

Warren Co. Utility District Annual Water Quality Report 2018

What is the source of my water?

Your water, which is surface water, comes from the Collins River. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water supply to contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the water supplies serving this water system. The SWAP Report assesses the susceptibility of public water supplies to *potential* contamination. Water sources have been rated as reasonably susceptible (high), moderately susceptible (moderate) or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water source. Warren County Utility Districts Water System sources rated as reasonably susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries susceptibility scorings and the overall TDEC report to EPA can be viewed online at <http://tn.gov/environment/article/wr-wq-source-water-assessment> or you may contact the Water System or TDEC at 1-888-891-TDEC to obtain copies of specific assessments. Please keep in mind that our water system has taken precautions to protect our customers from potential contamination from the source.

The Warren County Utility District Board meetings are held on the third Tuesday of each month at 4:00 p.m. at the Districts main office at 4034 Sparta Hwy. Board members serve four year terms and are selected by the County Executive from a list of three nominees, submitted by the Board.

For more information about this report or for any questions relating to your drinking water, please call Danny Sharpe, Plant Supervisor, at 931-668-4963.

Substances Expected to be in Drinking Water

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 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 and wildlife.

Think before you flush! Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of Tennessee's waterways by disposing in one of our permanent pharmaceutical take back bins. There are nearly 100 take back bins located across the state, to find a convenient location please visit: <http://tn.gov/environment/article/sp-unwanted-pharmaceuticals>

Please help us provide a safe supply of water to all of our customers. Remember; never place your water hose in anything you would not want to drink. For more information on cross connection and how to protect against them, call our office at 931-668-4175

LEAD

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. Warren County Utility District 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 3-seconds to 2 minutes before using your 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>

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;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; **Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems;

Radioactive Contaminants, which can be naturally-Occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which 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 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Drinking Water and People with Weakened Immune Systems

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 (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Este informe contiene la informacion importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien lo entienda.

Questions?

Call U.S. EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Regulated Substances

Substance (units)	Year Sampled	MCL	MCLG	Amount Detected	Range Low-High	Violation	Typical Source
Chlorine (ppm)	2018	MRDL = 4	MRDLG = 4	1.67avg.	1.18 – 2.0	No	Water additive used to control microbes.
Fluoride (ppm)	2018	4	4	.46	.40 - .49	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	2018	10	10	0.55		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Total Coliform Bacteria	2018	1 positive	0	0		No	Naturally present in the environment.
TTHMs [Total trihalomethanes] (ppb)	2018	80	NA	54 avg.	24-118	No	By-product of drinking water disinfection
THAAs [Total Haloacetic Acids] (ppb)	2018	60	0	46 avg.	20-51	No	By-product of drinking water chlorination.
Turbidity (NTU)	2018	TT	NA	.09 avg.	.05 - .14	No	Soil runoff.
TOCs [Total Organic Carbons] (ppm)	2018	TT	NA	.94 avg.	.63 - 1.17	No	Naturally present in environment.
Sodium (ppm)	2018	N/A	NA	8.3		No	Naturally present in environment.

Substance (units)	Year Sampled	Action Level	MCLG	Amount Detected	Number of Homes Above Action Level	Violation	Typical Source
Copper (ppm)	2017	1.3	1.3	90%= 0.017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (ppb)	2017	15	0	90%= 0.5	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.

FOOTNOTES

The simple fact is bacteria and other microorganisms inhabit our world. They can be found all around us; in our food; on our skin; in our bodies; and, in the air, soil and water. Some are harmful to us and some are not. 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 because they indicate that the water may be contaminated with other organisms that can cause disease. Throughout 2018, we tested 300 samples. 25 samples each month for coliform bacteria. As indicated in the Regulated Substances chart, all coliform bacteria results were negative.

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be below 0.3 NTU. During the reporting year, 100% of all samples taken to measure turbidity met water quality standards.

TTHMs Some people who drink water containing trihalomethanes in excess of the maximum contaminant level, over many years, may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. EPA establishes maximum contaminant levels using the assumption that if most people drink 2 liters of water containing disinfection byproducts in excess of the maximum contaminate level every day for 70 years, less than 1 person in 10,000 will have an increase risk of cancer.

TOCs – We met the treatment techniques required for Total Organic Carbon.

Table Definitions

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

BDL-Below detection level

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): 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.

Nephelometric Turbidity Units (NTU): Measurement of the clarity, or turbidity, of water.

Parts per billion (ppb): One part per billion (or micrograms per liter) is equivalent to one penny in \$10,000,000. **Parts per million (ppm):** One part per million (or milligrams per liter) is equivalent to one penny in \$10,000. **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.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health.