

Infants and young children are typically more vulnerable to lead (atomic symbol Pb) in drinking water than the general population. It is possible that lead levels at your home may be higher than those at other homes in the community as a result of materials used in your home's plumbing. In order to ensure the lowest possible lead levels, tap water should be flushed for thirty seconds to two minutes before using. If you are concerned about elevated lead levels in your home's water, you can have the water tested. Additional information is available from the EPA's Safe Drinking Water Hotline at 1 (800) 426-4791. Contact the Cobb Extension Office at (770) 528-4070 for information regarding lead testing of your water for a nominal fee.

Questions? Call Customer Service (770) 423-1000

Learn more about Cobb County Water System at

www.cobbwater.org

#### **Send written correspondence to:**

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

#### En Espanol

Este informe contiene information muy importante. Traduscalo o hable con un amigo quien lo entienda bien.



## Your Cobb County Water System ... did you know?

Safe drinking water and wastewater collection and treatment services are provided to nearly 600,000 people ... operations are supported through revenues from the sale of services — not from tax dollars ... AAA rated!

Annually more than 21 billion gallons of safe water are distributed through approximately 2,850 miles of major lines ... Georgia's outstanding large distribution system in 2000 ...

More than 29 billion gallons of wastewater are collected annually through approximately 2,300 miles of major lines and delivered for treatment at one of four plants which have a total daily capacity of 100 million gallons ... Georgia's outstanding large collection system in 2000 ...

Each month nearly 150,000 water meters are read, more than 15,000 fire hydrants maintained, more than 14,000 customer calls handled...

The Cobb County Water System is committed to its important role of protecting the environment and supporting our community.

## Water Conservation Update Water Use Ban In Effect

The Atlanta region remains under a state drought alert and at the time of printing there are mandatory restrictions on all outdoor water use. No residential or other landscaping outdoor water use is allowed from 10 a.m. - 10 p.m., seven days a week. Otherwise, outdoor water use is only permitted during the non-banned hours on the basis of even address and date, or odd address and date.

These State mandated water ban restrictions are subject to change. You are responsible for being aware of, and abiding by, current restrictions. Violations will not be excused due to non-awareness of current water ban restrictions. Violators are subject to a \$500 fine plus a \$20 service charge.

The official state web site for information on the drought is www.georgiadrought.org. For more information on the water ban and water conservation contact us at (770) 423-1000.

Cobb County Water System Water Quality Report 660 South Cobb Drive Marietta, GA 30060



# WATER SYSTEM

### **Annual Water Quality Report**

January 2000 — December 2000

#### Why this report?

The Cobb County Water System is committed to delivering to you, our customer, water that meets or exceeds federal and state requirements. This report will show we are doing just that.

While you may not even think about what it takes to purify and deliver water to your home, it is our priority every day. We invest in protecting our water resources for both existing needs and for future generations.

The drinking water analysis on the following pages provides the results of the testing program and identifies the goals set by the federal government to protect public health. Important definitions are provided to help further clarify the information. The Cobb Water Quality Report is also posted on the Cobb County Water System's Internet website www.cobbwater.org. For additional information contact our Customer Service Division at (770) 423-1000.

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

#### Wyckoff



Cobb-Marietta Water Authority Facility Locations Cobb County, Georgia

■ Water Treatment Plant

✓ Water Distribution Lines

#### Who provides my water?

You are a customer of the Cobb County Water System, an agency of Cobb County Government. We distribute water to you and treat wastewater in a manner safe to our families and the environment.

The Water System purchases water from the Cobb County-Marietta Water 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 150,000 customer accounts representing over 500,000 people in the Cobb Water System's service area.

#### Where does my water come from?

Your water comes from one of three sources. Most of the water is drawn from the Chattahoochee River and Lake Allatoona. In recent years, a supplemental groundwater (well) source located off Tritt Springs Trace has been tapped during peak demand times. These sources are located entirely in Georgia. The CCMWA has two plants that treat as much as 136 million gallons a day (MGD) of drinking water fed from the two bodies of surface water.

- Quarles Treatment Plant on Lower Roswell Road in East Cobb treats Chattachoochee River water.
- Wyckoff Treatment Plant on Mars Hill Road in Northwest Cobb treats Lake Allatoona water.

After treatment at the CCMWA plants, the finished water is fed to the Cobb County Water System's distribution lines and finally to your home or business.

#### How is my 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 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?

As water travels over the surface of the land or through the ground, it breaks up naturally occuring minerals and, in some cases, radioactive material. It also collects substances resulting from the presence of animals or human activity.

There are contaminants that may be present in untreated water including: microbes such as viruses and bacteria; inorganic compounds such as salts and metals; pesticides and herbicides which come from sources such as stormwater runoff and residental uses; organic chemicals such as industrial products, or waste from gas stations and septic systems; pesticides and herbicides and radioactive materials occurring naturally or from gas and oil production.

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 monitors water quality daily to be sure it is properly treated to EPA standards. Over 200 water samples throughout the Cobb County distribution system are taken randomly each month and tested.

Tap water is regulated by the EPA, which sets limits for the compounds that can be present in drinking water. 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.

#### **Drinking Water Analysis Table**

(Data in this report is furnished by the CCMWA)

	INORGANIC CONTAMINANTS											
Substance	Date Tested	Unit	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Amount Detected	Range	Likely Source(s)	Violation				
Copper <sup>1</sup>	7/12/00	ppm	AL= 1.3	0	0.05	n/a	Corrosion of household plumbing systems.	No				
Fluoride <sup>2</sup>	7/13/00	ppm	4	4	1.1	0.92 - 1.1	Erosion of natural deposits; water additive which promotes strong teeth.	No				
Nitrate	6/5/00	ppm	10	10	0.66	<0.2 - 0.66	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.	No				
Lead <sup>3</sup>	7/12/00	ppb	AL=15	0	12.0	n/a	Corrosion of household plumbing systems.	No				

<sup>&</sup>lt;sup>1</sup>No sites exceeded the Action Level (AL).

<sup>&</sup>lt;sup>3</sup>Of 50 sites tested, 4 exceeded action levels (AL).

VOLATILE ORGANIC CONTAMINANTS											
Total Trihalomethanes (TTHM's)	9/7/00	ppb	80	0	74.5	21.3 - 95.4	By-product of drinking water disinfection.	No			
Total Haloacetic Acids (THAA's)	7/24/00	ppb	60	0	56.4	15.3 - 82.0	By-product of drinking water disinfection.	No			
Total Organic Carbon (TOC)	8/2/00	ppm	n/a	n/a	1.9	0.9 - 1.9	Decay of organic matter in the water withdrawn from water sources such as lakes and streams.	No			

#### **CHEMICAL CONTAMINANTS**

The Cobb County-Marietta Water Authority participated in a major drinking water quality testing program called the Information Collection Rule (ICR). In the following table are the results of testing of contaminants detected. This program terminated in 1998.

Total Aldehydes	1/28/98	ppb	not regulated	not regulated	5.0	3.7 - 5.0	By-product of drinking water disinfection.	n/a
Chloral hydrate	8/26/98	ppb	not regulated	not regulated	7.0	1.9 - 7.0	By-product of drinking water disinfection.	n/a
Chlorate	1/28/98	ppb	not regulated	not regulated	124.0	22 - 124.0	By-product of drinking water disinfection.	n/a
Chlorine dioxide	3/25/98	ppm	not regulated	not regulated	1.5	0.1 - 1.5	Drinking water disinfectant. Oxidant for contaminants.	n/a
Free Chlorine	12/16/98	ppm	4	n/a	2.0	1.6 - 2.0	Drinking water disinfectant.	n/a
Chlorite	3/25/98	ppb	not regulated	not regulated	136.0	20 - 136.0	By-product of drinking water disinfection.	n/a
Chloropicrin	5/27/98	ppb	not regulated	not regulated	1.9	n/d - 1.9	By-product of drinking water disinfection.	n/a
Total Haloacetilenitriles	5/27/98	ppb	not regulated	not regulated	4.4	n/a - 4.4	By-product of drinking water disinfection.	n/a
Total Organic Halide (TOX)	4/29/98	ppb	not regulated	not regulated	254.0	94 - 254.0	By-product of drinking water disinfection.	n/a

#### **How to read this report**

The table shows the results of the Cobb County-Marietta Water Authority's laboratory analysis of your water during the period of January through December 2000. The table lists the name of each substance tested, the maximum level allowed in drinking water (MCL), the ideal goals for public health (MCLG), the amounts detected, and the range of levels detected. Also noted are the usual source of such contamination and an explanation of our findings.

The Georgia Environmental Protection Division has determined that the concentration of certain water quality monitoring parameters does not change frequently within our system, therefore some of the data presented in this report are greater than one year old.

#### **Definitions**

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

#### Maximum Contaminant Level or 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 or 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.

**cysts** small capsulelike sacs that enclose certain organisms.

n/a not applicable.n/d not detectable.

**NTU** nephelometric turbidity units (measures the cloudiness

of water

oocyst thick-walled structure in which parasitic organisms

ppm parts per million (or milligram per liter which corresponds

**ppb** parts per billion (or microgram per liter which corresponds

to one penny in \$10,000,000.)

range the highest to the lowest level detected.

to one penny in \$10,000.)

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

# Notice to People with Health 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 from infections. These people should seek advice about drinking water from their health care providers. 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.

## What exactly are Cryptosporidium and Giardia?

*Cryptosporidium* [krip´.to.spor.id´.ê.um] and *Giardia* [jê.är´dê.e.jär´] are microscopic parasites found in surface waters (*rivers*, *lakes*, *streams or ponds*) especially when these waters contain a high amount of sewage or animal waste. If ingested through food or drink, they can cause symptoms that include diarrhea, nausea or stomach cramps. As other conditions can cause these same symptoms, a special laboratory test is needed to confirm the cause. Your tap water is continually tested and treated to prevent exposure to these parasites. *Cryptosporidium* and *Giardia* have never been found in our treated drinking water.

During testing of raw (untreated) water at the intake area on Lake Allatoona, no *Cryptosporidium and/or Giardia* were detected. However, during testing of raw (untreated) water at the intake area on the Chattahoochee River north of Johnson Ferry Road, *Cryptosporidium* and/or *Giardia* were present in samples from several months as shown in the chart below.

Cryptosporidium Occurrences	Giardia Occurrences				
	9/28/99 - 19 cysts/10L				
6/16/99 - 1 oocysts/10L	10/12/99 - 9 cysts/10L				
6/29/99 - 1 oocysts/10L	10/25/99 - 10 cysts/10L				
9/28/99 - 1 oocysts/10L	11/8/99 - 10 cysts/10L				
11/8/99 - 2 oocysts/10L	11/22/99 - 6 cysts/10L				

The levels detected were not a violation and caused no health threat to the population. CCMWA's treatment process removes this contamination, so there was no need for precaution with our drinking water.

TURBIDITY										
Substance	Date Tested	Unit	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Amount Detected	Range	Likely Source(s)	Violation		
Turbidity	1/15/00	NTU	TT = 5 NTU TT = percentage of samples <0.5 NTU	0	0.45 NTU 100 %	n/a n/a	Soil runoff.	No		

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 effectiveness of disinfectants

#### MICROBIOLOGICAL CONTAMINANTS

	Total Coliform Bacteria (TC)	3/00 6/00 7/00	percent	Less than 5% positive samples during a monthly sampling period.	0% positive samples during a monthly sampling	0.95% <sup>a</sup> 0.48% <sup>b</sup> 0.48% <sup>b</sup>	n/a	Naturally present in the environment.	No
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<sup>&</sup>lt;sup>a</sup> 2 positive samples out of 210 samples tested during the month.

<sup>&</sup>lt;sup>2</sup>Flouride is added to the drinking water to help in the prevention of dental cavities in children.

<sup>&</sup>lt;sup>b</sup> 1 positive sample out of 210 samples tested during the month.