

ANNUAL WATER QUALITY REPORT

Reporting Year 2021

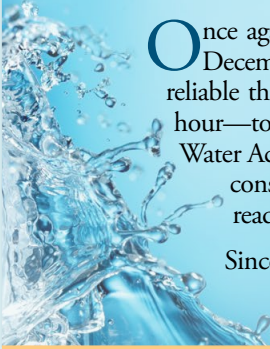
Presented By



Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

PWS ID#: GA0670005

We've Come a Long Way



Once again, we are proud to present our annual water quality report covering the period between January 1 and December 31, 2021. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at any hour—to deliver the highest quality drinking water without interruption. This report meets the federal Safe Drinking Water Act requirements for a Consumer Confidence Report and contains information on the source of our water, its constituents, and the health risks associated with any contaminants. Safe water is vital to our community. Please read this report carefully and contact us with any questions.

Sincerely,



Source Water Assessment

The CCMWA and the Atlanta Regional Commission completed a source water assessment itemizing potential sources of water pollution to our surface drinking water supplies. This information can help you understand the potential for contamination of your drinking water supplies and can be used to prioritize the need for protecting drinking water sources.

A source water assessment is a study and report that provides the following information: it identifies the area of land that contributes the raw water used for drinking water and potential sources of contamination to drinking water supplies and provides an understanding of the drinking water supply's susceptibility to contamination.

Individual source pollution involves actual facilities which have contaminants on-site that can pose a potential health risk if humans consume those contaminants. Nonpoint source pollution is caused by development and everyday activities that take place in residential, commercial, and rural areas; it is carried by rainfall to streams and lakes. After evaluating these sources of pollution, the report found the Chattahoochee watershed susceptibility ranking to be high and the Lake Allatoona watershed susceptibility ranking to be medium.

For more information on this project, you can visit <https://atlantaregional.org/> or request information by mail from the Environmental Planning Division, Atlanta Regional Commission, 229 Peachtree Street NE, International Tower Suite 100, Atlanta, GA 30303, Attn: Source Water Assessment.

Community Participation

Marietta Water operates under the supervision of the Board of Lights and Water (BLW). The BLW was created through the state legislature. The seven board members include the mayor (as chair), a city council member appointed by the mayor, and five other members of the community appointed by the city council.

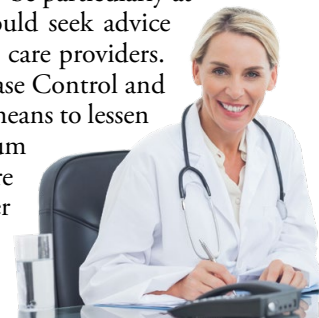
The board meets the Monday before the second Wednesday of each month. Marietta Water maintains regular operating hours of Monday through Friday, 7:00 a.m. to 4:00 p.m. To reach the service and maintenance department 24 hours a day, please call (770) 794-5230.

Where Does My Water Come From?

Marietta Water purchases water from the Cobb County - Marietta Water Authority (CCMWA), a public utility founded in 1951. The CCMWA treatment facilities are supplied from two separate surface water sources. The James E. Quarles Treatment Facility, built in 1952, withdraws water from the Chattahoochee River. The Quarles plant can treat a maximum of 86 million gallons of water a day. This water is distributed and utilized on the eastern side of Cobb County and Marietta. The Hugh A. Wyckoff Treatment Facility, originally built in the 1960s, withdraws water from Lake Allatoona. Lake Allatoona is a Corps of Engineers impoundment in north Cobb, south Cherokee, and south Bartow Counties. This human-made, multiuse lake is part of the Etowah River Basin. The Wyckoff plant can also treat a maximum of 86 million gallons of water a day. This water is distributed and utilized on the north and west sides of Cobb County and Marietta (<https://ccmwa.org/>).

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 online at: <http://water.epa.gov/drink/hotline>.



QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Tim Marshall, Environmental Compliance Coordinator, at (770) 794-5229.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount 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 be naturally occurring 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 be naturally occurring or may be the result of oil and gas production and mining activities.

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

Additional Monitoring

This year the Wyckoff plant was selected by the Environmental Protection Division (EPD) to collect samples of per- and polyfluoroalkyl substances (PFAS) as part of its required monitoring strategy for Georgia. The Quarles plant was not selected. CCMWA made the decision to send Quarles finished water to a private lab for PFAS testing to ensure we had the information needed to plan for the future.

The Wyckoff treatment plant samples had no PFAS compounds above the laboratory detection limit. The Quarles treatment plant samples contained four PFAS compounds.

- Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS): The U.S. EPA only has health advisories for PFOA and PFOS; the action limit is 70 parts per trillion (ppt) or nanograms per liter (ng/L), combined or individually. Amounts detected in the Quarles samples were 2.4 and 2.3 ng/L, respectively. Both are well below the health advisory level.

- Perfluorohexanoic acid (PFHxA): The state of Illinois has a health advisory for PFHxA, but U.S. EPA does not. The Illinois health advisory is 560,000 ppt (ng/L). The detected amount for the Quarles samples was 3.4 ng/L. PFHxA is a breakdown product of stain- and grease-proof coatings on food packaging and household products. It is highly persistent in people and the environment.

- Perfluorobutanesulfonic acid (PFBS): The state of Illinois has a health advisory for PFBS, but U.S. EPA does not. The Illinois health advisory is 2,100 ppt (ng/L). The detected amount for Quarles was 2.2 ng/L. PFBS is the replacement chemical for Scotchgard water repellent. It has been used as a surfactant in industrial processes and in water- and stain-resistant coatings on consumer products such as fabrics, carpets, and paper.

Health advisories provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. U.S. EPA's health advisories are not enforceable but provide technical guidance to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes *cryptosporidium*, the most commonly used filtration methods cannot guarantee 100-percent removal. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immunocompromised 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. Monitoring of our source water performed in 2013 exhibited no detection of *cryptosporidium*. Testing was only required for a period of nine months in 2013.

“When the well is dry, we know the worth of water.”

—Benjamin Franklin

Lead in Home Plumbing

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. 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. 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 online at: www.epa.gov/safewater/lead.



Test Results

During the past year, we have taken many water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables show only those contaminants that were detected in the water.

The state recommends monitoring for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the fourth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2021	[4]	[4]	2	ND-2	No	Water additive used to control microbes
Chlorite (ppm)	2021	1	0.8	0.42	0.041-0.42	No	By-product of drinking water disinfection
Fluoride (ppm)	2021	4	4	0.89	0.59-0.89	No	Erosion of natural deposits; Water additive which promotes strong teeth
Haloacetic Acids [HAAs]-Stage 2 (ppb)	2021	60	NA	30.8 ¹	16.5-35	No	By-products of drinking water disinfection
Nitrate + Nitrite [as N] ² (ppm)	2021	10	10	0.74	0.30-0.74	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Coliform Bacteria (% positive samples)	2021	TT	NA	3.80	NA	No	Naturally present in the environment
Total Organic Carbon (ppm)	2021	TT	NA	1.8	0.9-1.8	No	Naturally present in the environment; Decay of organic matter in the water withdrawn from lakes and streams
TTHMs [total trihalomethanes]-Stage 2 ³ (ppb)	2021	80	NA	63.6 ¹	22.6-86.6	No	By-products of drinking water disinfection
Turbidity ⁴ (NTU)	2021	TT	NA	0.14	ND-0.14	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2021	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community⁵

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	1.3	0.040	0/50	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2020	15	0	2	1/50	No	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

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.

MRDLG (Maximum Residual Disinfectant 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

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

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

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
HAA5 (ppb)	2020	28.04 ⁶	20.65–38.02	By-products of drinking water disinfection
HAA6Br (ppb)	2020	6.26 ⁶	4.72–7.58	By-products of drinking water disinfection
HAA9 (ppb)	2020	33.99 ⁶	26.47–44.87	By-products of drinking water disinfection
Manganese (ppb)	2020	1.44 ⁶	0.91–2.2	Erosion of natural deposits
Perfluorobutanesulfonic Acid [PFBS] (ppt)	2021	2.2	NA	Scotchgard water repellent; Surfactant in industrial processes and water- or stain-resistant coatings on fabrics, carpets, and paper
Perfluorohexanoic Acid [PFHxA] (ppt)	2021	3.4	NA	Stain- and grease-proof coatings on food packaging and household products
Perfluorooctanesulfonate Acid [PFOS] (ppt)	2021	2.3	NA	Nonstick coatings on cookware; Stain-resistant treatment for carpet and furniture
Perfluorooctanoic Acid [PFOA] (ppt)	2021	2.4	NA	Stain-resistant carpet; Water-repellent clothes, paper, and cardboard packaging; Ski wax; Foams used to fight fires; By-product of the breakdown of other chemicals

¹ Highest detected LRAA.

² Nitrate and nitrite are measured together as N.

³ 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 system and may have an increased risk of getting cancer.

⁴ 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.

⁵ The next round of sampling is due in 2023.

⁶ Average level found.

