

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 that 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.

> **Ouestions? 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



Your Cobb County Water System ... did vou 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 ... 1999 Georgia's outstanding large distribution system...

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 4 plants which have a daily capacity of 85 million gallons ... 1999 Georgia's outstanding large collection system...

Each month nearly 145,000 water meters are read, 14,453 fire hydrants maintained, more than 14,000 customer calls handled and nearly 123,000 payments processed ...

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

Water Conservation Update Water Use Ban In Effect

The Atlanta region remains under a national drought alert and currently a phase 3 water conservation plan is in effect in Cobb County. This is a mandatory restriction on all outdoor water use 10 a.m. - 10 p.m., seven days a week. If conditions worsen the county will move to phase 4.

The phases of the water conservation plan are:

Phase 1: Voluntary Water Conservation.

No outdoor water use 4 p.m. - 10 p.m., seven days a week.

No outdoor water use 10 a.m. - 10 p.m., seven days a week.

Phase 4: Total outdoor water use ban.

The Cobb County Water System is involved in the waterSmart campaign initiative to help educate county residents and businesses on how they can maintain healthy, beautiful lawns and conserve water through modified watering practices.

For more information on waterSmart and water conservation contact us at (770) 423-1000.

Please Be Advised

Effective June 13, 2000, in accordance with Georgia EPD guidelines, Cobb County will enforce "odd/even day" restrictions on outdoor water use in addition to the 10:00am - 10:00pm restrictions

The "odd/even day" restriction was not in place at the time of the initial printing of this report.

Address Here

Marietta, GA 30090 660 South Cobb Drive Water Quality Report Cobb County Water System



WATER SYSTEM **2000 Annual Water Quality Report**

January 1999 — December 1999

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 Ouarles **Cobb-Marietta Water Autl Facility Locations**

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 145,000 customer accounts representing over 450,000 people in the Cobb Water System's service area.

Where does my water come from?

Your water comes from the Chattahoochee River and Lake Allatoona. Both 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 these two bodies of 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 occurring 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 each

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.

Kate Rulk

Drinking Water Analysis Table

	INORGANIC CONTAMINANTS								
Substance	Date Tested	Unit	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Amount Detected	Range	Likely Source(s)	Violation	
Copper ¹	1/1/99	ppm	AL= 1.3	0	0.0	n/a	Corrosion of household plumbing systems	No	
Fluoride ²	9/18/99	ppm	4	4	1.1	0.82 - 1.1	Erosion of natural deposits; water additive which promotes strong teeth	No	
Nitrate	4/30/99	ppm	10	10	0.8	0.3 - 0.8	Runoff from fertilizer; leaching from septic tanks, sewage; erosion of natural deposits	No	
Lead ³	1/1/99	ppb	AL=15	0	5.7	n/a	Corrosion of household plumbing systems	No	

¹No sites exceeded the Action Level (AL).

³Of 100 sites tested, 7 exceeded action levels (AL).

	ORGANIC CONTAMINANTS									
Total Trihalomethanes (TTHM's)	8/99	ppb	100	0	59.0	30.7 - 119.7	By-product of drinking water disinfection.	No		
Total Haloacetic Acids (THAA's)	5/10/99	ppb	n/a	0	50.2	23.60 - 80.00	By-product of drinking water disinfection.	No		
Total Organic Carbon (TOC)	10/5/99	ppm	n/a	n/a	1.4	1.0 - 1.7	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). Many of the chemicals reported in this section are currently unregulated. Unregulated chemicals are those for which the USEPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In the following table are the results of testing of contaminants detected. This program terminated at the end of December 1998.

future regulation i	ure regulation is warranted. In the following table are the results of testing of contaminants detected. This program terminated at the end of December 1998.								
Total Aldehydes	1998	ppb	not regulated	not regulated	0.3	<2.0 - 5.0	.0 By-product of drinking water disinfection. n		
Chloral hydrate	1998	ppb	not regulated	not regulated	7.7	1.9 -17.0	By-product of drinking water disinfection.	n/a	
Chlorate	1998	ppb	not regulated	not regulated	55.5	<20.0 - 138.0	By-product of drinking water disinfection.	n/a	
Chlorine dioxide	1998	ppm	not regulated	not regulated	0.5	0.1 - 2.0	Drinking water disinfectant. Oxidant for contaminants.	n/a	
Free Chlorine	1998	ppm	4	n/a	1.4	<0.1 - 2.0	Drinking water disinfectant.	n/a	
Chlorite	1998	ppb	not regulated	not regulated	26.1	<20.0 - 864.0	By-product of drinking water disinfection.	n/a	
Chloropicrin	1998	ppb	not regulated	not regulated	0.8	<0.5 - 9.0	By-product of drinking water disinfection.	n/a	
Total Haloacetilenitriles	1998	ppb	not regulated	not regulated	1.3	<0.5 - 2.3	By-product of drinking water disinfection.	n/a	
Total Organic Halide (TOX)	1998	ppb	not regulated	not regulated	229.4	94.0 - 687.0	By-product of drinking water disinfection.	n/a	
HAA5	1998	ppb	not regulated	not regulated	44.1	1.1 - 99.2	By-product of drinking water disinfection.	n/a	
THM4	1998	ppb	100	0	48.9	18.0 - 123.2	By-product of drinking water disinfection.	No	

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 1999. 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 is the usual source of such contamination and an explanation of our findings.

Definitions

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

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.

NTU nephelometric turbidity units (measures the cloudiness of water).

oocyst thick-walled structure in which parasitic organisms

develop.

ppm parts per million (or milligram per liter which corresponds to one penny in \$10,000.)

parts per billion (or microgram per liter which corresponds to one penny in \$10,000,000.)

range the highest to the lowest level detected.

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, 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* and other microbiological contaminants, are available from the **Safe Drinking Water Hotline at 1 (800) 426-4791.**

What exactly are Cryptosporidium and Giardia?

Cryptosporidium [krip´.tō.spor.id´.ē.um] and Giardia [jē.är´dē.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 the Chattahoochee River north of Johnson Ferry Road, however, *Cryptosporidium and/or Giardia* were present during several months samples as shown in the chart below.

Cryptosporidium Occurances	Giardia Occurances
	9/28/99 - 19 cysts/10L
6/16/99 - 1 oocyst/10L	10/12/99 - 9 cysts/10L
6/29/99 - 1 oocyst/10L	10/25/99 -10 cysts/10L
9/28/99 - 1 oocyst/10L	11/8/99 -10 cysts/10L
11/8/99 - 2 oocyst/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	12/27/99	NTU	TT = 5 NTU TT = percentage of samples <0.5 NTU	0	<u>0.18</u> 100 %	n/a n/a	Soil runoff.	No		
MICROBIOLOGICAL CONTAMINANTS										
Total Coliform Bacteria (TC) Total Coliform Sacretia (TC) Total Coliform Sacretia (TC) Less than 5% positive samples during a monthly sampling period. O% positive samples during a monthly sampling O.48%* n/a Naturally present in the environment. No										
* 1 postive sample out of 2520 samples tested during the 12 months										

²Flouride is added to the drinking water to help in the prevention of dental cavities is children.