White House Utility District

2023 Water Quality Report

WHAT IS THE PURPOSE OF THIS REPORT?

The U.S. Environmental Protection Agency (EPA) requires community water systems to deliver a Consumer Confidence Report (CCR), also known as a Water Quality Report, to their customers each year. This report is intended to provide customers with information about their local drinking water quality and includes information such as the source of drinking water, any risk of contamination, contamination regulations, and more. Learn more at https://www.epa.gov/ccr.

For more information about WHUD's water testing results, call Brian Wade at (615) 672-4110, ext. 332.

WHAT IS THE SOURCE OF MY WATER?

Geographically, WHUD is TN's largest water and wastewater provider, covering more than 600 square miles. WHUD provides water service to more than 100,000 residents in Robertson, Sumner and northern Davidson counties. The district draws water from Old Hickory Lake, which is surface water, at a point off Rockland Road in Hendersonville, where WHUD's water treatment facility is located.

Note: WHUD purchased water from Hendersonville Utility District, Gallatin Public Utilities, and City of Springfield in the summer months of 2022 due to drought conditions causing higher than normal usage. Because of this, their water quality data is included in this report.

WHUD's goal is to provide the highest quality water to our customers. One way we do this is by working with the State of Tennessee to examine 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. Old Hickory Lake, WHUD 's water source, is 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 the EPA can be viewed online at

https://www.tn.gov/environment/program-areas/wr-water-resources/waterquality/source-water-assessment.html.

To ensure safe drinking water, all public water systems treat and routinely test their water. WHUD has a rigorous process that includes 24/7 system monitoring and sampling, strict adherence to state and federal rules and regulations, and a multitude of checks and balances that ensure the integrity of our system and high-quality water.

IS MY DRINKING WATER SAFE?

Yes. The water produced by WHUD continuously meets or exceeds ALL of the national water quality standards required by the Environmental Protection Agency (EPA) as well as the State of Tennessee (TDEC). WHUD has stringent processes in place to ensure your water is safe every time you turn on your faucet. Daily water quality tests are conducted by WHUD to ensure the water produced and delivered to your home is safe to drink - tests are performed both at the water treatment plant before the water leaves the plant and at various points and times once the water is in our distribution system. Tests look for and detect more than 80 possible contaminants using the newest technologies available. As evidenced in this report, during 2022, 10 contaminants were detected in the water supply. Of the 10 contaminants detected, all either naturally occurred at levels considered safe by the EPA and TDEC or were reduced to safe levels by WHUD's water treatment process.

WHY ARE THERE CONTAMINANTS IN MY WATER?

Drinking water, including bottled water, may contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that 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 and, in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. Contaminants 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.
- 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 TDEC prescribe regulations that 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

OTHER INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population, including immuno-compromised individuals (such as those undergoing chemotherapy, those who have undergone organ transplants, or those with HIV/AIDS or other immune system disorders). Some elderly and infants can also be particularly at risk of infections. These individuals 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 (1-800-426-4791).

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. WHUD is responsible for providing high-quality drinking water but cannot control the variety of materials used in private plumbing components. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

White House Utility District
2023 Water Quality Data

Contaminant	Violation	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Chlorine	No	1.79	1.0 - 2.8	2023	ppm	MRDLG = 4	MRDL = 4	Added as a disinfectant to control microbes
Copper[1]	No	0.107 90th percentile		2023	ppm	1.3	AL - 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	0.57	0.45 – 0.71	2023	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
HAA5 (Haloacetic acids)	No	42	20 - 50	2023	ppb		60	By-product of disinfection
Lead[1]	No	0.001 90th percentile		2023	ppb	0	AL - 15	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate	No	0.163		2023	Ppm	10	10	Soil run-off; Leaching from septic tanks; Erosion of natural deposits
Radionuclides Gross Alpha Radium 226 Radium 228	No	.156 pCi/l .135 pCi/l .349 pCi/l		2023	pCi/L	0	15 pCi/l 5 pCi/l 5 pCi/l	A radioactive substance found in nature
Sodium	No	7.23		2023	ppm			Erosion of natural deposits
TOC[2]	No	51% Removal Achieved	25% Removal Required	2023	ppm		TT	Naturally present in the environment
Total Coliform Bacteria	No	0.33%		2023		0	<5% Positive Samples Per Month	Naturally present in the environment
TTHM (Total trihalomethanes)[3]	No	61	27-59	2023	ppb		80	By-product of drinking water chlorination
Turbidity[4]	No	0.12	0.02 - 0.12	2023	NTU		TT	Soil runoff

[1] During the most recent round of lead testing, 0 out of 50 households sampled contained concentrations exceeding the action level of 15 ppb. No copper samples exceeded the action level of 1.3 ppm.

[2] Treatment technique requirements were met for Total Organic Carbon in 2023.

[3] 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.

[4] WHUD met the treatment technique for turbidity with 100% of monthly samples being below the limit set by the EPA of 0.3 NTU. Turbidity is a measure of the cloudiness of the water. WHUD monitors it because it is a good indicator of the effectiveness of our filtration system.

As part of the on-going evaluation program, the EPA has required White House Utility District to monitor for UCMR5 unregulated contaminants. Test results indicated all UCMR5 compounds were below detectable limits. 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 regulation is warranted. For additional information please contact WHUD at 615-672-4110 or call the Safe Drinking water Hotline at (800) 426-4791.

During the summer months when usage is at a high, some of our customers could have received water that was treated and tested by Hendersonville Utility District. For this reason, the information below has been supplied by Hendersonville Utility District. The water, which is surface water, comes from Old Hickory Lake. During the past year, numerous tests have been conducted by Hendersonville Utility District for contaminants that may be present in drinking water. WHUD also performs additional monitoring on this water before it reaches our customers.

Hendersonville Utility District
2023 Water Quality Data

Regulated Contaminant	Violation	Level Detected	Range of Detection	Date of Sampling	Unit of Measurement	MCLG / MRDLG/ MRLτ	MCL	Likely Source of Contamination
[1]Turbidity	No	.22	.03 - .22	Daily (Jan – Dec. 2023)	NTU	N/A	TT	Soil run-off
[2]Total Organic Carbon	No	>25% Achieved	25% Removal Req.	1/Month	PPM	TT	TT	Naturally present in the environment
Sodium Hypochlorite (Disinfectant)	No	1.98 Avg.	.074 – 3.16	Continuous 24/7	PPM	4.0	4.0	Additive used to control microbes
Fluoride	No	.46	.40 - .46	Quarterly	PPM	4.0	4.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium	No	9.73	9.41	7/19/2023	PPM	N/A	N/A	Erosion of natural deposits
Nitrate	No	.33	.39	1/11/2023	PPM	10.0	10.0	Soil run-off; Leaching from septic tanks; Erosion of natural deposits
[3]Trihalomethanes	No	LRAA = .029	.017 - .038	Quarterly	PPM	0	.08	By-product of drinking water disinfection
Total Haloacitic Acids	No	LRAA = .021	.012 -.032	Quarterly	PPM	0	.06	By-product of drinking water disinfection
[4]Lead	No	Non-Detectable	Non-Detectable	9/20/2022	PPM	0	AL = .015 95 Percentile	Corrosion of household plumbing; Erosion of natural deposits
[4]Copper	No	.11	.002 - .11	9/20/2022	PPM	0	AL = 1.3 95 Percentile	Corrosion of household plumbing; Erosion of natural deposits; leaching from wood preservatives
Radionuclides Gross Alpha Radium 226 Radium 228	No	.29 pCi/l .086 pCi/l .53 pCi/l		12/12/2023	pCi/l	0	15 pCi/l 5 pCi/l 5 pCi/l	A radioactive substance found in nature

[1] Hendersonville Utility District (HUD) met the treatment technique for turbidity with 100% of monthly samples below the turbidity limit of 0.3 NTU. Turbidity is a measure of the cloudiness of the water. HUD monitors turbidity because it is a good indicator of the effectiveness of our filtration system.

[2] HUD met the Treatment Technique requirement for Total Organic Carbon removal in 2023.

[3] 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.

[4] Lead and Copper: Lead and Copper testing is conducted every three (3) years. During the most recent round of lead and copper testing, not a single household sampled contained lead or copper concentrations exceeding the action level.

During the summer months when usage is at a high, some of our customers could have received water that was treated and tested by Gallatin Public Utilities. For this reason, the information below has been supplied by Gallatin Public Utilities. The water, which is surface water, comes from Old Hickory Lake. During the past year, numerous tests have been conducted by Gallatin Public Utilities for contaminants that may be present in drinking water. WHUD also performs additional monitoring on this water before it reaches our customers.

Gallatin Public Utilities
2023 Water Quality Data

Contaminant	Highest Level Allowed (MCL)	Ideal Goals (MCLG)	Highest Level Detected	Range of Detections	Units	Date	Violation	Sources of Contamination
E. Coli	*See Note	0	0	0	mpn/100 ml	2023	No	Naturally present in the environment
Cryptosporidium	Source Water Sample Only		0	0 – 0	oocyst/L	2018		
Copper	AL = 1.3	1.3	0.108 (90th percentile)		ppm	Jun - 23	No	Corrosion of household plumbing
Fluoride	4	4	0.64 (AVG)	0.5 - 0.85	ppm	Quarterly	No	Water additive for strong teeth
Lead	AL = 15	0	(90th percentile) ND (<2)		ppb	Jun - 23	No	Corrosion of household plumbing
Nitrate	10	10	0.38		ppm	6-Feb-23	No	Runoff from fertilizer use
Turbidity	TT (100% < 0.3 NTU)	TT	0.22	0.02 - 0.22	NTU	Daily	No	Soil runoff
Chlorine	MRDL=4	MRDLG=4	1.49 (AVG)	0.61 - 2.06	ppm	Daily	No	Water additive for disinfection
Sodium			12.6		ppm	5-May-23	No	Erosion of natural deposits
TTHM	80	0	51.875 (AVG)	19.5 - 48.6	ppb	Quarterly	No	By-product of drinking water chlorination
HAA5	60	0	37.625 (AVG)	11.1 – 36.5	ppb	Quarterly	No	By-product of drinking water chlorination
TOC	TT	TT	41.3% (AVG)	35.23% - 48.97%	% removal	Quarterly	No	Naturally occurring in environment
2,4-D	70	70	ND	ND	ppb	9-May-23	No	Runoff from herbicide used on row crops
Gross Alpha	15	0	2.42		pCi/L	7-Nov-23	No	Erosion of natural deposits
Radium 226	3	0	0.118		pCi/L	7-Nov-23	No	Erosion of natural deposits
Radium 228	2.5	0	ND		pCi/L	7-Nov-23	No	Decay of natural and man-made deposits

Listed above are contaminants detected in Gallatin's drinking water in 2023. All are below allowed levels. Not listed are the hundreds of other contaminants for which Gallatin tested, but were not detected. The Treatment Technique requirements for Total Organic Carbon were met in 2023. Most of the data presented in this table is from testing done between January 1, 2023 and December 31, 2023. Gallatin monitors for some contaminants less than once per year (for those contaminants, the last sample data is shown in the table).

*E. Coli MCL – Routine and repeat samples are total coliform-positive and either is E. Coli positive or system fails to take repeat samples following E. Coli positive routine sample or system fails to analyze total coliform positive repeat sample for E. Coli.

During the most recent round of lead and copper testing, 0 out of 30 households sampled contained concentrations exceeding the Action Level.

As part of the on-going evaluation program, the EPA has required Gallatin to monitor some additional contaminants. 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 regulation is warranted. For additional information call the Safe Drinking water Hotline at (800) 426-4791.

Additional Monitoring

Contaminant	Average Level Detected	Range of Detections	Units	Date
Anatoxin	0.011	BDL – 0.011	ppb	2018
Haloacetic Acids-6 (HAA6)	1.53	0.14 – 2.9	ppb	2019
Haloacetic (HAA9)	5.76	0.14 – 19.1	ppb	2019

Important Definitions Used in this Report

AL - Action Level is the concentration of a contaminant that, when exceeded, triggers treatment or other requirements a water system must follow.

BDL - Below detection limit

HAA5 - Halo Acetic Acids

LRAA – Local Running Annual Average

MCLG - Maximum Contaminant Level Goal is 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 is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

mg/l - Milligrams Per Liter

MRDL - Maximum Residual Disinfectant Level is 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 is 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.

MRL$_\tau$ – Maximum Residual Limit – EPA has demonstrated it can achieve these report limits in reagent water but cannot document them in all sample matrices.

MPN - Most Probable Number

NA – Not Applicable

ND – Not detected, indicates that the substance was not found by the laboratory.

NTU - Nephelometric turbidity units measure the turbidity, or clarity, of water. Turbidity in excess of 5 NTUs is just noticeable to the average person.

pCi/L – Picocuries per liter

ppb - Parts per billion or micrograms per liter can be 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.

ppm - Parts per million or milligrams per liter (mg/l) can be 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.

TOC – Total organic carbon

TT – Treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

TTHM – Total Trihalomethanes

ASK US

Our Customer Care Team is always ready to assist you. If you have questions, you can call us M-F, between 8am - 4pm, at 615-672-4110. You can also email customerservice@whud.org or submit an online inquiry through our Customer Service Hub at WHUD.org.

RECEIVE NOTIFICATIONS

Receive important district notifications by making sure we have your up-to-date contact information. Here are two ways to update your account contact information:

whud.org/my-account or 615-672-4110

FIND US ON SOCIAL

Follow us at facebook.com/whudh20 or twitter.com/whud_h20 for regular water savings tips, important updates, news, and behind the scene views of water and wastewater operations.

BOARD MEETINGS

Our Board of Commissioners meets quarterly on the last Tuesday of the months of March, June, September, and December at 9:00 am, at the WHUD office located at 3303 Highway 31W in White House. These meetings are open to the public.