



Cobb County Water System
 Water Quality Report
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 Marietta, Georgia 30060-3113

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Annual Water Quality Report

(January - December 2008)

Distribution: May 2009

January - December 2008

Cobb County Water System Annual Water Quality Report

Why This Report?

The Cobb County Water System (CCWS) is committed to delivering to you, our customer, water that meets or exceeds federal and state quality standards. We are pleased that this 2009 Water Quality Report shows we are doing that. Our priority is to deliver safe water to your home or business each day. We make significant efforts to protect our water resources for both existing needs and future generations.

The following pages provide the summary results of a continuous drinking water testing program. This report covers the calendar year 2008. Important definitions are provided to help clarify the information further. The CCWS's Water Quality Report is also posted on our Internet website at www.cobbwater.org. For additional information contact our Customer Service Division at (770) 423-1000.

The bottom line is we provide safe, quality drinking water to you 24 hours a day, seven days a week, 365 days a year because we know that it is vital to the health and well-being of our community.

Water Source

You are a customer of the CCWS, an agency of Cobb County Government. We distribute treated water to you and treat wastewater in a manner safe for your families and the environment.

The Water System purchases water from the Cobb County-Marietta Authority (CCMWA), a utility providing treated drinking water on a wholesale basis to other cities and counties in the region. CCMWA treats drinking water using state-of-the-art equipment and ensures water quality through continued monitoring and testing. Tap water is delivered to more than 175,000 customer accounts representing over 698,000 residents in the CCWS's service area.

The CCMWA was created by the Georgia Legislature in 1951 for the purpose of providing potable water to Cobb County. The CCMWA has two surface water sources supplying two treatment facilities. The Wyckoff Treatment Division is supplied from Lake Allatoona, a Corps of Engineers impoundment in north Cobb, south Cherokee and south Bartow counties. The Quarles Treatment Division withdraws water from the Chattahoochee River. After treatment at these plants, water is transported to various areas within the County where it is fed into CCWS distribution lines and finally to your home or business.

During 2002, the Cobb County – Marietta Water Authority 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 which provides the following information:

- Identifies the area of land that contributes the raw water used for drinking water,
- Identifies potential sources of contamination to drinking water supplies, and
- Provides an understanding of the drinking water supply's susceptibility to contamination.

For more information on this project visit the Source Water Assessment website at www.atlantaregional.com/swap/ or request information by mail from the ARC:

Atlanta Regional Commission
 40 Courtland Street, NE
 Atlanta, GA 30303
 Attn: Matthew Harper, Environmental Planning Division

How Is The Water Treated?

The process begins by pumping untreated water from the river or lake into sedimentation basins where large particles are removed and the water is disinfected.

The water is then directed to a process called flocculation which is a gentle mixing of the water with a coagulant. This allows particles, called *floc*, to form and settle, clarifying the water. Next the water is put through a filtration system where water flows through sand filters trapping even smaller particles.

After filtration, chemicals are added for final disinfection. Except for chlorine and fluoride, every chemical used in the treatment process is removed before the finished water is distributed to you.

Why Are There Contaminants?

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 and radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- Microbial contaminants** such as viruses and bacteria which may come from wildlife, agricultural livestock operations, septic systems, and sewage 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, storm water runoff, and residential uses.
- Organic chemical contaminants** including synthetic (man-made) and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban storm water runoff, and septic systems.
- Radioactive contaminants** which can be naturally-occurring or the result of oil and gas production and mining activities.

When there are contaminants, the U.S. Environmental Protection Agency (EPA) has set treatment methods to reduce them to levels that protect human health. CCMWA's laboratory continuously monitors water quality to be sure it is properly treated to EPA standards. In addition, over 200 water samples throughout the CCWS distribution system are taken randomly each month and tested. To ensure tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's *Safe Drinking Water Hotline* at 1 (800) 426-4791.

What Are Cryptosporidium and Giardia

The Cobb County – Marietta Water Authority participated in a major drinking water quality testing program called the Supplemental Information Collection Rule (SICR). Two of the contaminants tested for under this rule are the parasites *Cryptosporidium* and *Giardia*, which have caused outbreaks of intestinal disease in the United States and abroad. These parasites are common in surface water, very difficult to kill, and even a well-run water system may contain

Cryptosporidium Occurrences	
Date	# of Oocysts/10L
June 16, 1999	1
June 29, 1999	1
September 28, 1999	1
November 8, 1999	2

Giardia Occurrences	
Date	# of Cysts/10L
September 28, 1999	19
October 12, 1999	9
October 25, 1999	10
November 8, 1999	10
November 22, 1999	6

some live oocysts (in the case of *Cryptosporidium*)

or cysts (in the case of *Giardia*). The U.S. Environmental Protection Agency is working to resolve several scientific issues that will allow it to set *Cryptosporidium* and *Giardia* safety standards. The testing, performed at the raw (untreated) water intake on the Chattahoochee River, located immediately north of the Johnson Ferry Road crossing, revealed the presence of *Cryptosporidium* and/or *Giardia* in several months' samples. **These organisms were detected in the water prior to treatment.** The presented tables detail these occurrences. Our treatment technique is designed and optimized to remove these contaminants; therefore no precaution about our drinking water is currently needed for the general public. During the same monitoring periods as the Chattahoochee River, the water at Lake Allatoona was tested. No oocysts or cysts were detected.

In order to comply with an upcoming federal regulation, the Cobb County – Marietta Water Authority has been monitoring for *Cryptosporidium* and *Giardia* in the raw water from both its water sources, the Chattahoochee River and Lake Allatoona. The monitoring was performed on both Lake Allatoona and the Chattahoochee River water sources monthly during 2005. No *Cryptosporidium* oocysts were detected at either source. *Giardia* cysts were detected in two of the twelve samplings. Again, **these organisms were detected in the water prior to treatment.** All of the occurrences were at the Chattahoochee River intake:

Giardia Occurrences	
Date	# of Cysts/10L
January 14, 2005	2
February 14, 2005	1

See advice about special populations and a source for further information in the following paragraphs.

Concerning Lead In Our 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 CCWS is responsible for providing high quality drinking water, but cannot control the variety of materials used in home 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 or at <http://www.epa.gov/safewater/lead>.

Health Related Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. 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 people, and infants can be particularly at risk. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the EPA's *Safe Drinking Water Hotline* at 1 (800) 426-4791.

Water quality data for community water systems throughout the United States are available on the internet at www.waterdata.com.

How To Read This Report

The Drinking Water Analysis Table shows the results of our water quality analyses. Every regulated contaminant **that we detected** in the water, even in the minutest traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the usual sources of such contamination, footnotes explaining our finding, and a key to units of measurement. Definitions below are important.

The Georgia Environmental Protection Division (GaEPD) has determined that the concentrations of certain water quality monitoring parameters do not change frequently with our system; therefore, some of the data presented in this report may be greater than one year old.

Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

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

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

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbiological 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NTU – Nephelometric Turbidity Unit. Measures the cloudiness of water.

ppm – parts per million or milligrams per liter (mg/L). Corresponds to one penny in \$10,000

ppb – parts per billion or micrograms per liter (µg/L). Corresponds to one penny in \$10,000,000

n/a – not applicable

n/d – not detected

BDL – Below Detection Limits

Drinking Water Analysis Table

(The data presented in this report are furnished by the CCMWA and are from the most recent testing done in accordance with regulations.)

Inorganic Contaminants

Contaminant (Unit)	Date Tested	MCL	MCLG	Detected Level	Range	Major Sources	Violation
Fluoride ¹ (ppm)	02/03/08	4	4	0.97	0.0 – 0.97	Erosion of natural deposits; water additive which promotes strong teeth	NO
Lead ² (ppb)	07/15/08	AL=15	0	9.7	n/a	Corrosion of household plumbing systems.	NO
Copper ³ (ppm)	09/03/08	AL=1.3	0	0.032	n/a	Corrosion of household plumbing systems.	NO
Nitrate/Nitrite ⁴ (ppm)	04/01/08	10	10	1.2	0.48 – 1.2	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	NO

Notes: ¹ Fluoride is added to water to help in the prevention of dental cavities (caries) in children.
² Of the 50 sites tested, 3 exceeded the action level. The next round of testing is due in 2011.
³ Of the 50 sites tested none exceeded the action level. The next round of testing is due in 2011.
⁴ Nitrate and Nitrite are measured together.

Disinfection By-Products, By-Product Precursors and Disinfectant Residuals

Contaminant	Date Tested	MCL	MCLG	Detected Level	Range	Major Sources	Violation
TTHM's (Total Trihalomethanes) (ppb)	11/05/08	80	0	36.0	15.0-68.5 ¹	By-products of drinking water disinfection	NO
HAA5's (Haloacetic Acids) (ppb)	08/06/08	60	0	20.0	8.5-34.3 ¹	By-products of drinking water disinfection	NO
TOC (Total Organic Carbon) (ppm)	04/7/08	TT	n/a	2.0	1.0-2.0	Decay of organic matter in the water withdrawn from sources such as lakes and streams	NO
Chlorite (ppm)	12/03/08	1.0	0.8	0.42	<0.01-0.42	By-product of drinking water disinfection	NO
Chlorine Free (ppm)	05/21/08	MRDL 4	MRDLG 4	2.12	BDL ² -2.12	Drinking water disinfectant	NO

Notes: ¹ This contaminant is regulated by the average concentration over a period of a year.
² Detection Limit for chlorine is 0.05 mg/L. Disinfection was confirmed by heterotrophic plate count. This is a method that measures total bacteria in a sample. The result was within acceptable limits.

Microbiological Contaminants

Contaminant	Date Tested	MCL	MCLG	Level Found	Range	Typical Source	Violation
Total coliform bacteria	07/2008 10/2008 12/2008	<5% positive samples (monthly)	0% positive samples (monthly)	0.45% ¹ 0.45% ² 0.45% ³	Highest Detected 0.45%	Naturally present in environment.	NO

Notes: ¹ 1 positive sample out of 223 samples tested during the month.
² 1 positive sample out of 223 samples tested during the month.
³ 1 positive sample out of 223 samples tested during the month.

Turbidity

Contaminant	Sample Date	MCL	MCLG	Level Found	Range	Typical Source	Violation
Turbidity ¹	04/01/08	TT = 1 NTU	0	0.23	n/a	Soil runoff	NO
		TT = percentage of samples <0.3 NTU		100%	n/a		

Note: ¹ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Questions?

Contact Customer Services
(770) 423-1000

Send Written Correspondence:

Cobb County Water System
 Water Quality Report
 660 South Cobb Drive
 Marietta, GA 30060
 (770) 419-6478
 PWSID #0670003

En Espanol

Este informe contiene informacion muy importante. Traduscalo o hable con un amigo quen lo entienda bien.

Cobb County Water System

The Cobb County Water System (CCWS) recognizes that protecting the environment in an urban setting is important and requires a comprehensive approach. Our goals include helping our county residents increase their understanding of water, sewer and stormwater issues, learn about efforts being made to protect the environment, and learn how they can take part in these efforts.

Cobb Water's education programs include:

- Watershed Stewardship (770) 528-1482
- Backflow Prevention (770) 528-3343
- Grease and Oil Recovery (770) 419-6430
- Partners in Education (770) 419-6295
- Stormwater Management (770) 419-6435
- Water Efficiency (770) 419-6244
- CMOM Program (770) 419-6359

To learn more about CCWS and these programs, please visit our website at www.cobbwater.org.

Other Important Contacts:

- Main Customer Service Line Call Center (770) 423-1000
- 24/7 Water Restriction Information & Reporting Line Call to leave a message (770) 419-6278
- 24/7 Emergency Service Emergency Dispatch (770) 419-6201

Effective July 1, 2009, several changes will take place in Cobb County Water System's continuing effort to provide customer service in the most effective way possible. Among the changes are:

- Field Technicians will no longer accept any form of payment
- A \$50.00 Reconnect Fee will be assessed for all delinquent reconnects
- A late fee of \$10.00 (reduced from \$30.00) will be assessed for accounts 10 days overdue
- Call Center hours will change to 7:30 a.m. to 6:00 p.m. Monday through Friday
- Same day service restoration will be provided only for accounts settled before 6:00 p.m. Monday through Friday
- There will be no reconnects on holidays or weekends