



Macon Water Authority

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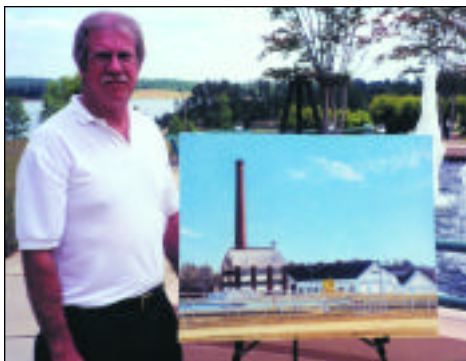
MWA presents 2001 Water Quality Report

The board of directors, management and employees of the Macon Water Authority (MWA) are pleased to present our annual Water Quality Report, which includes an in-depth analysis of your drinking water.

In addition, we will provide you with an overview of the MWA facilities and operations. We invite you to come tour our new Frank C. Amerson, Jr. (Town Creek) Water Treatment Facility or any of our other assets, which collectively allow us to provide you with the best water distribution and sewer collection services possible.

The Amerson Water Treatment Plant began full operation on July 10, 2000. This new facility has been on line the entire year of 2001, which is the time span that includes the water quality data presented to you in this report.

As with any upgrade or improvement to our system, we've had to address kinks during the transition of discontinuing operations at the old plant and bringing the new one on line. The Authority took the Riverside Water Treatment Plant off line on March 29, 2001, after the facility



(Above) MWA Plant Operations Director Terry Forrest shows off his original painting of the old Riverside Water Treatment Plant, a facility that was taken off line March 29, 2001. Forrest's artwork, oddly enough, is on display at the public education area of the MWA's new Amerson Water Treatment Facility, which took the place of the old Riverside plant.



(Above) The new Frank C. Amerson, Jr. (Town Creek) Water Treatment Facility features the Macon Water Authority's (MWA) water production operations and water quality lab (building in the background), as well as clearwells (domes in the center) for storing finished drinking water that's pumped to MWA customers.

had served Macon and Bibb County well for nearly 100 years.

Although the Riverside Plant provided high quality drinking water for Authority customers, the new Amerson Plant produces an even better quality product. The new facility features a state-of-the-art design and production capacity of 60 million gallons per day (MGD), with a production flow featuring advanced flocculation, sedimentation and filtration. The plant design will also allow us to expand our production capacity to 90 mgd, if necessary in the future.

In addition to providing our customers with the highest quality finished drinking water, the Macon Water Authority is also involved in writing a Source Water Assessment Plan (SWAP). This plan will help us protect and manage the watersheds of the Ocmulgee River and Town Creek, which provide the raw water resources for use in our drinking water production process.

The river intake structure on the banks of the Ocmulgee River withdraws raw water from the Ocmulgee and pumps it into the MWA's reservoir— the Javors J. Lucas Lake. From the reservoir, the raw water enters the Amerson plant for water production.

Essentially, the SWAP will identify any potential pollutants within a certain radius of the plant intake and the reservoir, so these potential threats can be taken into account in the planning to protect our natural resources. We expect to complete this study and begin implementing its recommendations by the end of 2003.

The Macon Water Authority again invites you to take a closer look at our facilities and operations, most of which are designed for public access. In fact, we hope that our reservoir will be open for public fishing soon, so our customers can see why we're so proud of this new community asset. Contact us at (478) 464-5650 for tours or public information.

What's in my drinking water and why? —

Putting things into perspective

Drinking water or tap water, as well as bottled water or water from a cooler, could have a very small amount of contaminants in it and still meet regulatory guidelines.

It's important to realize that a minute presence of contaminants in drinking water does not necessarily indicate there is a health risk.

For more information about contaminants and potential health effects from them, call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

People potentially at risk

Some people may be more vulnerable to effects of potential contaminants in drinking water than the general population.

Immuno-compromised persons, for example, can be more susceptible to risk from infections. Those individuals include persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly citizens and infants. For questions about health risks from drinking water for immuno-compromised individuals, contact health care providers, the EPA or CDC. All of

these organizations have guidelines on the appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants, and details may be obtained by contacting the Safe Drinking Water Hotline at 1-800-426-4791.

Raw water (natural) resources

The natural resources for drinking water – both tap water such as that provided by the Macon Water Authority (MWA) and bottled water provided in stores – include rivers, lakes, streams, ponds, reservoirs, springs and wells. Surface water is the major source of raw water for public water systems such as the MWA.

The origin of surface water comes from precipitation and ground water. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and collects substances originating from the presence of animals or from human activity.

Contaminants tested by MWA

Contaminants that may be present in source water before it is treated at the MWA's Amerson Water Treatment Facility include the following:

□ **Microbial contaminants**, such as viruses and bacteria that may come from septic tanks/systems, agricultural livestock operations, wildlife, as well as wastewater treatment plants.

□ **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm 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 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, yet can also come from gas stations, urban storm water runoff and septic tanks/systems.

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

MWA has highest water quality

It is important for MWA customers to understand how water acquires its various characteristics. Understanding these characteristics and their effect on safe, good-tasting drinking water is a necessary first step toward public awareness of the complexity of the water treatment process. The majority of our operations at the Amerson Water Treatment Facility has the highest certification available for water production in the state of Georgia.

In order to ensure that MWA tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by any public water system.

As for regulating the contaminants in bottled water, public health protection is provided by the Food and Drug Administration, who outline regulations for the presence of these same contaminants in those finished drinking water products.

The detailed data of the contaminants detected in MWA drinking water during the 2001 calendar year are included in the table on page 3.



A high capacity pump withdraws raw water from the MWA Javors J. Lucas Lake (Town Creek Reservoir) for eventual drinking water production at the Amerson Water Treatment Facility.

Water Quality Data

Regulated substances

	Units	MCLG	MCL	Detected amount	Violation (yes/no)	Typical source of contaminants
Copper	ppm	1.3	1.3	.27	no	Corrosion of household plumbing systems
Flouride	ppm	4.0	4.0	.80	no	Natural deposit, water additive
Lead	ppb	0	15	4.8	no	Corrosion of household plumbing systems
Nitrate	ppm	10	10	.28	no	Erosion of natural deposits, runoff from fretilizer use
Turbidity	NTU	N/A	TT	.09	no	Soil runoff
Total Trihalomethanes	ppb	0	80	58	no	By-product of water chlorination
Total Coliform	%	0	5%	1%	no	Naturally present in the environment

Unregulated substances

	Units	MCLG	MCL	Detected amount	Violation (yes/no)	Typical source of contaminants
Total Haloacetic Acids	ppm	TT	60	42	no	By-product of water chlorination
Chloroform	ppb	N/A	N/A	2.0	no	By-product of water chlorination
Bronodichloromethane	ppb	N/A	N/A	3.5	no	By-product of water chlorination
Chlorodibromomethane	ppb	N/A	N/A	3.2	no	By-product of water chlorination

How to read the report

MCLG Maximum Contaminant Level Goal is the ideal goal below which there is no known or expected health risk.
 MCL Maximum Contaminant Level is the highest amount of substance allowed in drinking water.

N/A Not applicable.
 NTU Nephelometric Turbidity Unit is the standard measuring unit for turbidity.
 ppm Parts per million means 1 part per 1,000,000 (same as a milligram per liter).

ppb Parts per billion means 1 part per 1,000,000,000 (same as microgram per liter).
 TT Treatment technique means a required treatment technique or process intended to reduce the level of contamination that is necessary for drinking water.

Our Water Source

The Macon Water Authority currently supplies finished drinking water to over 50,000 customers, including residential and industrial accounts.

Our distribution system spans over 1,500 miles of water line. The Frank C. Amerson, Jr. (Town Creek) Water Treatment Plant

was placed on line July 10, 2000. This new state-of-the-art treatment facility provided water to Macon and Bibb County throughout the year 2001. It will serve our community well in the future and will provide us with more reliable and better quality water for future generations.

These sedimentation basins are necessary to accommodate the Macon Water Authority's (MWA) conventional water treatment process. Finished drinking water is stored in one of several clearwells on the plant properly in preparation for distribution to MWA customers.



MWA Awards

- ❑ **Riverside Water Treatment Plant**
1998 Georgia Water & Pollution Control Association (GW&PCA) Gold Award.
- ❑ **Frank C. Amerson Jr. (Town Creek) Water Treatment Plant**
2000 GW&PCAGold Award; qualifies for the 2001 GW&PCAGold Award.
- ❑ **Rocky Creek Water Pollution Control Facility**
1999 and 2000 GW&PCAGold Award; qualifies for the 2001 GW&PCA Gold Award; qualifies for the 2001 Association of Metropolitan Sewerage Agencies (AMSA) Gold Award.
- ❑ **Lower Poplar Street Water Pollution Control Facility**
Qualifies for the 2001 GW&PCAGold Award; qualifies for the 2001 AMSA Gold Award.
- ❑ **Wilson Airport Water Pollution Control Facility**
1997 GW&PCAGold Award.
- ❑ **Macon Water Authority Accounting Department**
1997, 1998, 1999 and 2000 Certificate of Achievement in Financial Reporting; qualifies for 2001 Certificate of Achievement in Financial Reporting.

Information about your water board

The Macon Water Authority Board of Commissioners meets the first Thursday of every month in the Board Room on the second floor of the Albert Billingslea Building at 790 Second Street in Macon, Georgia.

MWA Board of Commissioners

Frank C. Amerson, Jr.
Bibb County at large,
Chairman
(478) 745-3003

Javors J. Lucas
District 2, Vice Chairman
(478) 742-2722

Dorothy 'Dot' Black
District 1
(478) 742-3503

Barbara Knight
District 3
(478) 477-6746

Clifford R. Howard
District 4
(478) 757-1848

Charles W. Bishop
County Representative
(478) 471-7776

Henry C. Ficklin
City Representative
(478) 745-2515

Senior Authority Staff

Frank C. Amerson, Jr.
Interim Executive Director
(478) 464-5622

Edward Williams, III
Human Resources
Manager
(478) 464-5646

Melissa Thorpe
Chief Financial Officer
(478) 464-5628

Jan Hudson
Customer Service Director
(478) 464-5619

Frank Sanders
Field Operations Director
(478) 464-5637

Terry Forrest
Plant Operations Director
(478) 464-5624

Important numbers

Customer Service	(478) 464-5600
Water Distribution (Maintenance)	(478) 464-5660
Wastewater Collection (Maintenance/Overflow)	(478) 464-5670
Central Laboratory/Industrial Monitoring	(478) 464-5678



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