

## *Town of Whiteville Water Quality Report 2023*

### **Is my drinking water safe?**

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 100 of these contaminants. We found all of these contaminants at safe levels.

### **What is the source of my water?**

Your water, which is ground water, comes from the Memphis Sand Aquifer. 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 water to 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 **Error! Reference source not found.** 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 <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or you may contact the Water System to obtain copies of specific assessments. A wellhead protection plan is available for your review by contacting **Operator , Matthew Harris** at the **Error! Reference source not found.** **between 8:00 A.M. to 4:30 P.M. weekdays.**

### **Why are there contaminants in my 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

**For more information about your drinking water, please call Matthew Harris at 731-212-2769**

### **Is our water system meeting other rules that govern our operations?**

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

### **Other Information**

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, in some cases, 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:

- **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 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 can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **Do I Need to Take Special Precautions?**

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 under-gone 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 not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### **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. **Whiteville Water System** 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 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

### **Water System Security**

Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, tanks, fire hydrants, etc. to **731-254-6523**.

## **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: <https://tdeconline.tn.gov/rxtakeback/>

## **Safe Disposal of Prescription Medication**

Recently government bodies have realized that there are limitations to what elements can be removed by the process of filtration. Government bodies have expressed their growing concern of hormones and PPCP's (Pharmaceutical and Personal Care Products) entering our drinking water.

Even with intricate, or highly technological water filtration system, PPCP's cannot be fully removed. Our wasted system is comprised of septic tank and pipes which leach into the soil and directly into our aquifer.

Please take precaution when disposing of PPCP's. There are 'take back' bins located across the state, please utilize this resource. Please visit this website for more information. (<http://www.tn.gov/environment/search?keywords=take+back+bins>)

## **Health Effects**

### *Microbiological Contaminants:*

**Total Coliform.** 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.

**Fecal coliform/E.coli.** Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. 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.

**Lead.** Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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. Town of Whiteville Water System 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 the 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 the EPA Website.**

**Copper.** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

**Nitrite.** Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

**TTHMs** [Total Trihalomethanes]. 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.

**HAA** [Haloacetic Acids]. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

**Atrazine.** Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

**Simazine.** Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.

### **General Health Effects**

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

### **Understanding Your Role**

With the changing times, our individual role becomes even more critical in preserving safe natural resources for future generations. Active participation and understanding can help ensure protection of our most valued resource.

### **Detecting Cross Connection**

‘Backflow’ and ‘Backsiphonage’ are two main cause of Cross Connection contamination.

Backflow is when water in your pipes flows back into the water system. If pressure suddenly drops because of heavy usage, (fires, broken water main, etc.) then contaminated water can be siphoned back into your plumbing system from unprotected cross connections within your home.

Weather indoors or outdoors, if hose is left in a bucket of soapy or uncleaned water – or if your faucet is submerged in a sink in a full of contaminated water, water could flow backwards into your home water piping causing danger to the health and welfare of your family.

Never, ever connect any piping connect any water sources to pre-existing mains. Only Wells #2 and #3 have been approved by the State and connection to any other connections would be a violation and direct cross connection. This will result in immediate contamination of the system. Please contact personnel if you feel a violation is made.

## Flushing System

We are blessed with groundwater source and do not face the same challenges as those whose main source is surface water. Although we do not have the complicated process of filtering surface impurities, yet as water travels from source to your home, there are instances where soil, sediments and other organic particles may become trapped within the pipelines.

Routinely we flush the lines from the designated flushing points which are throughout the system in yellow boxes. As we flush, we watch for possible changes in color which may indicate dirt, rust, or other sediments. During this process we leave the water flowing for approximately 5-10 minutes at a time. Please do not turn the water off during these times. Residents are welcome to bring buckets and use the water freely for their gardens or washing their cars. THIS IS NOT POTABLE WATER.

Residents are encouraged to flush their hot and cold water taps from time to time. Preferably turning all the taps on simultaneously, to achieve the same effect within your homes piping system.

## 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. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- MRDL: Maximum Residual Disinfectant Level or MRDL: The highest level of a 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. 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.
- AL - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- Below Detection Level (BDL) - laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.
- 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.
- Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
- Millirems per year (mrem/yr.) - measure of radiation absorbed by the body.
- Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- RTCR – Revised Total Coliform Rule. This rule went into effect on April 1, 2016 and replaces the MCL for total coliform with a Treatment Technique Trigger for a system assessment.
- TT - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	No	ND		01/01-12/31/2023		0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
E. Coli Bacteria	NO	ND				0	See Footnote 7	Human of animal waste
Gross Alpha	NO	2.09		2-10-2022	PCi/1	0	15	Erosion of natural deposits
Combined Radium	NO	0.2.82		12-16-2016	PCi/1	0	5	Erosion of natural deposits
Lead <sup>4</sup>	NO	ND	0	11-10-2023	Ppb	0	AL=15	Corrosion of household plumbing systems of natural deposits
Copper	NO	0.0.027 90 <sup>th</sup> %	0.00 to 0.0386 mg/L	11-10-2023	ppm	1.3	AL=1.3	Corrosion of household plumbing systems of natural deposits, leaching from wood preservatives
Nitrate (as Nitrogen) <sup>5</sup>	NO	0.676	0.676	12-13-2023	ppm	10	10	Run off from fertilizer use; leaching from septic tanks, sewage; erosion from natural deposits.
TTHM (6)	NO	ND	ND	7-12-2023	ppb	N/A	80	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (6)	NO	ND	ND	7-12-2023	ppb	N/A	60	By-product of drinking water disinfection
Sodium	NO	7.53	7.53	9-8-2022	ppm	4	4	Erosion of natural deposits in water treatment
Chlorine	NO	1.01	1.01 – 1.22	1/1/-2023 – 12-31-2023	ppm	4	4	Water additive used to control microbes

**During the most recent round of Lead and Copper testing, only 0 out of 20 households sampled contained concentrations exceeding the action level.**

<sup>4</sup>Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about elevated lead levels in your home’s water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

<sup>5</sup>Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

<sup>6</sup> While your drinking water meets EPA’s standard for trihalomethanes, it does contain low levels. 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.

<sup>7</sup>E. coli: A system is in compliance with the MCL for E. coli for samples unless any of the conditions identified in parts 1 through 4 occur.

1. The system has an E. coli-positive repeat sample following a total coliform positive routine sample.
2. The system has a total coliform positive repeat sample following an E. coli-positive routine sample.
3. The system fails to take all required repeat samples following an E. coli-positive routine sample.  
The system fails to test for E. coli when any repeat sample tests positive for total coliform.

### **How can I get involved?**

Our Governing Board meets the first (1<sup>st</sup>) Monday of each month, at 6:30 pm at the Town Hall. Please feel free to participate in these meetings. The Commissioners of Town of Whiteville Water System serve three-year terms. Vacancies on the Board of Commissioners are filled by the vote of the remaining Commissioners in office. 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. The Town of Whiteville City Hall phone is 731-254-8523.

### **What should I do?**

There is nothing to do currently.

You may contact Matthew Harris for more information at 931-627-15332.

\*Please share this information with all who drink this water, especially those who may not have received this notice directly

This notice is being sent to you by **Town of Whiteville Water System**. State Water System ID: **TN-0000748**

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