



# 2006 CCR

DATA FROM  
JAN. 1-DEC. 31,  
2006



ANNUAL WATER QUALITY REPORT FOR CUSTOMERS OF THE MACON WATER AUTHORITY

## Macon Water Authority Consumer Confidence Report

The Macon Water Authority (MWA) is pleased to present the results of this year's Consumer Confidence Report (CCR), also referred to as a water quality report, which provides definitive, empirical evidence that you and your family are enjoying some of the cleanest, safest, and best-tasting drinking water possible.

This report is intended to educate MWA customers about what is in their water and why, so they may make practical, knowledgeable decisions about their personal health and environment.

MWA customers should be confident knowing that their drinking water has had no violations in detected levels of inorganic contaminants, organic substances, micro-biological contaminants, disinfectants or disinfectant by-products. This report encapsulates a year's worth of data, col-

lected between Jan. 1, 2006 – Dec. 31, 2006, concerning the quality of water consumed by MWA customers.

Copies of this CCR are also available at the MWA headquarters at 790 Second Street in downtown Macon, as well as on our Web site at [www.maconwater.org](http://www.maconwater.org).

### MWA Drinking Water System Our Raw Water Source(s)

The raw water used for drinking water production and distribution at the MWA is obtained from two primary sources – the Ocmulgee River and Javors J. Lucas Lake.

Lucas Lake is a 625-acre reservoir that holds an estimated 6.5 billion gallons of raw water at full pool.

In addition, the Authority can utilize its intake on the Ocmulgee River to obtain a supplemental or

alternative source for raw water in the event of an emergency or for operating flexibility.

### Our Water Production Plant

The Frank C. Amerson, Jr. Water Treatment Plant produces all of the finished drinking water for MWA customers. Since opening in the summer of 2000, the Amerson Plant has twice been selected as the "Plant of the Year" in the state of Georgia. Its production capacity is 60 million gallons per day (MGD), with the capability to expand to 90 MGD in the future if necessary.

### Our Water Storage and Distribution

The MWA drinking water distribution system includes four clearwells located at the Amerson Plant, as well as seven elevated and 10 ground storage tanks.

Collectively, these 21 tanks throughout the system can store up to 35 million gallons of finished drinking water.

In addition, the MWA distribution system features approximately 1,600 miles of water lines and seven pumping stations, which carry 29 million gallons of finished drinking water, on average each day, to approximately 54,000 customers.

The Authority also uses advanced technology in its SCADA system to monitor and control drinking water distribution 24 hours a day, seven days per week.

Questions concerning any of the details of this Consumer Confidence Report, or the MWA Source Water Assessment Plan, should be directed to Gary McCoy, MWA director of water treatment, at 478-464-5653.

## What's in my drinking water and why?

### MWA has highest water quality

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 in any public water system.

The detailed data of the contaminants detected in MWA drinking water during the 2006 calendar year are included in the table titled "Water Quality Data 2006" in this report.

### Notice to Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than others – 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. They can be particularly at risk from infections and should seek advice about drinking water from their health care providers. Related concerns or questions can be addressed via the Safe Drinking Water Hotline at 1-800-426-4791.

### Contaminants tested by MWA

Contaminants that may be present in source water BEFORE it is treated at the MWA's Frank C. Amerson, Jr. Water Treatment Facility include: Microbial contaminants, such as viruses and bacteria that may come from septic tanks/systems, agricultural livestock operations, wildlife, as well as wastewater treat-

ment 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, in addition to coming 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.

## How to read the report

**AL** – Action Level.

**MCLG** – Maximum Contaminant Level Goal, which is the ideal goal below which there is no known or expected health risk.

**MCL** – Maximum Contaminant Level, which is the highest amount of substance allowed in drinking water.

**N/A** – Not Applicable.

**NTU** – Nephelometric Turbidity Unit, which is the standard measuring unit for turbidity.

**ppm** – parts per million, or 1 part per 1,000,000 (same as milligram per liter).

**ppb** – parts per billion, or 1 part per 1,000,000,000 (same as microgram per liter).

**TT** – Treatment Technique, or a required treatment process intended to reduce the level of contamination that is necessary for drinking water.

**MRDL** – Maximum Residual Disinfectant Level, which is the highest level of a disin-

fectant 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, which 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 2006

## INORGANIC CONTAMINANTS

	UNITS	MCLG	MCL	DETECTED AMOUNT	RANGE	LOW - HIGH	VIOLATION (YES/NO)
<b>FLUORIDE</b>	<b>ppm</b>	<b>4</b>	<b>4</b>	<b>1.25</b>		<b>0.61 - 1.25</b>	<b>no</b>
<b>NITRATE</b>	<b>ppm</b>	<b>10</b>	<b>10</b>	<b>0.35</b>		<b>N/A</b>	<b>no</b>

## ORGANIC SUBSTANCES

	UNITS	MCLG	MCL	DETECTED AMOUNT	RANGE	LOW - HIGH	VIOLATION (YES/NO)
Total organic carbon	% Removal	N/A	TT	38		26-56	no

## MICROBIOLOGICAL CONTAMINANTS

	UNITS	MCLG	MCL	DETECTED AMOUNT	RANGE	LOW - HIGH	VIOLATION (YES/NO)
<b>TURBIDITY</b>	<b>NTU</b>	<b>N/A</b>	<b>&lt;0.3NTU</b>	<b>0.12</b>		<b>0.03-0.12</b>	<b>no</b>
<b>TOTAL COLIFORM</b>	<b>%</b>	<b>0</b>	<b>&lt;5%NTU</b>	<b>2.50%</b>		<b>N/A</b>	<b>no</b>

## DISINFECTANTS & DISINFECTION BY-PRODUCTS

	UNITS	MCLG	MCL	DETECTED AMOUNT	RANGE	LOW - HIGH	VIOLATION (YES/NO)
<b>CHLORINE</b>	<b>ppm</b>	<b>4</b>	<b>4</b>	<b>2.1</b>		<b>0.8-2.1</b>	<b>no</b>
<b>CHLORITE</b>	<b>ppm</b>	<b>0.8</b>	<b>1</b>	<b>0.18</b>		<b>0.01-0.18</b>	<b>no</b>
<b>CHLORINE DIOXIDE</b>	<b>ppm</b>	<b>0.8</b>	<b>0.8</b>	<b>0.57</b>		<b>0.01-0.57</b>	<b>no</b>
<b>TRIHALOMETHANE</b>	<b>ppb</b>	<b>N/A</b>	<b>80</b>	<b>44</b>		<b>2.0-44</b>	<b>no</b>
<b>HALOACETIC ACID</b>	<b>ppb</b>	<b>N/A</b>	<b>60</b>	<b>15</b>		<b>0.09-15</b>	<b>no</b>

## REGULATED SUBSTANCES *(LEAD AND COPPER: SAMPLED IN 2005, REQUIRED EVERY 3 YEARS)*

	UNITS	MCLG	AL	90TH PERCENTILE LEVEL FOUND	# OF SITES FOUND ABOVE THE AL
<b>LEAD</b>	<b>ppb</b>	<b>0</b>	<b>15</b>	<b>2.6</b>	<b>0</b>
<b>COPPER</b>	<b>ppm</b>	<b>1.3</b>	<b>1.3</b>	<b>0.23</b>	<b>0</b>

## Violation: Continuous Chlorine Monitoring

The Macon Water Authority (MWA) would like to apologize for a violation notice we received from the Georgia Environmental Protection Division (EPD) for failing to monitor continuously for chlorine present in our drinking water from June 2000 to July 2006. Although this violation was not a threat to human health, it does not reflect positively on the MWA.

Within two business days after receiving the notice from the EPD, our Instrumentation Department made the necessary connection of the chlorine analyzer to the computer system so as to continuously monitor disinfectant chlorine residual. We then notified our customers of this issue via our customer newsletter.

It is important for you to know that the continuous monitoring now being performed is in addition to the manual monitoring we have been performing since the water plant went into operation in June of 2000.

We take very seriously our responsibility of providing our customers drinking water that is safe and meets the highest standards of quality, and we will continually strive to improve our service to you.



[www.ConserveWaterGeorgia.net](http://www.ConserveWaterGeorgia.net)

Plants need 1 inch of water every 7 to 10 days to stay healthy.

Try these 5 to help them thrive!

- 1. Water only once a week.** When it hasn't rained, a deep soaking every week will provide your plants with plenty of moisture.
- 2. Soak, don't sprinkle.** When you water, aim the nozzle at the base of plants so more water will reach the roots.
- 3. Don't water in the heat of the day.** You will only lose water to evaporation. If you have an automatic system, set it to come on in the early morning hours between 4 a.m. and 10 a.m.
- 4. Turn off sprinkler systems when it rains.** Install an inexpensive rain sensor shut-off switch.
- 5. Mulch!** Using pine straw, bark chips or ground hardwood mulch on the roots of plants and trees helps the soil retain water.

## BOARD OF DIRECTORS AND LEADERSHIP

Frank C. Amerson, Jr.  
Chairman, County-wide  
478.745.3003

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Vice Chairman, District 2  
478.742.2722

Dorothy 'Dot' Black  
District 1  
478.742.3503

Steve Rickman  
District 3  
478.743.0056

Frank Patterson  
District 4  
478.808.2020

Bert Bivins, III  
Bibb County  
Representative  
478.738.9466

Ed DeFore  
City of Macon  
Representative  
478.474.0754

Tony Rojas  
Executive Director  
478.464.5622



790 Second Street  
P.O. Box 108  
Macon, Ga., 31202-0108

478.464.5620 (M-F)  
478.464.5656  
(After Hours)  
478.750.2007 (Fax)