

# Cobb County – Marietta Water Authority CCMWA Consecutive System 2016 Annual Water Quality Report

This is an annual report on the quality of water delivered by the Cobb County – Marietta Water Authority. This report meets the federal Safe Drinking Water Act (SDWA) requirements for the Consumer Confidence Report (CCR) and contains information on the source of our water, its constituents, and the health risks associated with any contaminants. This document is intended to be used by the wholesale customers of the CCMWA to prepare their CCRs.

Safe water is vital to our community. Please read this report carefully, and if you have any questions, contact Karen Segars at 770.993.4231.

## Overview

### Water Source

The Cobb County – Marietta Water Authority has two (2) surface water sources supplying two treatment facilities. The Wyckoff Treatment Division is supplied from Allatoona Lake, a Corps of Engineers impoundment in north Cobb, south Cherokee and south Bartow counties. The Quarles Treatment Division receives water from the Chattahoochee River.

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 <http://www.atlantaregional.com/environment/water/source-water-assessment-project> or you can request information by mail from the ARC:

Attn: Source Water Assessment  
Environmental Planning Division  
Atlanta Regional Commission  
40 Courtland Street, NE  
Atlanta, GA. 30303

## An explanation of the Water Quality Data Table

The table shows the results of our water quality analyses. Every contaminant *regulated by EPA* that was 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 of MCL, MCLG, AL, and TT are important:

**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.

**The data presented in this report are from the most recent testing done in accordance with regulations.**

Key to Table	
AL – Action Level	ppm – parts per million or milligrams per liter (mg/L)
MCL – Maximum Contaminant Level	ppb – parts per billion or micrograms per liter ( $\mu\text{g/L}$ )
MCLG – Maximum Contaminant Level Goal:	TT – Treatment Technique
NTU – Nephelometric Turbidity Unit	n/a – not applicable
MRDL – Maximum Residual Disinfectant Level	n/d – not detected
MRDLG – Maximum Residual Disinfectant Level Goal	BDL – Below Detection Limits

Inorganic Contaminants								
Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources	Violation
Fluoride <sup>1</sup>	2016	ppm	4	4	0.88	0.66 – 0.88	Erosion of natural deposits; water additive which promotes strong teeth	NO
Lead <sup>2</sup>	2014	ppb	AL =15	0	3.3	n/a	Corrosion of household plumbing systems.	NO
Copper <sup>3</sup>	2014	ppm	AL =1.3	0	0.046	n/a	Corrosion of household plumbing systems.	NO
Nitrate/Nitrite <sup>4</sup>	2016	ppm	10	10	0.54	0.28 – 0.54	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 2 exceeded the action level. The next round of testing is due in 2017.								
<sup>3</sup> Of the 50 sites tested none exceeded the action level. The next round of testing is due in 2017.								
<sup>4</sup> Nitrate and Nitrite are measured together.								

Disinfection By-Products, By-Product Precursors and Disinfectant Residuals								
Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources	Violation
TTHMs (Total Trihalomethanes) Stage 2	2016	ppb	80	0	50.0 <sup>1</sup> Highest LRAA at site 501	35.0 – 50.0	By-products of drinking water disinfection	NO
HAA5s ( Haloacetic Acids) Stage 2	2016	ppb	60	0	30.0 <sup>1</sup> Highest LRAA at site 501	20.0– 30.0	By-products of drinking water disinfection	NO
TOC(Total Organic Carbon)	2016	ppm	TT	n/a	1.6	0.90 –1.6	Decay of organic matter in the water withdrawn from sources such as lakes and streams	NO
Chlorite	2016	ppm	1.0	0.8	0.45	0.09 – 0.45	Byproduct of drinking water disinfection	NO
Chlorine Free	2016	ppm	MRDL = 4	MRDLG = 4	1.96	0.00– 1.96	Drinking water disinfectant	NO
<b>Note:</b> <sup>1</sup> The highest detected LRAA (Locational Running Annual Average).								

Turbidity							
Contaminant	MCL	MCLG	Level Found	Range	Sample Date	Violation	Typical source
Turbidity <sup>3</sup>	TT = 1 NTU	0	0.16	n/a	2016	NO	Soil runoff
	TT = percentage of samples <0.3 NTU		100%	n/a			
<b>Note:</b> <sup>3</sup> 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.							

January 1-March 31, 2016

Microbiological Contaminants					
Contaminant	MCL	MCLG	Highest level detected (%)	Violation	Typical source
Total coliform bacteria	<5% positive samples during a monthly sampling period	0% positive samples during a monthly sampling period	<u>0.00%</u>	No	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.
<i>Escherichia coli</i> ( <i>E. coli</i> ) bacteria	<5% positive samples during a monthly sampling period	0% positive samples during a monthly sampling period	<u>0.00%</u>	No	<i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes.

April 1-December 31, 2016

Microbiological Contaminants					
Contaminant	MCL	MCLG	Highest level detected (%)	Violation	Typical source
Total coliform bacteria	<5% positive samples during a monthly sampling period	0% positive samples during a monthly sampling period	<u>25.00%</u>	No	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.
<i>Escherichia coli</i> ( <i>E. coli</i> ) bacteria	<5% positive samples during a monthly sampling period	0% positive samples during a monthly sampling period	<u>0.00%</u>	No	<i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes.

City of Mountain Park Water System- Microbiological results for 2016	Number of coliform-positive samples	Number of samples collected	% Total coliform-positive samples	Number of <i>E. coli</i> -positive samples	Number of samples collected	% <i>E. coli</i> -positive samples	Violation
Jan-16	0	1	0.00%	0	1	0.00%	NO
Feb-16	0	1	0.00%	0	1	0.00%	NO
Mar-16	0	1	0.00%	0	1	0.00%	NO
Apr-16	0	1	0.00%	0	1	0.00%	NO
May-16	0	1	0.00%	0	1	0.00%	NO
Jun-16	0	1	0.00%	0	1	0.00%	NO
Jul-16	1	4	25.00%	0	4	0.00%	NO
Aug-16	0	1	0.00%	0	1	0.00%	NO
Sep-16	0	1	0.00%	0	1	0.00%	NO
Oct-16	1	4	25.00%	0	4	0.00%	NO
Nov-16	0	1	0.00%	0	1	0.00%	NO
Dec-16	0	1	0.00%	0	1	0.00%	NO
	Highest detected total coliform level		25.00%	Highest detected <i>E. coli</i> level		0.00%	

## Cryptosporidium Information

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. 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. The monitoring of our source water performed in 2013 had **no detection** of cryptosporidium. Testing was only required for a period of nine months in 2013.

## Required Additional Health Information

To ensure tap water is safe to drink, EPA (Environmental Protection Agency) 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**.

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 City of Mountain Park** is responsible for providing high quality drinking water, but cannot control the variety of materials used in 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 2 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>.

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 from human activity. Contaminants that may be present in source water include:

- a) Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- b) Inorganic contaminants such as salts and metals which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- c) Pesticides and herbicides which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- d) 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.
- e) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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.***

For the person(s) responsible for preparing the system's report, information about this report can be obtained from Karen Segars, City of Mountain Park, 770.993.4231.