



Buckhannon Water Board

WV 3304902

Consumer Confidence Report – 2025

Covering Calendar Year

2024

In compliance with the Safe Drinking Water Act, the Buckhannon Water Board is providing customers with our Annual Water Quality Report.

This report is a snapshot of the quality of the water provided in 2024. Included is information about where your water comes from, its contents, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information, because informed customers are our best allies. If you would like to observe the decision-making process that affects drinking water quality or if you have any questions, comments, or suggestions, please attend any regularly scheduled water board meeting held on the 2nd Thursday of each month at 7:30am at City Hall or call Tommy Rolenson at 304-472-1651 Ext: 1000

The Buckhannon Water Treatment Plant treated 820,860,258 gallons of high-quality potable water in 2024. Our water source is the Buckhannon River, which categorizes our system as a surface water system. Our water system serves an estimated population of 8098 within our service area utilizing 6 storage tanks, 39 miles of water mains up to 24 inches in diameter, 4 booster stations, 1,200 valves and 250 hydrants. Fourteen dedicated employees operate and maintain the system. Including purchaser systems, the Buckhannon Water Treatment Plant serves over 22,000 customers in Upshur County and surrounding areas.

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 (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, 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 storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. With the EPA regulations as a baseline, the Buckhannon Water Department has been utilizing a concept called Area Wide Optimization Program (AWOPs), which was developed to improve plant performance. Goals stricter than those by the EPA have been set and are being achieved.

Water Quality Data

The following tables list all the drinking water contaminants which were detected during recent testing. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2024. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the “Goal” is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): the “Maximum Allowed” MCL is 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.

Secondary Maximum Contaminant Level (SMCL): recommended level for a contaminant that is not regulated and has no MCL.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

Treatment Technique (TT): a required process intended to reduce levels of a contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL): the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Non-Detects (ND): lab analysis indicates that the contaminant is not detected at or above the MDL (Method Detection Limit).

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Monitoring Period Average (MPA): An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

Locational Running Annual Average (LRAA): Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Minimum Reporting Limit (MRL): The lowest concentration a laboratory can report to the EPA during monitoring.

Monitoring Period Average (MPA): An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

Testing Results for: BUCKHANNON WATER BOARD

The Buckhannon Water Treatment Plant is required by the EPAs surface water treatment rule to monitor turbidity. The NTU must never exceed 1.0 NTU at any time. The samples for turbidity must be less than or equal to 0.3 NTU in at least 95% of the samples in one month.

Turbidity			
Monthly % < 0.3NTU	Yearly High	Violation	Likely Source of Contaminant
100%	0.080 NTU in May 2024	No	Soil Runoff

Being a surface water system, organics (TOCs) in our source water is a common concern. Interactions between the TOCs and the required disinfection process can produce disinfection by-products. Disinfection by-product precursor removal is a treatment technique to reduce the amount of TOCs that may react with the disinfection process.

Total Organic Carbon (TOC)						
Total Organic Carbon	Collection Date	Highest Value	Range	Unit	TT	Typical Source
CARBON, TOTAL (Raw)	2/26/24	2.94	1.1-2.94 1.9 RAA	ppm	TT	Naturally present in the environment
CARBON, TOTAL (Finished)	8/30/24	2.4	0.7-2.4 1.3 RAA	ppm	TT	Naturally present in the environment

Total Organic Carbon (TOC) Removal					
Year Sampled	Compliance Achieved	Required Removal RAA	Achieved Removal RAA	TT	Typical Source
2024	Yes	35%	22%	TT	Naturally present in the environment

Disinfectant						
Treatment	Violation	Level Detected RAA	Maximum Detected	Unit of Measure	MRDLG	MRDL
Chlorine (Water Plant)	No	1.3	1.3	ppm	4.0	4.0
Chlorine (Distribution)	No	1.4	1.6	ppm	4.0	4.0

Disinfection Byproducts	Sample Point	Violation	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	AIRPORT BPS	No	2024	24	10-39	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	E-17 DEER CREEK	No	2024	21	12-27	ppb	60	0	By-product of drinking water disinfection
TTHM	AIRPORT BPS	No	2024	42.9	12.5-66.7	ppb	80	0	By-product of drinking water chlorination
TTHM	E-17 DEER CREEK	No	2024	37.4	16.8-51.3	ppb	80	0	By-product of drinking water chlorination

Note: Some people who drink water containing **trihalomethanes** above the MCL over many years may experience problems with their liver, kidneys, or nervous system, and may have an increased risk of cancer.

Note: Some people who drink water containing **haloacetic acids** in excess of the MCL over many years may have an increased risk of cancer.

Our water system has an estimated population of 8098 and is required to test a minimum of 9 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public. In 2024, a total of 120 bacteriological sample were collected from the ten designated locations. All results were non-detects.

Microbiological				
Location	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2024				

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
1/1/2024 -1/31/2024	1.51	MG/L	1.30	MG/L

Inorganics						
Regulated Contaminants	Violation	Level Detected	Unit	MCLG	MCL	Typical Source
BARIUM	No	0.0263	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	No	0.522	ppm	0.7	2	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Note: Antimony, beryllium, cadmium, chromium, cyanide, mercury, nickel, nitrate, nitrite, thallium, and selenium were also analyzed for but were non-detectable.

Lead And Copper							
Lead and Copper	Monitoring Period	90 th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2020 - 2022	0.0698	<0.00221 - 0.398	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2020 - 2022	0.542	<0.172 - 19.7	ppb	15	1	Corrosion of household plumbing systems; Erosion of natural deposits

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your health care provider for more information about your risks.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Buckhannon Water Board 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 BUCKHANNON WATER BOARD and Tommy Rolenson at 304-472-1651. 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>.

BUCKHANNON WATER BOARD completed lead tap sampling in 2020 - 2022 the results are available for review and can be accessed **by reviewing the Water Consumer Confidence Report at www.buckhannonwv.org or calling Jerry Myers at 1-304-472-2530.**

BUCKHANNON WATER BOARD has prepared a service line inventory identifying service line materials throughout the water distribution supply. The most up to date inventory is located at the **Buckhannon Water Treatment Plant** or by contacting **Jerry Myers at 1-304-472-2530**. Our water system must develop an updated initial inventory, known as the "baseline inventory" and it includes each service line and identified connector that is connected to the public water distribution system.

Currently, our water system has **not** identified any **lead, galvanized requiring replacement, or lead status unknown** service lines in our inventory. If any are identified in the future, our water system must create a service line replacement plan by November 1, 2027.

Radionuclides							
Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	4/9/2019	2.13	2.13	pCi/L	15	0	Erosion of natural deposits

Note: Radionuclides are analyzed every six years.

Secondary Contaminants: Non-Health Based Contaminants						
No Federal Maximum Contaminant Level (MCL) Established						
Contaminant	Collection Date	Highest Value	Range (low/high)	Unit	SMCL	Typical Source
Sodium	10/29/24	12.1	N/A	ppm	1000	Erosion of natural deposits

Our water system has sampled for a series of unregulated contaminants as part of UCMR 5. Unregulated contaminants are those that do not yet have a drinking water standard set by the US Environmental Protection Agency (EPA). The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available. If you are interested in examining the results, please contact: Jerry Myers at 1-304-472-2530.

UCMR5				
Location	Result	MCL	MCLG	Typical Source
All results were less than the MRL (Not Detected) for each of the four quarters of 2024.				

During the **2024** calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
No Violations Occurred in the Calendar Year of 2024		

There are no additional required health effects violation notices.

Your CCR is available at WWW:// www.buckhannonwv.org/residents/buckhannon-water-department/

CCR will not be mail unless requested. To receive a paper copy in the mail, please contact

Jerry Myers at 304-472-2530.