



Macon Water Authority

2023 Consumer Confidence Report

MACON-BIBB, GEORGIA

**This Consumer Confidence Report includes Water Quality Data
from January 1 -- December 31, 2022.**

From the Highest Quality Tap Water PossibleTo the Best Tasting Drinking Water in Georgia!

The MWA experienced no violations of drinking water quality standards this past year, while also having the Best Tasting Drinking Water in Georgia!

Welcome to the 2023 MWA Water Quality Report, also referred to as our Consumer Confidence Report (CCR). According to this year's CCR, **we experienced no violations of drinking water quality standards**, as reflected through laboratory tests conducted and water quality data collected during the 2022 calendar year.

The water quality data presented in this year's CCR (see "Water Quality Data" table on page 5) provide empirical evidence that **our tap water met or exceeded all measures for clean, safe drinking water, as determined by state and federal regulatory oversight**. That is, the MWA had no violations for exceeding permitted levels of substances present in drinking water.

To put that into perspective, **the MWA's Frank C. Amerson, Jr. Water Treatment Plant produced more than 9.8 BILLION gallons of drinking water during 2022, and not one gallon failed to meet state or federal regulatory standards for drinking water quality.**

In addition to achieving complete compliance with the requirements of the regulatory community, the MWA has received awards and accolades from the water industry and fellow water professionals as well, highlighted by its recent selection as the Best Tasting Drinking Water in Georgia!

For our customers and community, we want you to know that your drinking water is not only the highest quality possible – thus, clean and safe to drink – but it's great tasting, too!

To the Best Tasting Drinking Water in Georgia!

Since we published our last CCR, the MWA has been recognized on several occasions for achieving excellence in its operations, at its facilities, and among its employees, including our award for producing the Best Tasting Drinking Water in Georgia.

The following industry awards and accolades received by the Authority this past year provide additional evidence of MWA drinking water quality.

- ◆ The Best Tasting Drinking Water in Georgia, as judged by the Georgia Section of the American Water Works Association (GAWWA).
- ◆ GAWWA awarded the MWA Amerson Water Treatment Plant with a Certificate of Achievement, or honorable mention for Best Operated Water Treatment Plant in Georgia, a year after being selected as the Plant of the Year for the seventh time.
- ◆ The Amerson Plant also won the Georgia Association of Water Professionals (GAWP) Platinum Award for 100% permit compliance for the 10th consecutive year.
- ◆ The MWA Lower Poplar Water Reclamation Facility received a GAWP Gold Award for 100% permit compliance this past year.
- ◆ The Authority's Lower Poplar Plant also won the 2022 National Association of Clean Water Agencies (NACWA) Gold Award for Peak Performance.
- ◆ The Authority's Chuck Mixon and Daniel Smith were inducted into the GAWP Golden Hydrant Society, which is a select honorary society recognizing outstanding professionals in the water industry. MWA Director of Water Treatment Gary McCoy was inducted into the Society the previous year.



- ◆ Michael Elliott won the GAWP District 5 Wastewater Top Operator Award.
- ◆ MWA Project Manager Heather Veal received the Water Environment Federation (WEF) Sidney Bedell Award for service to the profession.
- ◆ The MWA received the GAWP Water Distribution System Platinum Award for achieving a grade of 95% or higher on the annual evaluation of its water system for at least five consecutive years. Last fall, the MWA also completed its EPD Sanitary Survey with extremely high marks. This complete review of the MWA system is conducted by the state regulatory agency every three years.
- ◆ The MWA received the GAWP Collection System Platinum Award for achieving a grade of 95% or higher on the annual evaluation of its sewer system for at least five consecutive years.

Whether referring to its operations, facilities, or employees, these industry honors noted above provide further evidence that the MWA is among the Best of the Best water utilities in the state of Georgia.



What's in My Drinking Water and Why?

The MWA has the best water quality possible!

To ensure that the MWA's tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the levels of certain substances, which can be potential contaminants, present in water produced by a public water system such as ours. The detailed data of these substances detected in the MWA's drinking water during the 2022 calendar year are included in the "Water Quality Data" (table on page 5) of this report.

Our tap water is tested more vigorously than bottled water!

All drinking water, including bottled water, may contain at least small amounts of some potential contaminants. However, the presence of those substances, although minor, does not necessarily indicate a risk to public health. Tap water undergoes many more tests for water quality than bottled water, especially at a public water utility such as the MWA. We test for water quality nearly 10 times more than the minimum standards required by our regulatory agencies, to make sure you are drinking the cleanest and safest tap water possible! In addition, while bottled water is regulated by the much less stringent standards of the U.S. Food & Drug Administration, public tap water such as ours is more strictly regulated by the highest standards for water quality, as determined by the U.S. Environmental Protection Agency (EPA) and Georgia Department of Natural Resources, Environmental Protection Division (EPD).

Potential contaminants tested by the MWA

Potential contaminants that may be present in source water **before** it is treated at the MWA's Frank C. Amerson, Jr. Water Treatment Plant include:

Microbiological contaminants, such as viruses and bacteria that may come from septic tanks/systems, agricultural livestock, wildlife, or wastewater treatment plants.

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 agricultural sources or as a result of farming, urban storm water runoff, or residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, in addition to coming from gas stations, urban storm water runoff, and septic tanks/systems.

Radioactive contaminants, which can be naturally occurring, or be the result of oil and gas production or mining activity.

What's naturally present in water and what's added during treatment?

The items included in the "Water Quality Data" (table on page 5) of this report are tested in the MWA's award-winning water quality laboratory and confirmed by state regulators, according to industry standards.

Some of these items tested – such as Nitrate, Total Organic Carbon, Total Coliform, and Turbidity – are naturally present in water at some point during treatment, though they are not harmful at the detected levels.

Chlorine Dioxide and Chlorine are added during the disinfection phase of our water treatment process to kill harmful bacteria found in drinking water.

Other items regularly tested by the MWA – including Haloacetic Acids (HAA) and Trihalomethanes (THM) – are disinfectant by-products of the treatment process. If detected under EPA mandated MCL levels, they pose no immediate health risk to the public.

Finally, Lead and Copper may be present in tap water because of a customer's plumbing. The MWA is required to test for Lead and Copper at individual residential customers every three years, according to federal regulatory requirements, to protect the public's drinking water from harmful lead and copper levels. The most recent MWA tests for Lead and Copper occurred in 2020, and the next tests will be conducted as required in September 2023.



2023 MWA Consumer Confidence Report (CCR)

Water Quality Data from January 1 – December 31, 2022

Substances	Units	MCL	MCLG	Highest Amount	Range	Violation	Typical Sources in Drinking Water
Inorganic							
Chlorine	ppm	MRDL= 4	MRDLG= 4	1.80	1.00 – 1.80	No	Water additive used to control microbes.
Chlorine Dioxide	ppm	MRDL= 0.80	MRDLG= 0.80	0.77	0.01 – 0.77	No	Water additive used to control microbes.
Fluoride	ppm	4	4	1.22	0.57 – 1.22	No	Water additive that promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories.
Nitrate	ppm	10	10	0.35	N/A	No	Runoff from fertilizer use; leaching from septic tank sewage; erosion of natural deposits.
Organic							
Total Organic Carbon	Removal Ratio RAA	TT = ≥ 1	N/A	1.16	1.13 – 1.16	No	Naturally present in the environment.
Disinfection By-Products							
Chlorite	ppm	1	0.8	0.66	0.02 – 0.66	No	By-product of drinking water disinfection.
Haloacetic Acids (HAAs)	ppb	60	N/A	0.018	0.013–0.018	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHMs)	ppb	80	N/A	0.058	0.032–0.058	No	By-product of drinking water disinfection.
Microbiological							
Total Coliform	% of monthly samples	5	0	2	0 – 2	No	Naturally present in the environment.
Turbidity	>95% of monthly samples taken	0.30	N/A	0.25	0.03 – 0.25	No	Soil runoff.
Copper and Lead Sampled at Customer Taps in 2020							
Copper	ppm	AL = 1.3	0	Met required 90 th percentile on all samples.	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	
Lead	ppb	AL = 15	0	Met required 90 th percentile on all samples.	No	Internal corrosion of household plumbing systems; erosion of natural deposits.	

The MWA had no violations of drinking water quality standards during the 2022 calendar year.

How To Read The Report: Important Terms and Definitions

- **Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow. For lead and copper, the reading is the 90th percentile value from the most recent sampling.
- **≥:** greater than or equal to.
- **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 the addition of a disinfectant is necessary for the 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 contamination.
- **N/A:** Not Applicable.
- **Nephelometric Turbidity Units (NTUs):** Used in the measurement of turbidity. Turbidity is a measure of the cloudiness of the water. The MWA monitors turbidity because it is a good indicator of the effectiveness of our filtration system.
- **Parts per Billion (ppb):** A measurement concentration that is equivalent to micrograms per liter (µg/L).
- **Parts per Million (ppm):** A measurement concentration that is equivalent to milligrams per liter (mg/L).
- **Percent (%) of Monthly Samples:** The percent of samples taken during the month that tested positive for total coliforms. The MWA collects a minimum of 125 samples per month.
- **Removal Ratio RAA:** The amount removed in the process expressed as a ratio. The MWA samples its raw water and treated water each month for total organic carbon and then calculates a removal ratio. To meet regulatory requirements, the MWA then determines the RAA, which is the Running Annual Average – on a quarterly basis – of the removal ratio.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

Required Consumer Confidence Report (CCR) Statement Addressing Lead in Drinking Water



“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 Macon Water Authority is responsible for providing high quality drinking water but cannot control the variety of materials used in (a customer’s) 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 at 1-800-426-4791, or at <http://www.epa.gov/safewater/lead>.”

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In September 2020, the MWA completed its Lead and Copper testing, which is required to be conducted every three years. All samples met the 90th percentile, as required by the U.S. Environmental Protection Agency. The next scheduled MWA tests for lead and copper will be conducted in September 2023.

An Overview of the MWA's Drinking Water System



MWA Capital Projects to Benefit Customers Now and in the Future



The MWA's leadership, starting with the seven-member Board of Directors and extending to its executive team and staff, is continually investing in capital projects to improve facilities and operations for the benefit of customers.

This past year marked several accomplishments and milestones regarding MWA capital improvements.

1

Raw Water Storage:

Javors Lucas Lake:

Our 581-acre reservoir, with 5.8 billion gallons of raw water storage at full pool.

Ocmulgee River:

Our permit allows us to withdraw between 35 million gallons per day (MGD) and 110 MGD, depending on water levels and river flow.

2

Water Treatment:

Our regulated production capacity is 60 MGD of finished drinking water, although we are capable of producing 76 MGD. In addition, the Amerson Plant has infrastructure already in place to expand to 90 MDG of capacity in the future, if/when necessary.

3

Water Distribution:

The MWA Water Storage and Distribution System includes:

- 4 clear wells at the Amerson Water Treatment Plant totaling 20 million gallons.
- 10 elevated tanks + 10 ground storage tanks within the system totaling 19.9 million gallons.
- 24 tanks in all that total 39.9 million gallons of finished drinking water storage.

In addition, MWA drinking water distribution includes:

- 1,413 miles of water lines (all sizes/types) and 9 pumping stations.

This past year, the MWA provided an average of 26.9 MGD of finished drinking water to more than 55,000 MWA water customers. During 2022, the MWA produced and distributed approximately 9.8 billion gallons of water to customers throughout its system, without a single gallon being out of compliance.

Wastewater CIP Rehabilitation Project

Last summer (2022), the MWA cut the ribbon on its Wastewater Capital Improvement Plan (CIP) Rehabilitation Project – one of the largest in the history of the utility – with more than \$51 million in upgrades completed at its two water reclamation facilities.

Additional Facility and System Improvements

In addition, the MWA recently completed construction of its 3 million gallon (MG) elevated water storage tank at the former Atlantic Cotton Mills location in Historic Vineville. In addition to construction of the composite elevated tank, the project included the installation of a 36-inch water main with two connections between the tank and distribution system, as well as a 24-inch water main and third connection.

The Authority also continues to make progress on the rehabilitation of its Administrative Building at the Second Street Headquarters. Construction on the first floor has been completed, with the opening of a new Customer Service Lobby, Call Center, and Customer Care Department offices. Construction is ongoing on the

second and third floors, with the entire project scheduled for completion in November 2023.

Finally, the end of the year (2023) should also mark the completion of the Authority's meter change out program, with all manually read residential and non-residential water meters being replaced with Automated Meter Reading (AMR) Technology.

Special Dedications of MWA Facilities

Within the past year, the MWA celebrated the dedication of two major facilities renamed in honor of two notable board members and leaders in the community. The MWA dedicated its Support Services Building in honor of Mr. Herbert Dennard, Sr., who is a local business, civic, and civil rights leader in Macon-Bibb County and whose service included 16 years on the MWA Board of Directors from 1981-1996.

In addition, the MWA dedicated its Engineering Building in honor of current District 4 Board Member Frank Patterson, who has served on the MWA Board since 2004, including 12 years previously as Vice Chairman. Mr. Patterson has overseen several milestones in the history of the Authority. As a result, the Frank K. Patterson, Jr. Engineering Complex now bears his name.

MWA Public Outreach

Please consider helping us in our mission to Protect Water Quality!

The Macon Water Authority (MWA) continually welcomes the public’s involvement in protecting our water quality. There are many avenues of Public Outreach for you to help us in this number one priority. Your involvement can include community partnerships and events expanding programming to reach more stakeholders. We invite you to become engaged in protecting our water quality.

There are several avenues of Public Outreach for you to consider. These beneficial customer behaviors and activities go a long way in protecting our water quality:

- The Fight Against FOG** You can protect water quality by properly disposing of Fats, Oils, and Grease (FOG).
- The Toilet is Not a Trash Can** Remember, only toilet paper and human waste should be flushed, because the Toilet is Not a Trash Can for disposing of non-dispersible items.
- Prevent Stormwater Pollution** Anything that hits the

ground eventually ends up in our water supply after a storm, creating additional challenges in drinking water treatment.

Wise Water Use Please be wise in your water use, both indoors and outdoors, to help preserve this precious and critical natural resource. An example of wise water use is to winterize your water lines to protect them from freezing and subsequent pipe bursts and water leaks.

Additional invitations for your involvement in protecting water quality include:

- Kids Fishing Derby** The first Saturday in March marks the annual MWA Kids Fishing Derby at Javors Lucas Lake. A record number of 400+ participated this year.
- Fix A Leak Week** During the month of March, the MWA celebrates national Fix A Leak Week to encourage customers to find and fix household water leaks...all year round!
- Drinking Water Week** The first week in May is national Drinking Water Week, which intends to raise awareness of the vital role water plays in our daily lives.
- Water Professionals Appreciation Day** The MWA celebrates Water Professionals Appreciation Day in Georgia on the first Monday in May by honoring our 200+ employees who are “essential workers” in our community.
- Ocmulgee Alive!** The MWA hosts this annual cleanup of the Ocmulgee River, which is affiliated with Georgia Rivers Alive, to keep this primary source of drinking water and outdoor recreation clean and safe for our community. Come join us on Saturday, Oct. 14, 2023, for Ocmulgee Alive!

For more information on how you can get involved in these and other efforts to protect our water quality, please visit our website at www.maconwater.org or contact us at 478-464-5600.

MWA Partnerships in Public Outreach include:

- Macon Water Alliance, Inc.** This non-profit subsidiary of the MWA pursues partnerships with other like-minded organizations and individuals in the community.
- Macon Cherry Blossom Festival** The MWA’s participation in this most popular and visible event in Macon-Bibb County promotes our role in the community as a utility providing award-winning water, sewer, and stormwater services.
- Earth Day** The MWA is a proud sponsor of Macon-Bibb County’s Earth Day, to celebrate the importance of protecting and preserving natural resources.
- Career Days and Field Days** MWA employees often take our “show on the road” to share valuable information on our role in the community – and opportunities for careers within the water profession – with students in Macon-Bibb County Schools.



Quality Drinking Water Starts with Quality Leadership

The MWA Board of Directors

The MWA would not be known for producing the Best Tasting Drinking Water in Georgia and North America and as a model water utility if not for its leadership. The Authority is governed by a seven-member Board of Directors, consisting of a Chairman elected county-wide, four Members elected within respective Districts, and two Members appointed from the elected Macon-Bibb County Commission.

Photos from top to bottom:

Mr. Gary Bechtel, who served previously on the MWA Board from 2017-2018, is in his first term as Chairman of the Authority, following his victory in the 2022 General Election. Mr. Bechtel is a commercial real estate associate for Bob Lewis & Associates in Macon, where he specializes in commercial properties throughout the Southeast.

Dr. Anissa Jones-Aiken, who won re-election in 2022, is the District 1 Member and Vice Chair of the MWA Board. Dr. Jones-Aiken has served on the MWA Board since her first election in 2018. Professionally, she is the first African-American Chiropractor in Macon, Georgia, who has been practicing locally for more than 20 years.

Mr. Desmond Brown was first elected as the District 2 MWA Board Member in 2020, to fill the unexpired term of long-time MWA Board Member Javors J. Lucas upon his passing. Mr. Brown was re-elected for a full term in 2022. His professional experience includes work as an economic growth developer, a commercial mortgage banker, a loan officer, and a certified investment banker.

Mr. Dwight Jones is the District 3 Member on the MWA Board, having served in that capacity

since 2014. A life-long resident of Bibb County, Mr. Jones is a local business owner who specializes in leasing and managing commercial properties and retail storefronts. In addition, as a licensed general contractor, he offers businesses the ability to build to suit projects for their operations.

Mr. Frank Patterson, who was re-elected in 2022 to represent District 4, has served for 18 years on the MWA Board, including 12 years previously as Vice Chairman. He worked for more than 53 years in local government, including 35 years with Bibb County Government, retiring as Assistant Director of the Lake Tobesofkee Recreation Area.

Finally, **Mr. Bill Howell** and **Mrs. Valerie Wynn** serve as the two appointed members of the MWA Board, as elected Representatives from the Macon-Bibb County Commission. Their terms on the MWA Board began in January 2021.

Mr. Howell was born and raised in Bibb County, and he has spent most of his life here. He has been self-employed since 1986, owning and operating several businesses, both in Macon-Bibb County, Georgia and in East Tennessee.

Mrs. Wynn retired in 2017 from a 46-year career in the insurance industry. She worked for several major insurers during this time, including Travelers, Prudential, GEICO, and her last 10 years in business at Selective Insurance Company.

For the complete profile on all MWA Board Members, please visit our website at www.maconwater.org.





Macon Water Authority

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MaconWater.org



Questions Or Concerns About This Water Quality Report

If you have questions about this year's MWA Water Quality Report, the MWA Source Water Assessment Plan, or opportunities for public involvement, please contact Gary McCoy, MWA Director of Water Treatment, at 478-464-5653 or **gmc coy@maconwater.org**.