

**What is Your Water Source?** The water source for Columbus and Fort Benning, Georgia is Lake Oliver and the Chattahoochee River respectively, which is surface water. Columbus Water Works operates and treats water for its customers under permit #CS2150000. The Chattahoochee River has been providing the area with a safe and dependable water supply for over 100 years.

Source Water Assessment Plan: In March 2001, Columbus Water Works (CWW) completed a Source Water Assessment Plan (SWAP). In 2015, a second SWAP was completed for the Ft. Benning Water Treatment Plant. In 2019, CWW completed an update to the SWAP for the North Columbus Water Resource Facility located on River Road. The purpose of updating the SWAP was to identify if there were any new potential contamination sources throughout the watershed and to determine the risks these sources pose to the water supply intakes. The overall contaminant susceptibility for Columbus and Fort Benning residents remains LOW. Some Potential Pollution Sources (PPS) include: a marina with fuel stations, sewer lift stations and pipelines, commercial and industrial areas, residential lawns, and golf courses. Columbus Water Works employs real time detection systems to ensure these potential sources do not enter our water supply. A complete list of all PPS, their substances of concern and the assessment methods are in the SWAP.

For more information or to get a copy of the SWAP, please contact William Kent, Manager of Environmental Services at (706) 649-3490 or wkent@cwwga.org

**Questions about your water quality report?** If you have any questions about the information in this report or would like an additional copy, please contact William Kent, Manager of Environmental Services at (706) 649-3490 or wkent@cwwga.org.

Connect with us!





# The Facts About 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 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, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- a. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and/or wildlife.
- b. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or 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/or residential uses.
- d. 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 stormwater runoff, and/or septic systems.
- e. 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, the Environmental Protection Agency prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.



## An Important Message from the EPA

Lead In Drinking Water: If present, elevated levels of lead in your drinking water 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. Columbus Water Works 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 running 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/safewater/lead.

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

Other Water Contaminants: Cryptosporidium is a protozoan parasite too small to be seen without a microscope. It is common in surface waters like lakes and rivers, especially when waters contain a high amount of sewage or animal waste. This parasite can cause symptoms like diarrhea, nausea, stomach cramps, or all three. Because other illnesses can have similar symptoms, a special laboratory test is needed to determine if this contaminant is the cause. Columbus Water Works has sent both treated and source water samples from our system to laboratories set up for this parasite test. The water that goes into your tap has never tested positive for this parasite; however, it may be assumed that this parasite can be found in all surface water.

## **Key Terms to Know**

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

**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 feasible using the best available treatment technology.

**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 allow for a margin of safety.

**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.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of 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 contamination.

Nephelometric Turbidity Units (NTU): Measurement of the clarity (turbidity) of water.

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

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

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

## **How Clear Is Your Water?**

**Did you know?** Turbidity is the measure of the cloudiness of water. We monitor turbidity because it is a good indicator of water quality and the effectiveness of our filtration system.



### **Turbidity Maximum**

Dates Sampled: January, 2019 through December, 2019

**EPA Maximum Goal (MCLG)** 

None

Highest EPA Allowed Level (MCL)
TT = 1 NTU

Amount Detected in Our Tap Water 0.04

Range of Detection

No established range

**Turbidity Percentage:** 100% of the samples tested for turbidity were equal to or below 0.30 NTU, which meets the allowed limit for the selected TT.

## **Total Organic Carbon**

Dates Sampled:

January, 2019 through December, 2019

EPA Maximum Goal (MCLG) None

Highest EPA Allowed Level (MCL)

Amount Detected in Our Tap Water 1.38 ppm

**Range of Detection** 

1.1 - 1.7 ppm

**Quick Definition:** TT (treatment technique) is defined as a required process intended to reduce the level of a contaminant in drinking water. Treatment techniques will vary based on the type of water contaminant being treated.

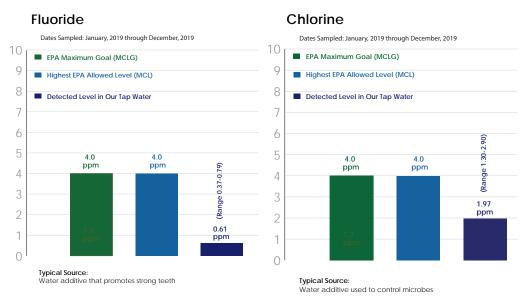




### **Did You Know?**

Columbus Water Works has achieved the EPA 20-Year Directors Level Certificate with the Partnership for Safe Drinking Water! There are only 150 water utilities out of approximately 51,000 community water utilities in the U.S. who have earned this recognition.

The Partnership for Safe Water is a unique cooperative effort between EPA, American Water Works Association, Association of Metropolitan Water Agencies, National Association Water Companies, Association of State Drinking Water Administrators. The Partnership encourages and assists United States water suppliers to voluntarily enhance their water systems performance and improve water quality.

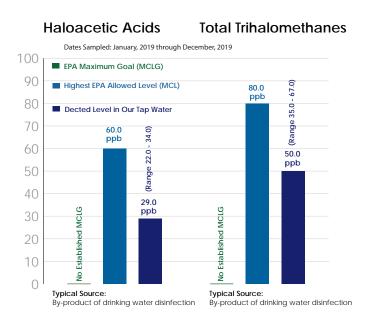


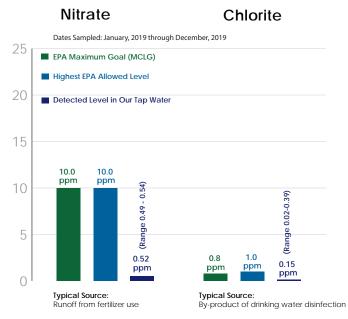
**Did you know?** Fluoride is found naturally in the environment. The State of Georgia requires public water systems to maintain an optimum level of 0.85 parts per million.

#### Did you know?

Water disinfection and treatment is considered one of the greatest public health achievements in the 20th century. In fact the routine disinfection of drinking water dramatically decreased the number of deaths resulting from water borne diseases such as typhoid fever and cholera.



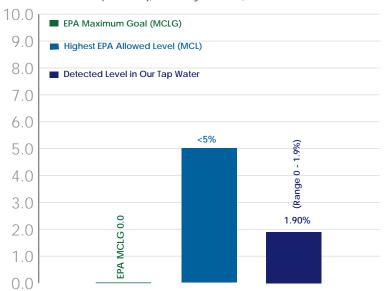






#### **Total Coliform Bacteria**

Dates Sampled: January, 2019 through December, 2019



Typical Source: Naturally present in the environment



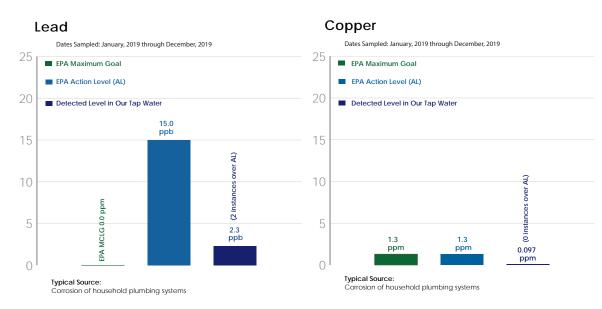
#### **Did you Know?**

Our Environmental Services department processes over 110,000 water analyses per year on the drinking water, streams and waterways in our community. In fact, we monitor 14 sites along the Chattahoochee River to ensure the health of our source water and proper drinking water treatment.

#### **Did you Know?**

Columbus Water Works has a comprehensive corrosion control program that is effective and monitored closely.





#### **Ouick Fact:**

Water from the treatment plant does not contain lead or copper. However, under EPA test protocol, water is tested at the tap. Tap tests show that where a customer may have lead-soldered copper pipes, the water is not corrosive. This means the amount of lead or copper absorbed by that water is limited to safe levels. Running the line before drinking will ensure your safety.

**Please Note:** Although two (2) out of 50 sites sampled tested above the action level, the standard of 90 percent of test sites being within the regulated limits was met. The lead and copper rule mandates sampling every three years.

# **Drinking Water Analysis Table**

As a second seco	2 /		i la m		27, 27,		
Regulated Substance Tested and Detected	MCL	MCLG	Amount Detected	Range of Detection	Dates of Sampling (Mo./Yr.)	Does it meet Standards?	Possible Source of Substance
Fluoride, ppm	4	4	0.61	0.37 - 0.79	1/19 -12/19	Yes	Water additive promoting strong teeth
Nitrate, ppm	10	10	0.52	0.49 - 0.54	1/19 -12/19	Yes	Runoff from fertilizer use
Chlorite, ppm	1	0.8	0.15	0.020 - 0.39	1/19 -12/19	Yes	By-product of drinking water disinfection
Turbidity, Maximum NTU	TT = 1 NTU	N/A	0.04	N/A	1/19 -12/19	Yes	Soil runoff
Turbidity, TT %	TT = % of samples ≤ 0.30 NTU	0	100%	N/A	1/19 -12/19	Yes	Soil runoff
Haloacetic Acids (HAA), ppb	60	N/A	29	22.0 - 34.0	1/19 -12/19	Yes	By-product of drinking water disinfection
Total Trihalomethanes (TTHM), ppb	80	N/A	50	35.0 - 67.0	1/19 -12/19	Yes	By-product of drinking water disinfection
Total Organic Carbon, ppm	TT	N/A	1.38	1.1 - 1.7	1/19 -12/19	Yes	Naturally present in the environment
Total Coliform Bacteria Highest Percent (percent of monthly samples positive for bacteria)	<5%	0	1.90%	0 - 1.9%	1/19 -12/19	Yes	Naturally present in the environment

# **Drinking Water Analysis Table** (continued)

_	Regulated Substance Tested and Detected	MRDL	MRDLG	Amount Detected	Range of Detection	Dates of Sampling (Mo./Yr.)	Does it meet Standards?	Possible Source of Substance
9	Chlorine, ppm	4	4	1.97	1.30 - 2.90	1/19 -12/19	Yes	Water additive used to control microbes

Lead and Copper at the Tap (d)	AL	MCLG	Amount Detected	# of Sites Found Above AL	Dates of Sampling (Mo./Yr.)	Does it meet Standards?	Possible Source of Substance
Lead, ppb	15	0	2.3	2* (50 sites Sampled)	1/19 -12/19	Yes	Corrosion of household plumbing systems
Copper, ppm	1.3	1.3	0.097	0 (50 sites Sampled)	1/19 -12/19	Yes	Corrosion of household plumbing systems

Note: Detected amounts are annual averages or running annual averages

**Please note:** the information displayed in the "Drinking Water Analysis Table" is the same information displayed in the graphs on pages 7-11 of the booklet. To assist with comprehension of the complex data, we have provided both formats. If you have addition questions, please contact William Kent, Manager of Environmental Services at (706) 649-3490 or wkent@cwwga.org.

<sup>\*</sup> Although 2 sites tested above the action level, the standard of 90 percent of test sites being within the regulated limits was met.

# **Unregulated Contaminant Monitoring Rule**

**Unregulated Contaminant Monitoring Rule (UCMR):** In an effort to protect the public from potentially harmful substances, the EPA requires all drinking water utilities to analyze its water supply and finished drinking water every five (5) years for certain compounds. This process is called the Unregulated Contaminant Monitoring Rule (UCMR). The compounds selected for testing are from a Chemical Candidate List that the EPA maintains. The data collected from the UCMR testing is used to determine if there are any public health concerns related to these compounds. For more information please refer to <a href="https://www.epa.gov/ucmr">www.epa.gov/ucmr</a>.

Each Chemical Candidate that is chosen are reviewed by certified independent labs then submitted to the EPA for approval and participation in the UCMR. Each utility that collects samples for testing these compounds may use one of these labs. If one of these chemicals are detected through testing it must be reported in the utilities Consumer Confidence Report. The table on page 15 shows all of the chemicals found in 2019 UCMR testing for Columbus Water Works.

**Manganese** is a naturally occurring element found in nature. Manganese is usually found in surface water when it rains. Runoff carries many natural elements when it runs across the land.

**Total Organic Carbon (TOC)** is a measure of the solubilized organic material in water. This could be from decaying leaf debris or other organic sources.

**Bromide** is a binary compound of bromine which is commonly found in nature. Bromine can also be found in runoff after a rain event.

**Halo Acetic Acids** are by-products of the drinking water disinfection process where chlorine is used. Chlorine interacts with total organic carbon to form these chemicals. Other factors such as temperature and water age contribute to their production as well. HAA's are suspected carcinogens. HAA5 (meaning 5 specific species of HAA's) are currently regulated by the EPA at a level of 60 ug/L as a locational running annual average. CWW's drinking water is consistently well under the 60 ug/L limit for HAA5.

# Table of UCMR Substances Tested and Detected

						The state of the s	and the second of the second o	
Unregulated Substance Tested and Detected*	MCL	MCLG	Amount Detected	Range of Detection	Dates of Sampling (Mo/Yr)	Does it Meet Standards	Possible Sources of Substance	
Bromide, ppb	None	None	28	20.5 - 38	5/19 - 12/19	Standard not established	Found naturally in most surface waters	
Total Organic Carbon (TOC), ppm	None	None	2.3	2.0 - 2.6	5/19 - 12/19	Standard not established	Organic matter found in surface waters	
Manganese, ppb	None	None	11.8	1.1 - 34.8	5/19 - 12/19	Standard not established	Naturally occurring in earth metal	
HAA5, ppb	60 ug/L	0 ug/L	26.2	13.7 - 37.9	5/19 - 12/19	Yes	Byproduct of chlorine disinfection	
HAA6Br, ppb	None	None	8.6	6.5 - 12.8	5/19 - 12/19	Standard not established	Byproduct of chlorine disinfection	
HAA9, ppb	None	None	34	20 - 45.8	5/19 - 12/19	Standard not established	Byproduct of chlorine disinfection	

<sup>\*</sup>Unregulated Contaminant Monitoring Rule (UCMR) is required testing by the EPA every 5 years. CWW detected trace amounts on 6 of the 35 substances tested.

Columbus Water Works Post Office Box 1600 Columbus, GA 31902

#### **Public Meeting Information:**

Columbus Water Works' operations are conducted under the Board of Water Commissioners. Board Members are appointed by the Columbus Consolidated Government City Council. The Board holds regularly scheduled meetings at 1:30 PM on the second Monday of each month. Please verify the meeting date on our website at: www.cwwga.org

These meetings are open to the public. Meetings are located at:

1421 Veterans Parkway, Columbus, Georgia 31901.

#### **Other Information Sources:**

Websites with information about water quality:

www.epa.gov

www.awwa.org

www.amwa.net

www.gaepd.gov

www.cwwga.org



#### **Columbus Customers:**

Columbus Water Works business office located at 1421 Veterans Parkway, is open weekdays, except for holidays:

Lobby Hours 9:00 AM - 5:00 PM

Drive-Thru Hours 9:00 AM - 5:00 PM

General Information/Emergencies: (706) 649-3400

#### **Fort Benning Customers:**

If you have problems with your service, contact:

Residential: (706) 685-3929

Commercial: (706) 545-2232 or (706) 545-2518