

From the Desk of Tony Rojas, executive director, Macon Water Authority

At the Macon Water Authority (MWA), we have always operated according to the premise that "Service is our Mission." It is our goal to provide the cleanest and safest drinking water to our over 50,000 customers. But how do you, the consumer, know that we are doing our job?



That's the purpose of this Water Quality Report. Here at the MWA, we like to call it a Consumer Confidence Report, because we hope that the information contained within this document will help to maintain your confidence in our ability to deliver the best drinking water and sanitary sewer services available.

Quality water begins with a clean source, which is why in 2003 we completed work on a Source Water Assessment Plan (SWAP). This plan helped us to identify potential contamination to our local watersheds. This year, we built on the SWAP by working with those in the community to create a Source Water Protection Plan (SWPP). Implementation of this plan will help to ensure that the water that you and your family depend on is safe from harmful contaminants. The MWA is the only public utility in the state taking this much-needed measure to protect these water sources.

Our efforts in fulfilling our mission to you were rewarded this year as the Georgia Water & Pollution Control Association (GW&PCA) named our Frank C. Amerson, Jr. Water Production Plant (WPP) as the top plant in the state. In addition, our Lower Poplar Creek and Rocky Creek Water Pollution Control

Plants (WPCP) were also recognized for excellence. The reason these plants were praised was because of the incredible group of operators and maintenance staff who work day and night to ensure these facilities are in top shape. One of those operators, Chuck Mixon of the Amerson WPP, was named the top operator in Middle Georgia by the GW&PCA. As a result of their hard work, the GW&PCA named our drinking water as the best tasting in Middle Georgia.

I don't speak of these accolades to boast, but instead to assure you, our valued customer, that your water resources are being handled by some of the best facilities and staff in the state of Georgia.

If you have any questions concerning the information in this report, or any other aspect of the Authority's facilities or operations, please visit our website at www.maconwater.org, or call us at (478) 464-5620.



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Further Evidence of Excellence

GW&PCA Plant of the Year
Frank C. Amerson
Water Production Plant

GW&PCA Platinum Award -
100% Permit Compliance,
5 Consecutive Years
Rocky Creek
Water Pollution Control Plant
Frank C. Amerson
Water Production Plant

GW&PCA Gold Award -
100% Permit Compliance 2004
Lower Poplar Street
Water Pollution Control Plant

2004 GW&PCA Top Operators
Chuck Mixon,
District 5 Water System

GW&PCA Best Tasting Water
in Middle Georgia

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BUILDING CONSUMER CONFIDENCE IN THE MACON WATER AUTHORITY

2004

MWA Water Quality Report

The board members and employees of the Macon Water Authority (MWA) are pleased to present the annual Water Quality or Consumer Confidence Report (CCR). This report is produced and distributed to provide an in-depth analysis of your drinking water, so that you can be assured that you and your family are drinking the cleanest, safest water possible.



Our Source Water

The MWA currently supplies finished drinking water to over 50,000 customer accounts in Macon and Bibb County. To do so, the MWA has constructed a distribution system that spans over 1,500 miles of water lines. The Frank C. Amerson Jr. Water Production Plant (WPP) produces all of the finished drinking water for MWA customers. The Amerson Plant, for the second time in its short history, was named "Plant of the Year" for the state of Georgia by the GW&PCA this year.

The Amerson WPP features a design and capacity to produce 60 million gallons of drinking water per day (MGD). It was built with the ability to handle an expansion to 90 MGD of production capacity, if necessary in the future. The Amerson Plant features advanced flocculation, sedi-

mentation and filtration – all state-of-the-art methods in water treatment.

The water treated by the Amerson Plant is supplied by two sources – the MWA's Javors J. Lucas Lake and the Ocmulgee River. Lucas Lake is a 625-acre reservoir that holds an estimated 6.5 billion gallons at normal full pool. Water is pumped directly from the lake into the Amerson WPP for treatment. An additional booster pumping station is located between an intake on the Ocmulgee and the Amerson Plant, bypassing Lucas Lake. This alternative raw water pumping method can provide the Authority with continuous operations during maintenance, or in the event of an emergency, which might affect withdrawal from Lucas Lake.

Raw water (natural) resources

The natural resources for drinking water – both tap water and bottled water – include rivers, lakes, streams, ponds, reservoirs, springs and wells. Surface water is the source of raw water for the Macon Water Authority's water system. 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. The presence of these substances in our drinking water production process is the focus of this Water Quality Report.

What's in my drinking water and why?

MWA has highest water quality

In order to ensure that MWA tap water is of the highest quality and 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. The detailed data of the contaminants detected in MWA drinking water during the 2004 calendar year are included in the "Water Quality Data" table on page 3 of this report.

Notice to Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than others. Immuno-compromised 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 citizens and infants – can be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers, while calling the Safe Drinking Water Hotline at 1-800-426-4791.

Contaminants tested by MWA

Contaminants that may be present in source water BEFORE it's treated at the MWA's Amerson/Town Creek 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** – 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, may come from 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** – can occur naturally or be the result of oil and gas production or mining activity.

How to read the report

AL Action Level

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 a microgram per liter).

TT Treatment technique means a required treatment process intended to reduce the level of contamination that is necessary for drinking water.

MRDL Maximum Residual Disinfectant Level is the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbiological contaminants.

MRDLG Maximum Residual Disinfectant Level Goal is the level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbiological contaminants.

Water Quality Data

Inorganic Contaminants

	Units	MCLG	MCL	Detected amount	Range Low - High	Violation (yes/no)	Typical source of contaminants
Fluoride	ppm	4	4	1.2	0.8-1.2	no	Natural deposit, water additive
Nitrate	ppm	10	10	0.38	N/A	no	Erosion of natural deposits, runoff from fertilizer use

Organic substances

	Units	MRDLG	MRDL	Detected amount	Range Low - High	Violation (yes/no)	Typical source of contaminants
Total Organic Carbon	ppm	N/A	TT	1.6	1.4-1.9	no	Naturally present in the environment

Microbiological Contaminants

	Units	MRDLG	MRDL	Detected amount	Range Low - High	Violation (yes/no)	Typical source of contaminants
Turbidity	NTU	N/A	TT = 1.0 TT = % of samples < 0.3 NTU	0.18 100%	N/A	no	Soil runoff
Total Coliform	%	0	5%	2.5	N/A	no	Naturally present in the environment

Disinfectants & Disinfection By-Products

	Units	MRDLG	MRDL	Detected amount	Range Low - High	Violation (yes/no)	Typical source of contaminants
Chlorine	ppm	4	4	1.5	0.8-1.5	no	Water additive used to control microbes
Chlorite	ppm	0.8	1	0.01	0 - 0.01	no	By-product of drinking water chlorination
Chlorine Dioxide	ppm	0.8	0.8	0.57	0.19-0.57	no	Water additive used to control microbes
Total Trihalomethanes	ppb	N/A	80	32	24-47	no	By-product of water chlorination
Total Haloacetic Acids	ppm	N/A	60	10	8-15	no	By-product of water chlorination

Inorganic Contaminants

	Units	MCLG	AL	Detected amount	# of sample sites	# of sites above AL	Violation (yes/no)	Typical source of contaminants
Copper	ppb	1300	1300	200	50	0	no	Corrosion of household plumbing systems
Lead	ppb	0	15	2.5	50	0	no	Corrosion of household plumbing systems