Plateau Utility District Water Quality Report 2024

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 12 of these contaminants. We found all of these contaminants at safe levels.

What is the source of my water?
Your water, which is surface water, comes from the Crooked Fork Creek. The District, in an effort to protect this source, has cooperated 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 source serving this water system which assesses the susceptibility of untreated water sources to ***potential*** contamination. Water sources throughout Tennessee have been rated as low susceptibility, moderate susceptibility, or high susceptibility to potential contamination based on geologic factors and human activities in the vicinity of the water source. The District's intake located on Crooked Fork Creek has been rated as highly 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.

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).

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

For more information about your drinking water, please call Mike Monroe 423-346-3101.

How can I get involved?
Our Water Board meets on the second Friday of each month at 8:30 a.m. at 407 Eliza Street, Wartburg, Tennessee; please feel free to participate in these meetings. The Commissioners of Plateau Utility District serve four-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.

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 of 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.

In order 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. Plateau Utility District'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.

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).

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, pumping stations, tanks, fire hydrants, etc. to 423-346-3101.

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 Tennessee's 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/. There are two pharmaceutical take back bins located within Plateau Utility District's service area: one at the Morgan County sheriff's office and one at the Wartburg police department.

Lead in Drinking Water

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Plateau Utility District is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Plateau Utility District at 423-346-3101. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

Lead Service Line Inventory

A Lead Service Line Inventory has been completed for our system and is accessible by contacting our office during regular business hours.

W a t e r Q u a l i t y D a t a

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.
- 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..
- 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.
- TT - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Contaminant	Violation Yes/ No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (RTCR)	No	0		2024		0	TT Trigger	Naturally present in the environment
Turbidity[1]	No	0.10	Range of Results 0.03 to 0.10	2024	NTU	N/A	TT	Soil runoff
Copper[2]	No	90% = 0.1490	Range of Results 0.00219 to 0.512	2023	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	0.63 Avg.	Range of Results 0.57 to 0.73	2024	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead[3]	No	16.3	Range of Results ND to 16.3	2023	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Sodium	No	6.17		2024	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM[4] [Total trihalomethanes]	No	59.63	13.20 to 88.60	2024	ppb	n/a	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	46.38	15.30 to 61.00	2024	ppb	N/A	60	By-product of drinking water disinfection.
Total Organic Carbon[5]	No			2024	ppm	TT	TT	Naturally present in the environment.
Chlorine	No	1.56 Avg.	Range of Results 0.65 to 2.81	2024	ppm	4	4	Water additive used to control microbes.

Nitrate (as Nitrogen)	No	0.150		7/10/2024	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Non-Regulated Contaminant	Violation Yes/ No	Level Detected		Date of Sample	Unit Measurement	UCMR5 MRL (ppb)[6]	Regulatory Level (ppb)	Likely Source of Contamination
Perfluorobutanoic acid (PFBA)[7]	No	0.006		11/08/2023	ppb	0.005	None	Footnote 7

[1] 100% of our samples were below the turbidity limit. 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.

[2]During the most recent round of lead and copper, NONE (zero out of thirty) of the households sampled exceeded the action level for copper.

[3] In accordance with Tennessee Rule 0400-45-01-.35 (3) (d) (iv) (I), Plateau Utility District hereby reports that during the most recent round of Lead and Copper testing, conducted July 2023, one out of thirty households sampled contained lead concentrations exceeding the lead action level of 15 parts per billion. Lead **WAS NOT** detected in any of the other twenty-nine households wherein sampling was conducted. Changes were made to the customer owned plumbing wherein the lead action level exceedance was detected, and another sample was collected. The second sample representing the water quality after changes were made to the customer owned plumbing indicated that **NO LEAD WAS PRESENT**. Thinking that the second sample containing **NO LEAD** was the correct level to report to our customers, Plateau Utility District failed to report in our 2023 Water Quality Report that one sample exceeding the lead action level. This was reported in error, and in fact we should have reported that lead in excess of the action level of 15 parts per billion was detected. That error is herein and hereby correct. The United States Environmental Protection Agency (USEPA or EPA) states "a lead action level exceedance (ALE) occurs when the 90th percentile concentration of lead is greater than 15 parts per billion (ppb) or 0.015 mg/l". Whereas the 90th percentile concentration of the most recent lead sampling conducted by Plateau Utility District is "non-detected", Plateau Utility District does not herein intend to report a lead action level exceedance according to the USEPA definition, but rather inform our customers that one household contained lead concentrations greater than the established action level prior to changes to the customer owned plumbing; at which time resampling indicated **NO LEAD PRESENT**.

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems. **In consideration of the serious health effects that lead exposure can have on humans, our customers should be vigilant to ensure they do not have lead pipes, lead solder, or plumbing fixtures containing lead within their home plumbing systems.**

[4]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.

[5]We have met all treatment technique requirements for Total Organic Carbon removal.

[6]The EPA has established minimum reporting levels (MRLs) for lithium and the 29 per- and polyfluroralkyl substances (PFAS) included in the Unregulated Contaminant Monitoring Rule (UCMR5). Plateau Utility District conducted four rounds of sampling at three locations for lithium and the 29 PFAS. Those three locations were: 1)Plateau's water treatment facility, 2) the interconnection of Plateau Utility District and Huntsville Utility District, and 3) the interconnection of Plateau Utility District and Cumberland Utility District. Of the approximate 360 water quality analyses generated from the UCMR5 program, Plateau Utility District detected only one contaminant that exceeded the minimum reporting level established by EPA. That exceedance was detected at the interconnection between Plateau Utility District and Cumberland Utility District and that contaminant was detected at a level that was 1,000 times less than maximum concentration is **NOT EXPECTED** to cause adverse non-carcinogenic health effects over a lifetime of exposure. See below for additional explanation.

The EPA website, www.epa.gov/dwucmr/fith-unregulated-contaminant-monitoring-rule#a5, states the following:

> "The UCMR MRL is the lowest measurable concentration of a contaminant that, with 95% confidence, is achievable by at least 75% of laboratories nationwide using a specified analytical method (recognizing that individual laboratories may be able to measure or quantify analytes at lower levels)".

The website listed above also includes a link to the UCMR5 Data Summary that states in Table 2 that the Health Based Screening Level (HBSL) for the Perfluorobutanoic acid (PFBA), the contaminant that Plateau Utility District detected, is 6 ppb. That same UCMR5 Data Summary Report states in the Terms and Definitions the following:

> "HBSL – USGS non-cancer Health Based Screening Level. HBSLs are non-enforceable water quality benchmark concentrations of contaminants in water developed using the latest EPA methods for establishing drinking water guidelines and the most recent EPA peer-reviewed toxicity information. Non-cancer HBSLs are maximum concentrations that are not expected to cause adverse non-carcinogenic health effects over a lifetime of exposure".

That means that the minimum reporting level (MRL) of PFBA (0.005 ppb) that Plateau Utility District detected in our water is 1,200 less than the maximum concentration of PFBA (6 ppb) that ARE NOT EXPECTED TO CAUSE ADVERSE NON-CARCINOGENIC HEALTH EFFECTS OVER A LIFETIME OF EXPOSURE. It also means that the concentration of PFBA (0.006 ppb) detected by Plateau Utility District in our water is 1,000 times less than the levels that ARE NOT EXPECTED TO CAUSE ADVERSE NON-CARCINOGENIC HEALTH EFFECTS OVER A LIFETIME OF EXPOSURE.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted. For additional information call the Safe Drinking Water Hotline at (800) 426-4791.

[7]Perfluorobutanoic acid (PFBA) was formerly used for manufacturing photographic film.