which the light is scattered by the suspended material. An instrument called a Turbidimeter is used for this purpose.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.