

# Water Quality Report 2017

## City of Elberton (GA1050001)

### Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúscalo o hable con alguien que lo entienda bien.

### Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The City of Elberton vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard.

### Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

### Where does my water come from?

Elberton Utilities Water Division pumps its raw (untreated) water from Lake Russell by way of Lake Russell Pumping Station that is located off of Middleton Church Road.

### The Treatment of my drinking water

The City of Elberton's Water Treatment Plant is located on Filter Plant Dr. just off of Ruckersville Rd. The treatment process is carried out by five trained operators who have been certified by the State of Georgia.

In 2004 the Plant started the first phase in the process of upgrading the plant by installing liquid chemical feeders and additional monitoring equipment to increase the efficiency of plant operations. The final phase to the plant upgrade was completed in early 2006. In 2014 the four filters were upgraded, the building and pipes painted, concrete repairs made and additional laboratory equipment purchased. **In 2017, the plant underwent a filter valve replacement project to enhance operations and efficiency.**

### Source water assessment and its availability

Source Water Assessment Project was conducted by Brown and Caldwell. Elberton received a low ranking (as in low priority potential pollution source) in the assessment. The complete assessment report is available and can be viewed at the Filter Plant by calling (706) 213-3100.

### Why are there contaminants in my drinking 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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, in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or human activity, microbial contaminants, such as viruses and bacteria that 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 and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 City of Elberton 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>.

## How can I get involved?

Consumers can contribute greatly through water conservation and as well as using proper methods in the disposal of contaminated waste that could pollute the water supply.

## Other Information

The Water Division prides itself with quality water and trained personnel to serve its customers. The Elberton City Council meets the first Monday of each month (5:30 pm) at the Municipal Building 203 Elbert Street and you are welcome to attend these meetings to share your concerns about water operations and quality. Any questions or comments that you may have concerning water quality and operations may also be directed to either Tyron Yeargin (Water Treatment Plant Manager) at (706) 213 3100 or Jason Hackett (Water and Wastewater Operations Manager) at (706) 213-3162.

## Results of Cryptosporidium monitoring

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor 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.

## Descriptions and Definitions

**mg/L:** Same as parts per million ppm Number of milligrams of substance in one liter of water  
This can be compared to 1 penny in 10,000 dollars or one minute in 2 years.

**ug/L:** Same as parts per billion ppb: Number of micrograms of substance in one liter of water  
This can be compared to 1 penny in 10,000,000 dollars or one minute in 2,000 years.

**ppt :** parts per trillion, or nanograms per liter

**ppq :** parts per quadrillion, or picograms per liter

**pCi/L:** picocuries per liter (a measure of radioactivity)

**mrem/yr :** millirems per year (a measure of radiation absorbed by the body)

**MFL:** million fibers per liter, used to measure asbestos concentration

**NTU :** Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water.

We monitor it because it is a good indicator of the effectiveness of our filtration system.

**Positive samples/month:** Number of samples taken monthly that were found to be positive.

**Positive samples/yr:** The number of samples taken yearly that were found to be positive.

**% Positive samples/month:** Percent of samples taken monthly that were positive

**% Killed or inactivated:** Percentage of viruses/bacteria killed or inactivated by treatment method

**CFU / mL:** Colony Forming Units per milliliter

**NA :** not applicable

**ND :** Not detected

**NR:** Monitoring not required, but recommended.

**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.

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

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

**Variances and Exemptions:** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**MRDLG:** Maximum residual disinfection 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.

**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.

**MNR:** Monitored Not Regulated

**MPL:** State Assigned Maximum Permissible Level

The following table lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

**Daily /Monthly Laboratory Tests**

<b>Laboratory test</b>	<b>Average</b>	<b>Max/Min Average</b>	<b>Major sources in drinking water</b>	<b>MCL or MRDL</b>
<b>Turbidity</b>	0.05 ntu	From .10 ntu to .02 ntu	Turbidity is the measurement of the amount of small particles of solid matter suspended in water.	potable water should not exceed .3 n t u
<b>Chlorine</b>	2.4 mg/l	From 3.1 mg/l to 1.6 mg/l	a gas widely used in the disinfection of water	minimum of.2 mg/l maximum of 4.0 mg/l in the distribution system
<b>Fluoride</b>	0.8 mg/l	From 1.3mg/l to 0.51 mg/l	a chemical added to water to promote strong teeth	4.0 mg/l is maximum contaminant level
<b>P H</b>	7.2	From 7.5 to 6.5	Refers to “potential hydrogen” and is a measure of acidity or alkalinity of water	measured on a 14 point scale with 0-6 acidic 7 neutral 8-14 alkaline
<b>Total coliform bacteria</b>	0%	0%	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present	can not be present in more than 5% of monthly samples. Ten monthly samples required others upon request of customer.
<b>Nitrate/Nitrite</b>		0.00		10.0

**Inorganic Contaminant**

<b>Laboratory test</b>	<b>Average</b>	<b>Max/Min</b>	<b>Major sources in drinking water</b>	<b>Limit/ Requirement</b>
<b>Lead</b> 2016 Results Latest required testing due to previous < AL’s reported.	90 <sup>th</sup> percentile 2.5 ug/l	From 0 (not detected) to 2.5 ug/l	Corrosion of household plumbing systems; erosion of natural deposits.	15 ug/l is maximum contaminant level
<b>Copper</b>	90 <sup>th</sup> percentile 260 ug/l	From 0 (not detected) to 340 ug/l	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	1300 ug/l is maximum contaminant level

### Trihalomethanes

Laboratory test	Average	Max/Min	Major sources in drinking water	Limit/ Requirement
TTHM's	38.4 ug/l	From 50.3 ug/l to 21.0 ug/l	By-product of drinking water disinfection	80 ug/l is maximum contaminant level
HAA acid	28.7 ug/l	50.4ug/l to 17.8 ug/l	By-product of drinking water disinfection	60 ug/l is maximum contaminant level

### Total Organic Carbon

Laboratory test	Average	Max/Min	Limit/ Requirement
TOC's	1.3	1.7- 1.1	<2.0

### Cryptosporidium and Escherichia Coliform Monitoring

Monitored	Result / Detection
Cryptosporidium	0 - (Not Detected)

