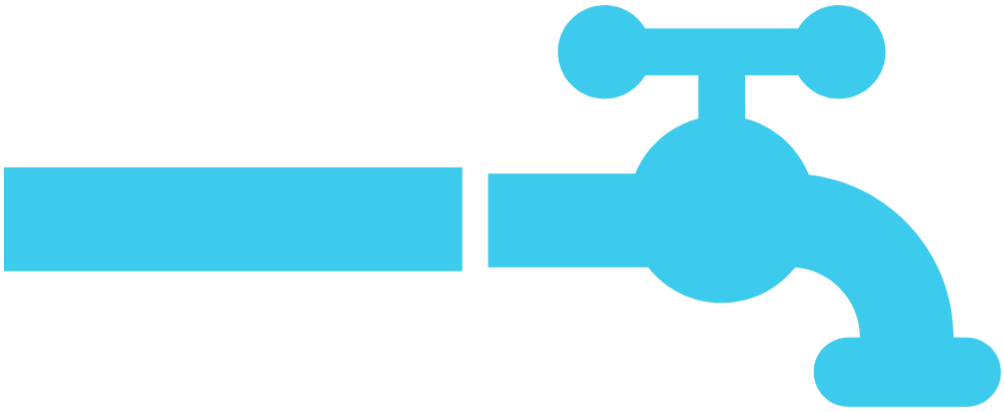

YEAR 2022 ANNUAL WATER QUALITY REPORT

PRESENTED BY

CANTON

QUALITY FIRST

Once again, the City of Canton Water Treatment Plant is proud to present our annual water quality report. This report, mandated by the U.S. Environmental Protection Agency (U.S. EPA) and funded by the City, covers the results of all required testing performed between January 1 and December 31, 2022. Over the years, water plant staff have dedicated themselves to supplying drinking water that meets or exceeds all state and federal standards. The City has accomplished this goal by continually striving to adopt better methods for delivering the best-quality drinking water possible. As regulations and drinking water standards change, it is the City's commitment to our residents to incorporate these changes systemwide in an expeditious and cost-effective manner. As new drinking water challenges emerge, we will be vigilant in maintaining our objective of providing high-quality drinking water at an affordable price.

For additional information contact our Water Department at (770) 704-1500 or the Canton Water Treatment Plant at (770) 479-2392. All sampling data is available at www.gadrinkingwater.net.

This Water Quality Report is also posted on the City's website www.cantonga.gov

Where Does My Water Come From?

Sources of drinking water (both tap 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.

The City of Canton is supplied by surface water from the Etowah River and is treated at the Bobby E. Bishop Water Treatment facility located at 150 Bobby E. Bishop Drive, Canton GA 30114. The water is treated and filtered to remove several contaminants, plus the water is chlorinated to disinfect against viruses and pathogens (harmful bacteria), fluoride is added to enhance dental protection, and polyphosphate is added to reduce internal pipe scaling and corrosion. The levels of these additives are monitored daily to ensure proper dosages are being added. Canton also purchases water from the Cherokee County Water & Sewer Authority and the City of Waleska in amounts less the 20% of the total water sold. The source water for the Authority's and the City of Waleska is also the Etowah River.

Substances That Could be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the number of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which 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 occur naturally 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 occur naturally.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

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.

LEAD IN HOME PLUMBING

Infants and young children are typically more vulnerable to lead (atomic symbol Pb) in drinking water than the general population. It is possible that lead levels at your home may be higher than those at other homes in the community as a result of materials used in your home's plumbing. 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 two 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. Additional 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

Test Results

During the past year, we have taken hundreds of water samples to determine the presence of any radioactive, biological, inorganic, volatile, organic, or synthetic organic contaminants. The table shows the results of our water quality analyses and lists all the drinking water contaminants that we detected during Calendar Year 2022. This table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement. Definitions of MCL and MCLG are important.

- **Turbidity** is a measure of the cloudiness of water and is a good indicator of water quality. Turbidity is measured in NTU's (Nephelometric Turbidity Unit)
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.
- **Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow
- **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.
- **PPM:** Parts per Million (or milligrams per liter)
- **PPB:** Parts per Billion (or micrograms per liter)

Contaminant	Unit	MCL	MCLG	Detected Level	Range	Violation	Likely Source(s)
Turbidity	NTU	TT = 5[(a)]	0.50	0.05[(b)]	0.03 – 0.13	NO	Soil Runoff
Copper[(c)]	ppm	AL = 1.3	1.30	0.19	0.03 – 0.32	NO	Corrosion of household plumbing
Fluoride	ppm	4	4.00	0.87	0.64 -1.19	NO	Water additive which promotes strong teeth
Lead	ppm	AL = 0.015	0.015	0.0001	0.000 – 0.003	NO	Corrosion of household plumbing
Nitrate	ppm	10	10.00	0.33	N/A	NO	Runoff from Fertilizer: leaching from septic tanks, sewage, erosion
Haloacetic Acids	ppb	60	N/A	33.4	13.1 – 72	NO	By-product of drinking water disinfections
Total THMs (Trihalomethanes)	ppb	80	N/A	34.8	9.1 – 70.5	NO	By-product of drinking water disinfections

(a) TT = 95% of samples < 0.5 NTU

(b) 99.9% of samples < 0.5 NTU

(c) None of the sampling sites exceeded the Action Level (AL)

What is a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (back siphonage). Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination. Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection. For more information on backflow prevention contact the Safe Drinking Water Hotline at (800) 426-4791.

Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far, the most common method of disinfection in North America is chlorination. Before communities began routinely treating drinking water with chlorine, cholera, typhoid fever, dysentery, and hepatitis-A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the U.S. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water plus the use of chlorine is probably the most significant public health advancement in human history.

How chlorination works:

- *Potent Germicide Reduction* in the level of many disease-causing microorganisms in drinking water to almost immeasurable levels.
- *Taste and Odor Reduction* of many disagreeable tastes and odors like foul-smelling algae secretions, sulfides, and decaying vegetation.
- *Biological Growth Elimination* of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.
- *Chemical Removal* of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.

Water Treatment Process

The treatment process consists of a series of steps. The raw surface water is drawn from the Etowah River and sent to flocculation tanks, where aluminum sulfate is added, which causes small particles called “floc” to adhere to one another, making them heavy enough to settle into a basin, from which the sediment is removed. The surface water then travels through multi-media filters to remove smaller suspended particles. Pristine water emerges after these treatment processes and goes into the finished water clear well, where chlorine is then added. We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising the taste. Finally, fluoride and a corrosion inhibitor are added before the water is pumped into the water distribution system, elevated water towers, and your home or business.

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