

## 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 2010 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 2009. 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](http://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 712,000 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/](http://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 Chattahoochee River or Lake Allatoona 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.

# Annual Water Quality Report

(January to December 2009)

Distribution: May 2010

## Annual Water Quality Report (January - December 2009)

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



## Cobb County Water System

[www.cobbwater.org](http://www.cobbwater.org)



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 Is Cryptosporidium**

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in one of our source waters. 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. **These organisms were detected in the water prior to treatment.** During the same monitoring periods as at the Chattahoochee River, the water at Allatoona Lake was tested. No oocysts were detected. **Testing conducted after treatment has not revealed cryptosporidium in the water from either facility.** Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

**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>.

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 <sup>1</sup> (ppm)	12/05/09	4	4	1.05	0.0 – 1.05	Erosion of natural deposits; water additive which promotes strong teeth	NO
Lead <sup>2</sup> (ppb)	07/15/08	AL =15	0	9.7	n/a	Corrosion of household plumbing systems.	NO
Copper <sup>3</sup> (ppm)	09/03/08	AL =1.3	0	0.032	n/a	Corrosion of household plumbing systems.	NO
Nitrate/Nitrite <sup>4</sup> (ppm)	06/03/09	10	10	1.6	0.0 – 1.6	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	NO
<b>Notes:</b> <sup>1</sup> Fluoride is added to water to help in the prevention of dental cavities (caries) in children. <sup>2</sup> Of the 50 sites tested, 3 exceeded the action level. The next round of testing is due in 2011. <sup>3</sup> Of the 50 sites tested none exceeded the action level. The next round of testing is due in 2011. <sup>4</sup> Nitrate and Nitrite are measured together.							

Disinfection By-Products, By-Product Precursors and Disinfectant Residuals							
TTHM's (Total Trihalomethanes) (ppb)	11/04/09	80	0	45.0	9.9- 97.5 <sup>1</sup>	By-products of drinking water disinfection	NO
HAA5's ( Haloacetic Acids) (ppb)	11/04/09	60	0	26.0	11 - 42.2 <sup>1</sup>	By-products of drinking water disinfection	NO
TOC (Total Organic Carbon) (ppm)	03/03/09	TT	n/a	2.2	1.0 - 2.2	Decay of organic matter in the water withdrawn from sources such as lakes and streams	NO
Chlorite (ppm)	11/02/09	1.0	0.8	0.51	0.17 - 0.51	By-product of drinking water disinfection	NO
Chlorine <sub>Free</sub> (ppm)	11/10/09	MRDL=4	MRDLG= 4	2.12	BDL <sup>2</sup> - 2.12	Drinking water disinfectant	NO
<b>Notes:</b> <sup>1</sup> This contaminant is regulated by the average concentration over a period of a year. <sup>2</sup> 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							
Total coliform bacteria	10/2009 11/2009	<5% positive samples (monthly)	0% positive samples (monthly)	1.31% <sup>1</sup> 0.45% <sup>2</sup>	<b>Highest Detected</b>  1.31%	Naturally present in environment.	NO
<b>Notes:</b> <sup>1</sup> 3 positive samples out of 229 samples tested during the month. <sup>2</sup> 1 positive sample out of 223 samples tested during the month.							

Turbidity							
Contaminant	Sample Date	MCL	MCLG	Level Found	Range	Typical Source	Violation
Turbidity	04/19/09	TT = 1 NTU	0	0.29	n/a	Soil runoff	NO
		TT = percentage of samples <0.3 NTU		100%	n/a		
Note: 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.							

**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](http://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 are greater than one year old.

Definitions
<b>Maximum Contaminant Level (MCL):</b> 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.
<b>Maximum Contaminant Level Goal (MCLG):</b> 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.
<b>Action Level (AL):</b> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must implement.
<b>Treatment Technique (TT):</b> A required process intended to reduce the level of a contaminant in drinking water.
<b>Maximum Residual Disinfectant Level (MRDL):</b> 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.
<b>Maximum Residual Disinfectant Level Goal (MRDLG):</b> 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.
<b>NTU – Nephelometric Turbidity Unit.</b> Measures the cloudiness of water.
<b>ppm –</b> parts per million or milligrams per liter (mg/L). Corresponds to one penny in \$10,000
<b>ppb –</b> parts per billion or micrograms per liter (Φg/L). Corresponds to one penny in \$10,000,000
<b>n/a –</b> not applicable
<b>n/d –</b> not detected
<b>BDL –</b> Below Detection Limits

 Questions?	
<b>Contact Customer Services</b> (770) 423-1000	<b>Send Written Correspondence:</b> Cobb County Water System Water Quality Report 660 South Cobb Drive Marietta, GA 30060 (770) 419-6478 PWSID #0670003
<b>En Espanol</b> Este informe contiene information 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 Management	(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](http://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