

ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2018



Presented By
**Maury County
Water System**

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all State and Federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Mission Statement

Our mission is to provide safe, reliable drinking water to the residents of Maury County at the lowest possible cost and still meeting all Federal and State requirements.

Please remember that we are always available should you ever have any questions or concerns about your water.

Where Does My Water Come From?

Maury County Water System purchases its water from Columbia Power and Water System. Columbia Power and Water System has one water treatment plant, which draws its water from the Duck River. The Duck River is 169 miles long, making it the longest river located entirely in the State of Tennessee. Duck River is the sole water source for 250,000 people in Tennessee.

The watershed for Maury County Water System's water supply is part of the Upper Duck River Watershed, located in Middle Tennessee and covering parts of Bedford, Coffee, Franklin, Giles, Lincoln, Marshall, Maury, Moore, Rutherford, and Williamson Counties. The Upper Duck River Watershed is part of the Tennessee River Basin.



Source Water Assessment

Our goal is to protect our water from contaminants, and we are working with the State to determine the vulnerability of our water source to potential contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. The SWAP Report assesses the susceptibility of untreated water sources to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible, or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Maury County Water System sources rated as slightly susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility ratings, and the overall TDEC report to the EPA can be viewed online at <http://www.tn.gov/environment/dws/dwassess.shtml>, or you may contact Maury County Water System to obtain copies of specific assessments.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



Community Participation

You are invited to participate in our public meetings and voice your concerns about your drinking water. Maury County Board of Public Utilities meets on the second Monday of each month, beginning at 5:30 p.m., at 765 New Lewisburg Highway. Please feel free to participate in these meetings.

Protecting Your Water

Bacteria are a natural and important part of our world. There are around 40 trillion bacteria living in each of us; without them, we would not be able to live healthy lives. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern, however, because it indicates that the water may be contaminated with other organisms that can cause disease.

In 2016, the U.S. EPA passed a regulation called the Revised Total Coliform Rule, which requires additional steps that water systems must take in order to ensure the integrity of the drinking water distribution system by monitoring for the presence of bacteria like total coliform and *E. coli*. The rule requires more stringent standards than the previous regulation, and it requires water systems that may be vulnerable to contamination to have in place procedures that will minimize the incidence of contamination. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment of their system and correct any problems quickly. The U.S. EPA anticipates greater public health protection under this regulation due to its more preventive approach to identifying and fixing problems that may affect public health.

Though we have been fortunate to have the highest-quality drinking water, our goal is to eliminate all potential pathways of contamination into our distribution system, and this requirement helps us to accomplish that goal.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.



Substances That Could Be in Water

In order to ensure that tap water is safe to drink, the U.S. EPA and the Tennessee Department of Environment and Conservation prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Larry Chunn at (931) 381-8900 or email lchunn@mymcws.com. You can also visit our Web site at www.mymcws.com.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only those substances that were detected in our water. (A complete list of all our analytical results is available upon request.) Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The State recommends monitoring for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	Columbia Power and Water System		Maury County Water System		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Barium (ppm)	2017	2	2	0.0216	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2018	[4]	[4]	1.69 Average	0.8–3.2	1.8	0.9–2.8	No	Water additive used to control microbes
Chlorite (ppm)	2018	1	0.8	0.046 Average	0.011–0.100	NA	NA	No	By-product of drinking water disinfection
Haloacetic Acids [HAAs] (ppb)	2018	60	NA	40 Highest Site LRAA	1–40	31 Highest Site LRAA	20–36	No	By-product of drinking water disinfection
Nitrate (ppm)	2018	10	10	0.400	NA	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	70 Highest Site LRAA	20–50	44 Highest Site LRAA	25–55	No	By-product of drinking water disinfection
Total Coliform Bacteria (Positive samples)	2018	TT	NA	5	NA	1	NA	No	Naturally present in the environment
Total Organic Carbon (% removal)	2018	TT	NA	58% Average Removal	- 25% Highest Removal	NA	NA	No	Naturally present in the environment
Turbidity ¹ (NTU)	2018	TT	NA	0.150	0.020–0.150	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2018	TT	NA	100	NA	NA	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Columbia Power and Water System				Maury County Water System		VIOLATION	TYPICAL SOURCE
		AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES		
Copper (ppm)	2016	1.3	1.3	0.106	0/30	0.0721 ²	0/30 ²	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2016	15	0	2.02	0/30	1.97 ²	0/30 ²	No	Lead services lines; Corrosion of household plumbing systems including fittings and fixtures; Erosion of natural deposits

UNREGULATED SUBSTANCES (COLUMBIA POWER AND WATER SYSTEM)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Sodium (ppm)	2018	10.4	NA	Naturally occurring

¹ Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

² Sampled in 2018.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

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 microbial 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.

NA: Not applicable

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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