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 requirements. We are pleased that this 2017 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 2016. Important definitions are provided to help clarify the information further. The CCWS's Water Quality Report is also posted on our website at ***https://cobbcounty.org/images/documents/water/waterqualityreport.pdf.*** For additional information contact our Customer Service Division at 770.419.6200

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

WHERE DOES MY WATER COME FROM?

You are a customer of the CCWS, an agency of Cobb County government. We distribute treated water to more than 179,000 customer accounts representing about 741,000 residents in the CCWS's service area, and treat collected wastewater in a manner safe for your 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 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.

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 receives 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.

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:

- 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-assesment-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

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, chemicals used in the treatment process are 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 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.

The U.S. Environmental Protection Agency (EPA) has established treatment methods to reduce contaminants 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, up to 226 water samples throughout the CCWS distribution system are taken 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.

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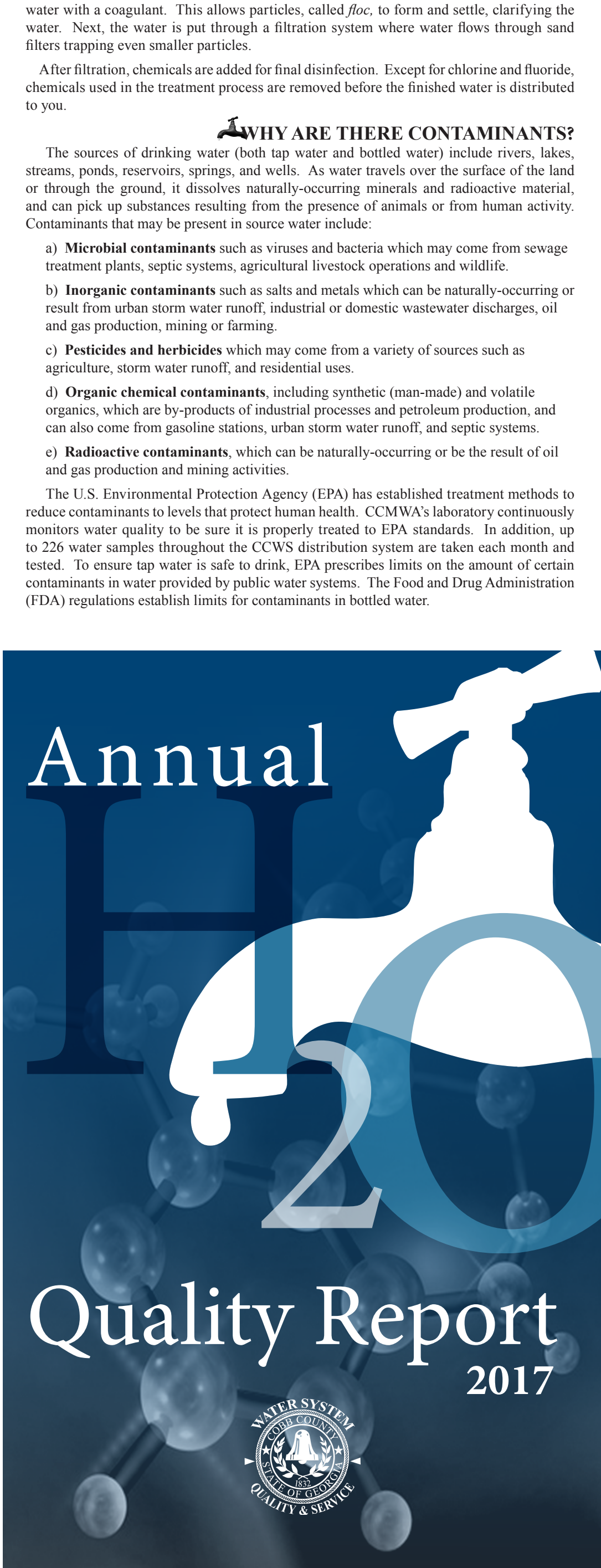
Annual Water Quality Report
(January - December 2016)
PWSID: 0670003

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



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 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 individuals, infants, 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 during the last testing period had **no detection** of cryptosporidium.

LEAD IN 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 plumbing components. The water has been treated to minimize leaching of such materials. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 or more seconds before using cold tap water for drinking, preparation, 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 individuals, such as persons 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***.

HOW TO READ THE DRINKING WATER ANALYSIS 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.

DEFINITIONS

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

BDL – Below detection limits.

EC+ – E. coli-positive.

MCL – Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG – Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL – Maximum Residual Disinfectant Level: 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.

MRDLG – Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

n/a – not applicable.

n/d – not detected.

NTU – Nephelometric Turbidity Unit: Measures the cloudiness of water

ppb – parts per billion or micrograms per liter (µg/L), i.e., penny in $10,000,000.

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

PWS – Public water system.

RTCR – Revised total coliform rule.

TC+ – Total coliform-positive.

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

COBB WATER'S EDUCATION PROGRAMS INCLUDE:

• Backflow Prevention	770.528.3343
• CMOM Program	770.419.6359
• Grease Management	770.419.6430
• Partners in Education	770.419.6295
• Stormwater Management	770.419.6435
• Stream Monitoring	770.528.2448 or 8212
• Water Efficiency	770.419.6244
• Watershed Stewardship	770.528.1482

To learn more about CCWS and these programs, please visit our websites at ***cobbwater.org, cobbstreams.org,*** and ***cmom.cobbcountyga.gov.***

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.)

EPA Regulated Inorganic Substances or Contaminants

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

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

TTHMs (Total Trihalomethanes) (ppb)	2016	80	n/a	75[1]	16 – 89	By-products of drinking water disinfection	NO
TTHMs (Total Trihalomethanes) (ppb) - Stage 2	2016	80	0	50.0[1]	35.0 – 50.0	By-products of drinking water disinfection	NO
HAA5s (Haloacetic Acids) (ppb)	2016	60	n/a	35[1]	9 – 57	By-products of drinking water disinfection	NO
HAA5s (Haloacetic Acids) (ppb) - Stage 2	2016	60	0	30.0[1]	20.0 – 30.0	By-products of drinking water disinfection	NO
TOC (Total Organic Carbon) (ppm)	2016	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 (ppm)	2016	1.0	0.8	0.45	0.09 – 0.45	By-product of drinking water disinfection	NO
Chlorine $_{Free}$ (ppm)	2016	MRDL=4	MRDLG= 4	1.96	0.00 – 1.96	Drinking water disinfectant	NO

Notes: [1] The highest detected LRAA (Locational Running Annual Average).

Turbidity

Substance	Date Tested	MCL	MCLG	Level Found	Range	Typical Source	Violation
Turbidity[1]	2016	TT = 1 NTU	0	0.16	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.

Microbiological Contaminants

(*The data presented in this table were from samples tested during **01/01/2016 - 03/31/2016**)

Substance	Date Tested Positive	MCL	MCLG	Highest Level Detected (%)	Major Sources	Violation
Total coliform bacteria	None	<5% positive samples during a monthly sampling period	0	0	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially - harmful, bacteria may be present.	NO
Escherichia *coli (E. coli)* bacteria	None		0	0	*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes	NO

Microbiological Contaminants

(*The data presented in this table were from samples tested during **04/01/2016 - 12/31/2016**)

Substance	Date Tested Positive	MCL	MCLG	Level 1 Assessment Trigger[2]	Level Detected	Highest Level Detected	Likely Source	Violation
Total coliform bacteria	07/2016 10/2016 11/2016	TT	TT	Exceeds 5.0% TC+ samples in a month	0.88% [3] 0.45% [4] 0.45% [4]	0.88%	Naturally present in the environment	NO
E. coli	None	One Positive Sample[1]	0	n/a	0.00%	0.00%	Human or animal fecal waste	NO

[1] A PWS will receive an E. coli MCL violation when there is any combination of an EC+ sample result with a routine/repeat TC+ or EC+ sample result.
[2] A level 1 assessment is not a violation unless it is not completed.
[3] Two positive samples out of 226 samples tested during the month.
[4] One positive sample out of 223 samples tested during the month.

Notes:

*This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and begin compliance with a new rule, the Revised Total Coliform Rule, April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level (MCL) violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the Public Water System (PWS). The regulated status of E. coli did not change under the RTCR, and the MCL for E coli remains the same, but requires a Level 2 assessment to provide a more thorough investigation of the cause.

QUESTIONS?

Contact Customer Service
770.419.6200

Send Written Correspondence:
Cobb County Water System
Water Quality Report
660 South Cobb Drive
Marietta, GA 30060
Fax: 770.419.6224

En Espanol
Este informe contiene información muy importante. Visite nuestra página de internet: ***https://cobbcounty.org/images/documents/water/calidaddelagua.pdf***

OTHER IMPORTANT CONTACTS:

• Main Customer Service Line Call Center	770.419.6200
• 24/7 Water Restriction Information & Reporting Line - Leave Message	770.419.6278
• 24/7 Emergency Service Emergency Dispatch	770.419.6201