



2017 Water Quality Report

-----What is the source of my water?

Your water, which is surface water, comes from Barren Fork River. 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) have 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 (high), moderately susceptible (moderate) or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water source. The West Warren-Viola Utility District (WWVUD) Water System source is rated as moderately 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

<https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or you may contact the Water System or TDEC at 1-888-891-TDEC to obtain copies of specific assessments.

For more information about this report or your drinking water, please call Water Plant Superintendent Bobby Rutledge at 931-668-2762.

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

-----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.; 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the results of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA and TDEC prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. WWVUD's water treatment processes are designed to reduce any such substances to levels well below any health concern. FDA 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

-----How can I get involved?

Our Water Board meets monthly on the third Tuesday at 7:00 p.m. at the utility operations facility located at 141 Sunny Acres Road in Morrison, Tennessee. Please feel free to participate in these

meetings. The Commissioners of West Warren-Viola Utility District serve four year terms. Vacancies on the Board of Commissioners are filled by appointment by the Warren County Executive and the Coffee County Mayor from a list of three nominees certified by the Board of Commissioners to the Warren County Executive and the Coffee County Mayor to fill a vacancy. Decisions by the Board of Commissioners on customer complaints brought before the Board of Commissioners under the District's customer complaint policy may be reviewed by the Utility Management Review Board of the Tennessee Department of Environment and Conservation pursuant to Section 7-82-702(7) of Tennessee Code Annotated.

-----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 información importante sobre su agua potable. Haga por favor que sea traducido por un amigo o por alguien que lo entienda y puede traducirlo para usted.

-----CROSS-CONNECTION EDUCATION

Over the next few months, the warm weather will bring people outdoors to work in their yards and gardens and begin getting swimming pools ready. West Warren/Viola Utility District would like to ensure that our customers are aware of the dangers associated with these activities. An ordinary garden hose is a common way to contaminate a water supply when the hose is submerged in any liquid or attached to certain device used to spray pesticides or herbicides. This forms a cross connection. A cross connection is a situation where a possible source of contamination is directly linked to our public water system. If the end of your hose is connected to a chemical container, swimming pool or other contaminant during a water main break or fire, the substance can be siphoned back into the water system. This condition, known as back siphon age, could cause a public health hazard. Devices are available to prevent this problem; however the best solution is to always be careful how you use your water hose. Please help us to 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 connections and how to protect against them, call our office at (931) 635-2762. Our after-hours emergency number is (931) 668-2762.

-----Lead in Drinking 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. WWVUD 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>

-----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://tdeconline.tn.gov/rxtakeback/>

-----Water Quality Data:

What does this chart mean?

- **MCLG** - Maximum Contaminant Level Goal, or 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.
- **MCL** - maximum Contaminant Level or 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.
- **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** - explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or Micrograms per liter** - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **TT** - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.
- **BDL** - Below Detection Level
- **MRDL** - Maximum Residual Disinfectant Level, or the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- **MRDLG** - Maximum Residual Disinfectant Level Goal, or 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.

Contaminant	Violation Yes/No	Level Detected	Range of Detection	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Turbidity *	No	.08 avg	0.05 - .19	2017	NTU	N/A	TT	Soil runoff
Copper	No	90 th % = .0476		2017	ppm	1.3	AL=1.3 Number of Homes Above AL =0 sites of 30 sites sampled	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	.38 avg	.31 - .47	2017	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Chlorine	No	2.03 avg	1.65 – 2.33	2017	ppm	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Lead	No	90 th % = 3.0		2017	ppb	0	AL=15 0 sites of 30 exceeded the AL	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	No	1.14		2017	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	No	9.36		2017	ppm	N/A	N/A	Naturally present in the environment.
Total Trihalomethanes (TTHMs)***	No	46.8 avg	9 - 70	2017	ppb	0	80	Chlorination by-product
Total Organic Carbon (TOC)**	No	.95 avg	.57 – 1.3	2017	ppm	N/A	TT	Naturally present in the environment
Total Halo acetic Acids (THAAs)	No	58.8 avg	9 – 83	2017	ppb	0	60	Chlorination by-product

FOOTNOTES:

The simple fact is bacteria and other microorganisms inhabit our world. Some are harmful 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 2017, we tested 180 samples for coliform bacteria. All coliform bacteria results were negative.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

***Total Trihalomethanes or thms – Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. THAAs are disinfection by-products resulting from our chlorination of the water to minimize risk of microbial life in drinking water. To understand these risks, the EPA has identified them as 1 out of every 10,000 people may have an increased risk of getting cancer if they drink 2 liters of water containing disinfection byproducts each day for 70 years.

* Turbidity does not present any risk to your health. We monitor turbidity, which is a measure of the cloudiness of water, because it is a good indicator that our filtration system is functioning properly. The turbidity rule is that 95% or more of the monthly samples must be below 0.15 NTU.

Turbidity Health Effects Language- Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

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

Total Coliform Bacteria – Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.