



Annual Water Quality Report January 2015 – December 2015

Why This Report?

The Powder Springs Water System is committed to delivering to you, our customer, water that meets or exceeds federal and state quality standards. We are pleased to announce that this 2015 Water Quality Report shows we are doing that. Our priority is to deliver safe water to your home or business each day. The following pages provide the drinking water summary results of a continuous testing program. This analysis demonstrates the meeting or exceeding of the goals set by federal and state agencies to protect public health. Important definitions are provided to help further clarify the information. For additional information, you may contact our office at 770-943-8010.

Who Provides My Water?

You are a customer of the Powder Springs Water System. We distribute treated water to you and collect wastewater in a manner safe to your families and to the environment. The City of Powder Springs 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. Water is delivered to more than 7000 customer accounts representing approximately 14,000 people in the Powder Springs Water System's service area.

The CCMWA and the Atlanta Regional Commission (ARC), 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 request information by mail from the ARC at: Environmental Planning Division, Atlanta Regional Commission, 40 Courtland St., NE, Atlanta, GA 30303; ATTN: Source Water Assessment

Where Does My Drinking Water Come From?

The Cobb County-Marietta Water Authority has two (2) 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 Cobb County and then is fed into the City of Powder Springs distribution lines and finally to your home or business.

How Is My Water Treated?

The process begins by pumping untreated water from Allatoona Lake or the Chattahoochee River 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 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 in some cases radioactive material and can pick up substances resulting from the presence of animals or human activity. There are contaminants that may be present in raw (untreated) water including: **Microbial Contaminants**, such as viruses and bacteria, which come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife

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 and farming

Pesticides and Herbicides, including synthetic (man-made) and volatile organics, which are by-products of industrial processes and petroleum production, or waste from gas stations, urban storm water runoff, and septic systems

Radioactive Contaminants, occurs naturally or resulting from gas and oil production and mining activities

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 12 water samples throughout the Powder Springs distribution system are taken randomly each month and tested.

Additional Health Information

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**.

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 City of Powder Springs 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 or more 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 for the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Cryptosporidium Information

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. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of the 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 immune-compromised individuals to consult with their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may 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.

How To Read This Report

The Drinking Water Analysis Table shows the results the water quality analyses. Every regulated contaminant that CCMWA 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 may be 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.

BDL: Below Detection Limits

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 health risk. MCLG's allow for a margin of safety.

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.

n/a: not applicable

n/d: not detected

Nephelometric Turbidity Unit (NTU): Measures the cloudiness of water

Ppb: parts per billion or micrograms per liter (ug/L); i.e., one penny in \$10,000,000.

Ppm: parts per million per liter (mg/L); i.e., one penny in \$10,0000.

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

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 (ug/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

Drinking Water Analysis Table

(Data in this report is furnished by the CCMWA)

Inorganic Contaminants								
Substance	Date Tested	Unit	(MCL)	(MCLG)	Amount Detected	Range	Major Source(s)	Violation
Fluoride*	2015	ppm	4	4	0.94	0.63-0.94	Erosion of natural deposits; water additive which promotes strong teeth	NO
Lead**	2014	ppb	AL=15	0	3.3	n/a	Corrosion of household plumbing systems	NO
Copper***	2014	ppm	AL = 1.3	0	0.046	n/a	Corrosion of household plumbing systems	NO
Nitrate/Nitrite****	2015	ppm	10	10	1.2	BDL- 1.2	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	NO

NOTES:

- *Fluoride is added to water to help in the prevention of dental cavities (caries) in children
- **Of the 50 sites tested, 2 exceeded the action level. The next round of testing is due in 2017.
- ***Of the 50 sites tested, none exceeded the action level. The next round of testing is due in 2017.
- ****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
TTHM's (total Trihalomethanes) Stage 2	2015	ppb	80	0	50.0 ¹	48.0-50.0	By-products of drinking water disinfection	NO
HAA5's (Haloacetic acids) Stage 2	2015	ppb	60	0	28.0 ¹	21.0-28.0	By-products of drinking water disinfection	NO
TOC (total organic carbon)	2015	ppm	TT	n/a	2.2	1.1-2.2	Decay of organic matter in the water withdrawn from sources such as lakes and streams	NO
Chlorite	2015	ppm	1.0	0.8	0.27	0.01-0.27	By-product of drinking water disinfection	NO
Chlorine (free)	2015	ppm	MRDL=4	MRDLG=4	2.09	0.04-2.09	By-product of drinking water disinfection	NO

Note: ¹The highest detected LRAA (Locational Running Annual Average)

Turbidity

Contaminant	MCL	MCLG	Level Found	Range	Sample Date	Violation	Typical Source
Turbidity ²	TT = 1 NTU	0	0.21	n/a	2015	NO	Soil Runoff
	TT = percentage of samples <0.3 NTU		100%	n/a			

Note: ²Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

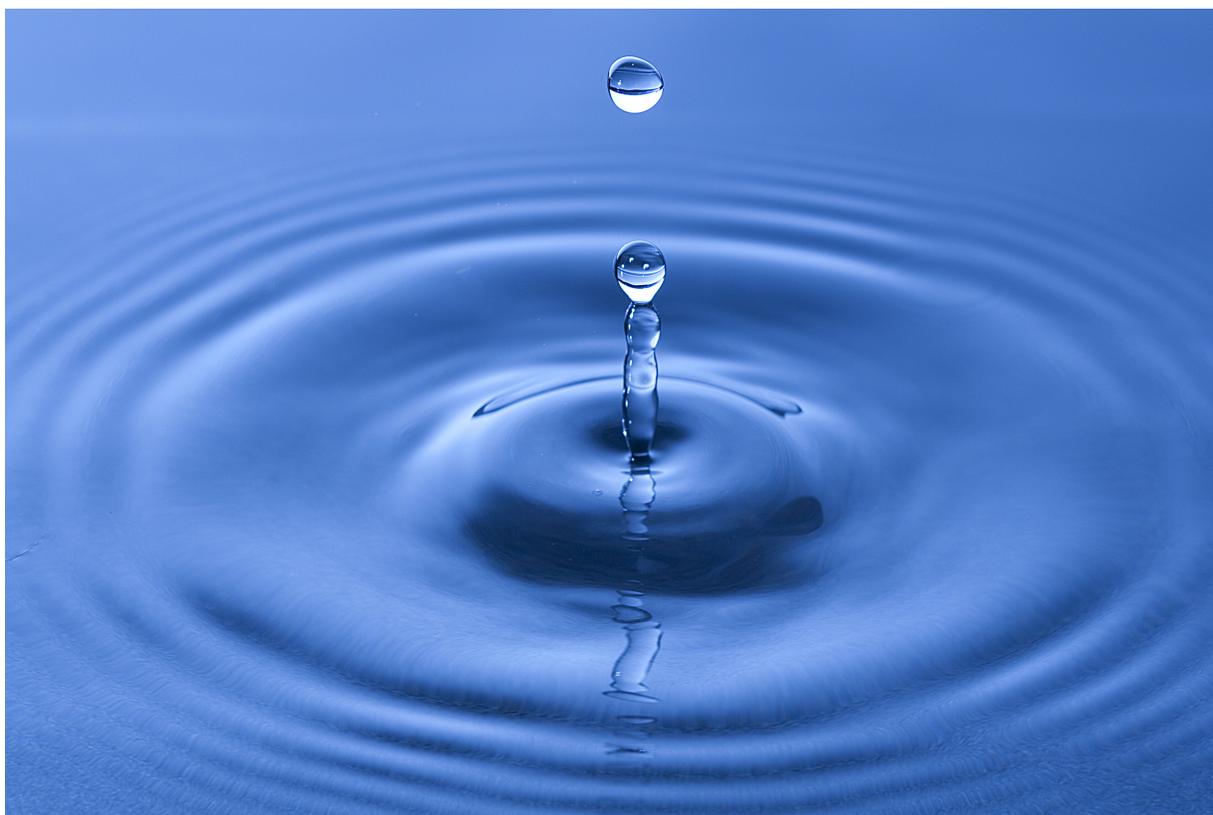
Microbiological Contaminants

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	9.52% ³	YES	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Escherichia coli (E. coli bacteria)	<5% positive samples during a monthly sampling period	0% positive samples during a monthly sampling period	0.00%	NO	<i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Microbes in these wastes can cause short-term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely-compromised immune systems.

Note: ³All the positive samples came from one sample location and it was determined to be a problem with no other locations testing positive for Total coliform in the same month.

Outdoor Water Use Information

The Georgia Water Stewardship Act went into effect statewide on June 2, 2010. It allows daily outdoor watering for purposes of planting, growing, managing, or maintaining ground cover, trees, shrubs, or other plants only between the hours of 4 p.m. and 10 a.m. by anyone whose water is supplied by a water system permitted by the Environmental Protection Division.



En Español

Este informe contiene información muy importante.
Tradúzcalo o hable con un amigo quien lo entienda bien.

City of Powder Springs

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