# 2023 City of Fort-Oglethorpe Water Quality Report

## Georgia Water System I.D. Number GA0470001

#### IS MY DRINKING WATER SAFE?

The City of Fort-Oglethorpe's water department is pleased to report that your community's water met or exceeded all safety and quality standards set by the State of Georgia and U.S. E.P.A. during the previous year. This 2023 water quality report provides our customers with detailed accounts of all monitoring and testing results gathered from water quality testing during the previous year. Our employees are committed to providing you with safe, dependable tap water on a year-round basis and are proud to provide the following information.

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 (1-800-426-4791).

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. City of Fort Oglethorpe Public Utilities Department 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 a minimize exposure is available from the Safe Drinking Water Hotline or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

#### WATER SOURCE INFORMATION

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 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 (1-800-426-4791).

The City of Fort-Oglethorpe purchases water from two different wholesalers. The primary wholesaler is Tennessee American Water Company, which draws water from the Tennessee River and is considered a surface water source. The secondary wholesaler is Catoosa Utility District, which draws water from Yates Springs and Tennessee American Water Company and is considered a blended water source, a mixture of ground water and surface water.

#### WHOLESALE WATER REPORTS

A copy of the wholesaler CCR water reports can be obtained upon request at the Fort Oglethorpe City Hall.

#### PUBLIC WATER SYSTEM CLASSIFICATION

The City of Fort-Oglethorpe takes great pride in the education and certification of water system operators within the company. The City of Fort-Oglethorpe has 6 certified operators employed with the city.

FOR MORE INFORMATION ABOUT YOUR DRINKING WATER, PLEASE CALL Courtney Johnson, Director of Public Utilities at 706-866-0962

#### HOW CAN I GET INVOLVED?

If you are interested in becoming more involved in water quality concerns within the City of Fort Oglethorpe, please feel free to give us a call at (706) 866-2544 EXT.1300. Our normal office hours are Monday-Friday from 8am to 5:00pm.

#### **DEFINITIONS**

MAXIMUM CONTAMINANT LEVEL (MCL): "The highest level of a contaminant that is allowed in drinking water. MCL are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

TREATMENT TECHNIQUE (TT): 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 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.

#### **ABBREVIATIONS**

**PPB:** Parts per billion or micrograms per liter **PPM:** Parts per million or milligrams per liter

### WATER QUALITY DATA

TOTAL COLIFORM: Typical source of substance, naturally present in the environment. The City of Fort Oglethorpe collects 10 total coliform samples per month within the water distribution system. In the year 2023 a total of 120 samples were collected and all 120 samples were reported as negative for any presents of coliform.

COPPER: Typical sources of substance corrosion of household plumbing systems erosion of natural deposits, leaching from wood preservatives. The City of Fort Oglethorpe collects 20 copper samples per EPA monitoring period within the water distribution system.

2023 Copper Samples 20 90<sup>th</sup> Percentile 36 ppb (ug/1) Action Level 1300 ppb (ug/1)

LEAD: Typical sources of substance, corrosion of household plumbing system, erosion of natural deposits. The City of Fort Oglethorpe collects 20 lead samples per EPA monitoring period within the distribution system.

2023 Lead Samples 20 90<sup>th</sup> Percentile 0 ppb (ug/1) Action Level 15 ppb (ug/1)

Volatile Organics	Year Sampled	<b>Violation</b>
Haloacetic Acids ppb	2023	No
TTHM's ppb	2023	No

#### BASIC WATERSHEAD PRINCIPLES

The sources of drinking water (both tap and bottled water) include river s, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of 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 animal or human activity.

Contaminants that may be present in source water include the following:

- 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 or metal s, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharge, 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 also can 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 regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### INTERNET SITES OF INTEREST

Two Internet sites that may be of interest are listed below.

- 1) EPA drinking water site (<u>www.epa.gov/safewater/</u>)
- 2) American Water Works Association (www.awwg.org)

# **Definition of Terms**

These are terms that may appear in your report.

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

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**LRAA:** Locational Running Annual Average

#### 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. See also Secondary Maximum Contaminant Level (SMCL).

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 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 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.

MFL: Million fibers per liter.

micromhos per centimeter (µmhos/ cm): A measure of electrical conductance.

NA: Not applicable

ND: Not detected

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

**pH:** A measurement of acidity, 7.0 being neutral.

plcocuries per liter (pCi/L): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta

particles).

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

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

parts per trillion (ppt): One part substance per trillion parts water, or nanograms per liter.

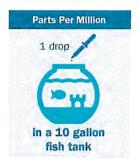
Secondary Maximum Contaminant Level (SMCL): Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

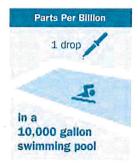
TON: Threshold Odor Number

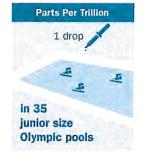
**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

%: Percent

#### **MEASUREMENTS**







# Water Quality Results

Tennessee American Water conducts extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables. While most monitoring was conducted in 2023, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting the tables below, see the "Definition of Terms" on the previous page. Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

NOTE: Regulated contaminants not listed in this table were not found in the treated water supply.

LEAD AND COPPER MONITORING PROGRAM - At least 50 tap water samples collected at customers' taps every 3 years									
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	Range	No. of Homes Sampled	Homes Above Action Level	Typical Source
Lead (ppb)	2022	Yes	0	15	2	<1-8	50	0	Corrosion of household plumbing systems.
Copper (ppm)	2022	Yes	1.3	1.3	0.072	<0.025 - 0.098	50	. 0	Corrosion of household plumbing systems.

	DISINFECTION BYPRODUCTS - Collected in the Distribution System										
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Level Detected (Max LRAA)	Range Detected	Typical Source				
Total Trihalomethanes (TTHMs)(ppb)	2023	Yes	NA	80	50.8	23.0 - 67.9	By-product of drinking water disinfection.				
Haloacetic Acids (HAAs) (ppb)	2023	Yes	NA	60	28.9	11.8 - 38.3	By-product of drinking water disinfection.				

NOTE: Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Range Detected reflects all samples from this year used to calculate the running annual average. 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.

DISINFECTANTS - Collected in the Distribution System and at the Treatment Plant									
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Compliance Result	Range Detected	Typical Source		
Chlorine (ppm) (Distribution System)	2023	Yes	MRDLG = 4	4	1.601	0.54 - 2.18	Water additive used to control microbes.		
Chlorine (ppm) (Entry point)	2023	Yes	MRDLG=4	4	1.49 <sup>2</sup>	1.49 - 2.29	Water additive used to control microbes.		

- 1-Data represents the highest quarterly running annual average of chlorine residuals measured in distribution system of compliance samples. 2-Data represents the lowest residual entering the distribution system from our surface water treatment plant.

	TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant									
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Range of % Removal Required	Range of Removal Achieved	Number of Quarters out of compliance	Typical Source			
Total Organic Carbon (ppm)	2023	Yes	NA	TT= 25% removal	29.2% to 39.5%	0	Naturally present in the environment.			

The treatment technique requirement for Total Organic Carbon was met 100% of the time in 2023.

	TURBIDITY - Collected at the Treatment Plant									
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Amount Detected	Range Detected	Typical Source			
	2023	Yes	0	TT: Single result>1NTU	0.14	0.02-0.14	Soil runoff.			
Turbidity <sup>1</sup> (NTU)	2023	Yes	NA	TT: At least 95% of samples < 0.3 NTU	100%	NA	Soil runoff.			

<sup>1-</sup>Turbidity is a measure of the cloudiness of the water. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system. During 2023, 100% of all samples taken to measure turbidity met water quality standard of less than 0.3 NTU. Turbidity in excess of 5 NTUs is just noticeable to the average person.

REGULATED SUBSTANCES - Collected in the Distribution System and at the Treatment Plant									
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Compliance Result	Range Detected	Typical Source		
Fluoride <sup>1</sup> (ppm) (Distribution)	2023	Yes	4	4	0.71	0.68 - 0.75	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories		
Nitrate <sup>2</sup> (ppm) (Entry point)	2023	Yes	10	10	0.46	0.18 - 0.46	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.		

<sup>1-</sup>Fluoride compliance result is the average of quarterly distribution samples.

<sup>2-</sup>Nitrate compliance result is the highest result achieved in 2023 at the entry point.

			OTHER SUBS	TANCES OF IN	TEREST - Collected a	nt the Treatment Pl	ant
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Limit	Average Amount Detected	Range Detected	Comments
lron¹ (ppm)	2023	NA	NA	NA	<0.10	<0.10	Secondary standard limit = 0.3 mg/L
Manganese <sup>1</sup> (ppm)	2023	NA	NA	NA	<0.010	<0.010	Secondary standard limit = 0.05 mg/L
Sodium <sup>2</sup> (ppm)	2023	NA	NA	NA	7.95	7.8 - 8.1	Erosion of natural deposits; used in water treatment
Chloride <sup>1</sup> (ppm)	2023	NA	NA	NA	11.1	10.8 - 11.3	Secondary standard limit = 250 mg/L
Hardness (ppm)	2023	NA	NA	NA	78	68 - 101	Soft 0 - 60 mg/L  Moderately Hard 61 - 120  Hard 121 - 180  Very Hard greater than 180
Hardness (grains/gal)	2023	NA	NA	NA	4.5	4.0 - 5.9	Naturally occurring
pH <sup>1</sup>	2023	NA	NA	NA	7.3	7.1 - 7.6	Secondary standard limit = 6.5 - 8.5
Temp <sup>3</sup> (Celsius)	2023	NA	NA	NA	21.0	11.8 - 29.3	
Total Dissolved Solids <sup>1</sup> (ppm)	2023	NA	NA	NA	64.5	59 - 70	Secondary standard limit = 500 mg/L
Zinc¹ (ppm)	2023	NA	NA	NA	0.17	0.14 - 0.19	Secondary standard limit = 5.0 mg/L

<sup>1-</sup>Substances with Secondary MCLs do not have MCLGs and are not legally enforceable; these limits are primarily established to address aesthetic concerns.

2-For healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

3-Temp. is the temperature of the effluent water