



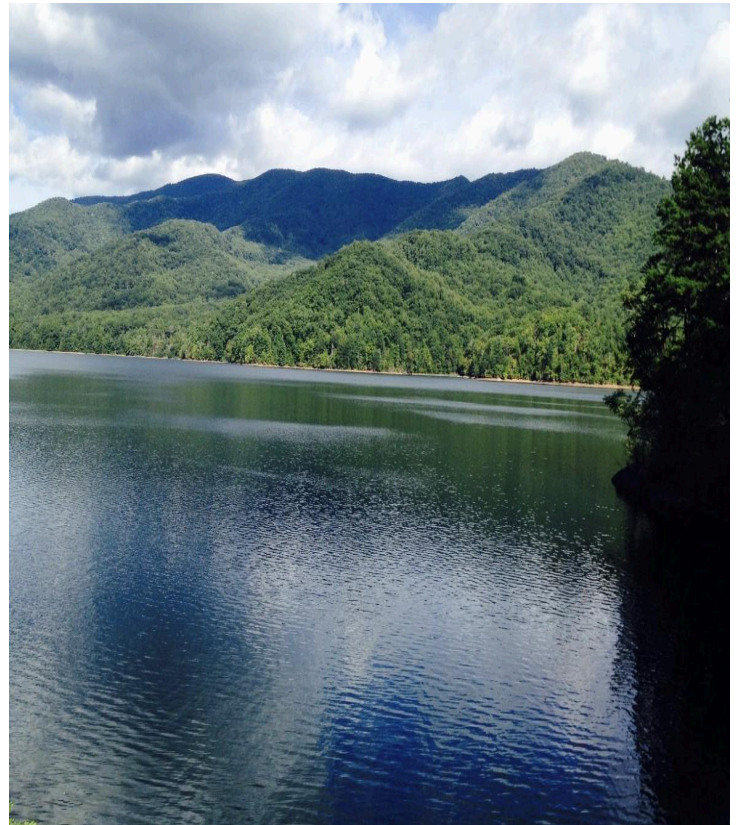
City of Asheville Water Resources Department 2024 Annual Water Quality Report

PWSID# NC0111010

Este informe contiene información muy importante sobre su agua potable. Copias traducidas están disponibles en el sitio web de recursos hídricos en ashevillenc.gov/wqr. Llame al 828-251-1122 para solicitar una copia impresa o si tiene preguntas sobre el informe.

Этот отчет содержит очень важные Информация о вашей питьевой воде. Переведенные копии доступны на веб-сайте водных ресурсов по адресу ashevillenc.gov/wqr. Пожалуйста, позвоните по телефону 828-251-1122, чтобы запросить бумажную копию или если у вас есть вопросы по поводу отчета.

Цей звіт містить дуже важливу інформацію про вашу питну воду. Перекладені копії доступні на веб-сайті водних ресурсів за адресою ashevillenc.gov/wqr. Зателефонуйте за номером 828-251-1122, щоб отримати друковану копію або якщо у вас є питання щодо звіту.





Our Commitment to Quality

We are pleased to present this year's annual Drinking Water Quality Report. This report serves as a snapshot of last year's water quality. Included are details about your source(s) of water, what it contains, and how it compares to standards set by regulatory agencies. Our goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information because informed customers are our best allies. **If you have any questions about this report or your water, please contact Water Resources Customer Service at 828-251-1122.**

Customer Input Welcome

We invite our customers to learn more about the City of Asheville and the Water Resources Department. Customers are invited to attend Asheville City Council meetings that are held in-person in the Council Chamber, on the second floor of City Hall, located at 70 Court Plaza, typically at 5:00 p.m. on the second and fourth Tuesday of every month. Meetings are televised live on Charter/Spectrum Channel 193. The City of Asheville also posts City Council Meetings to our YouTube Channel at <https://www.youtube.com/user/CityofAsheville> for easier viewing. The Asheville City Channel is on Charter Cable channel 193 and on AT&T U-Verse channel 99. The council meetings may be watched live at: <https://publicinput.com/hub/88>.

What EPA Wants You to Know

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 at 800-426-4791. 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, those 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).

Contaminants that may be present in source water before it is treated include microbial contaminants, inorganic contaminants, pesticides and herbicides, radioactive contaminants, and organic chemical contaminants. The City of Asheville has one of the purest sources of water in the country, thus minimizing any chance of contamination.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. It is important to remember that the presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that your tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants. The Food and Drug Administration established limits for contaminants in bottled water which must provide the same level of protection. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

When You Turn on Your Tap, Consider the Source

The City of Asheville has three main water sources. Water flows from pure mountain springs and streams in eastern Buncombe County into two pristine reservoirs that are surrounded by 20,000 acres of protected mountain forests owned by the City of Asheville. These reservoirs are known as the North Fork and Bee Tree Reservoirs located in Black Mountain and Swannanoa, respectively, and are the water sources for the North Fork and William Debruhl Water Treatment Facilities. These treatment facilities provide water to the majority of the City of Asheville distribution system. Mills River treatment facility is located in Henderson County, with 75 percent of the

watershed being in the Pisgah National Forest. The rest of the watershed is a mixture of farmland and low-density development. Along with being an invaluable water source, Mills River also provides multiple uses to the community such as trout fishery, fish and wildlife habitat, and a recreational resource. Only during extreme drought conditions, water would be taken from the French Broad River in Henderson County. These are the water sources to the Mills River Water Treatment Facility.

Source Water Assessment Program (SWAP) Results

North Carolina Department of Environmental Quality, Public Water Supply Section, Source Water Assessment Program (SWAP) conducted an assessment of the drinking water sources across North Carolina. The purpose of the assessment was to determine the susceptibility of each drinking water source to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate, or Lower. The relative susceptibility rating of each source for the City of Asheville was determined by combining the contaminant rating (number and location of PCSs within the watershed) and the inherent vulnerability rating (geologic characteristics of the surface water source and the watershed area). The assessment findings are summarized below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating
North Fork Reservoir	Higher
Mills River	Moderate
Bee Tree Reservoir	Moderate
French Broad River*	Higher

(Found in SWAP Report Table 2, dated September 9, 2020)

*French Broad River Intake is only used during extreme drought conditions.

It is important to understand that a susceptibility rating of Moderate or Higher does not imply poor water quality, only the systems' potential to become contaminated by PCSs in the assessment area. The complete SWAP Assessment report for the City of

Asheville's Water Resources Department may be viewed on the Web at:

<https://www.ncwater.org/?page=600>. To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Center, Raleigh NC 27699-1634, or email request to swap@deq.nc.gov. Please indicate the system name (City of Asheville), PWSID (01-11-010), and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

ISO 14001: Our Commitment to the Environment for over 20 years

Since 2004, the Water Resources Department has been ISO 14001 registered by NSF, proving that we have implemented practices and procedures to do our part to protect the environment. As we celebrate 20 years of rigorous environmental certification, we look forward to many more. We are committed to ensuring environmental quality through:

- Continuous Improvement in our product, systems, and processes to maximize customer satisfaction;
- Communication among and between our staff, customers, vendors, contractors, and governing board;
- Compliance with relevant federal, state, and local environmental regulations; and
- Commitment to a clean, healthy environment through prevention of pollution.

Lead Awareness



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. The City of Asheville is responsible for providing high-quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can

take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

The City of Asheville has effectively implemented a system-wide corrosion control treatment process to minimize corrosion. Homes and businesses at risk for lead in the water are those that have lead pipe, galvanized pipe, or copper pipe with lead solder for their service line or home plumbing. The new Lead and Copper Rule Revisions require the City of Asheville to build a service line inventory that includes the customer side of the meter. We are requesting customers to call 828-259-5962 to set up an appointment for a city representative to check the service line coming into your residence or business. If you are concerned about lead in your water, interested in free water lead testing, or have questions about the service line inventory, please call 828-259-5962, visit www.ashevilenc.gov/leadawareness, or email LeadPrevention@ashevilenc.gov.

Accomplishments & Achievements

- The Advanced Metering Infrastructure (AMI) Project started in March 2023 and the project is 48% complete. Once completed, all customers will have smart meters with which they can review their water usage online or via an app. This project will take 2-3 years to complete.
- More than 85 customers participated in the Service Line Inspection program in 2024. To participate call 828-259-5962 or visit ashevilenc.gov/leadawareness.
- Patton Ave had 7,000 feet of water mains replaced to help move more water to the western portions of the distribution system.
- Continued to develop and manage other capital improvement projects, including Neighborhood Enhancement Project #8 and the South Buncombe Pump Station relocation projects.

These projects will address specific needs and generally replace existing failing infrastructure.

- Performed testing during each quarter of 2024 for PFAS as part of the Unregulated Contaminant Monitoring Rule (UCMR5) and no detections occurred.
- All three water treatment facilities received the Area Wide Optimization Program (AWOP) Award for 2023. This means that they meet water quality optimization goals and provide an increased and sustainable level of public health protection to consumers during 2023.
- North Fork and William DeBruhl Water Treatment Facilities treatment study was completed by CDMSmith to help move forward with the construction of sedimentation basins within the treatment process to help with higher levels of turbidities. This is an important step that will help provide more resilience during severe weather events like hurricanes and tropical storms.
- Mills River Water Treatment Facility's Phase 2 upgrade was awarded to Wharton-Smith. The upgrade includes a new one million gallon clearwell, new emergency generator switchgear, new 8 million gallon off stream storage pond, and several other plant improvements to increase the plant's treatment capacity.
- The filter rehabilitation process at North Fork and William DeBruhl Water Treatment Facilities began using a Construction Manager at Risk (CMAR) to perform the work along with the emergency repair of filter three at North Fork.
- The entire Water Resources Department worked alongside several other outside companies and agencies to restore all transmission lines and provide water for fire protection and public health for City of Asheville customers within 21 days after Hurricane Helene. The Boil Water Notice was lifted on November 18th due to the ingenuity and hours of hard work by staff to ensure that water was properly treated and analyzed to ensure the water quality met all state and federal regulations.

Our Water Quality Surpasses All Requirements

Out of 150 possible substances tested only **6** were detected - making our drinking water one of the best sources of water in the country. The following regulated substances were detected at or well below the required limits in the drinking water as analyzed between **January 1 and December 31, 2024**.

Contaminant (Units)	Sample Date	MCL Violation (Y/N)	Your Water (highest LRAA)	Range (Low to High)	MCLG	MCL	Likely Sources of Contamination
*Total Trihalomethanes (TTHMS) ppb	2024	No	58	13-113	N/A	80	Byproduct of drinking water disinfection
**Haloacetic Acids (HAA5) ppb	2024	No	55	24-96	N/A	60	

**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.*

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

Contaminant (Units)	Sample Date	Your Water (90th Percentile)	Number of Sites above the AL	Range (Low to High)	MCLG	AL	Likely Source of Contamination
Copper (ppm) 90th Percentile	Jun - Sep 2024	0.074	0	< 0.050 - 0.097	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) 90th Percentile	Jun - Sep 2024	< 3	1	< 3 - 15	0	AL = 15	
Copper (ppm) 90th Percentile *	Nov - Dec 2024	0.073	1	< 0.050-7.58	1.3	AL = 1.3	
Lead (ppb) 90th Percentile *	Nov - Dec 2024	< 3	12	< 3 - 81	0	AL = 15	

*The table above summarizes our most recent lead and copper tap sampling data. If you would like to review the complete lead tap sampling data, please email us at leadprevention@ashevillenc.gov or call **828-251-1122**. We have been working to identify service line materials throughout the water system and prepared an inventory of all service lines in our water system. To access this inventory, use this link: <https://www.ashevillenc.gov/serviceinventory>*

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.

**Non-compliance sampling occurred after Tropical Storm Helene when the water treatment facility was unable to provide corrosion control into the water for an average of 19 days. The City Water Department could not provide corrosion control when the turbidity levels in the North Fork Water Treatment Plant's reservoir were too high for the direct filtration system at the plant.*

Contaminant (Units)	MRDL Violation (Y/N)	Your Water (RAA)	Range Low High	MCLG	MCL	Likely Source of Contamination
Chlorine (ppm)	No	1.46	0.23 - 8.5	4	4.0	Water additive used to control microbes.

Contaminant (Units)	Treatment Technique (TT) Violation (Y/N)	Your Water	MCLG	Treat Technique (TT) Violation if:	Likely Source of Contamination
Turbidity (NTU)	Yes	10.3	N/A	Turbidity >1 NTU	Soil runoff
Turbidity (%) - Lowest monthly percentage of samples meeting turbidity limits	Yes	60%	N/A	Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU	

Turbidity is a measure of the cloudiness of the water. Turbidity is monitored as it is a good indicator of the effectiveness of the filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU. 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.

Contaminant (Units)	MRDL Violation (Y/N)	Your Water (RAA)	Range Low High	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (TOC) Removal Ratio (no units)	No	1.00	1.00-2.86	N/A	Removal Ratio RAA <1.00 and alternative compliance criteria was not met	Naturally present in the environment

2024 PHYSICAL AND MINERAL CHARACTERISTICS

The following constituents analyzed in your water are indicators of the appearance, taste, and mineral content of the drinking water delivered to your tap.

Constituent Annual Average

pH (SU)	Alkalinity (ppm)	Hardness (ppm)	Sodium (ppm)
7.61	24.08	5.48	12.4

KEY TO UNIT ABBREVIATIONS

Action Level (AL) = The concentration of a contaminant that triggers treatment or other requirements that a water system must follow.

Maximum Contaminant Level (MCL) = 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.

Maximum Contaminant Level Goal (MCLG) = 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.

Maximum Residual Disinfectant Level Goal (MRDLG) = 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.

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.

Not-Applicable (N/A) = Information not applicable/not required.

Non-Detects (ND) = Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

Nephelometric Turbidity Unit (NTU) = Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person.

Parts per Billion (ppb) or Micrograms per liter (µg/L) = One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per Million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

su = Standard Units

Locational Running Annual Average (LRAA) = The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

Treatment Technique (TT) = A required process intended to reduce the level of a contaminant in drinking water.

< = Less than

Violations that Your Water System Received for 2024

The City of Asheville Water Resources Department received two violations due to sending out untreated water just after Tropical Storm Helene. The decision to send untreated water into the distribution system for fire protection and basic sanitation was made under the guidance of EPA staff on site and with the understanding of NCDEQ regulators. Boil Water Advisories & Notices were issued from October 4, 2024 - November 18, 2024 and potable water stations were provided to the public throughout the event. The violations were:

- Maximum contaminant level (MCL) for turbidity in exceedance of 5 NTU, per 40 CFR 141.13(b)
- Treatment technique (TT) requirement for 2-log removal of *Cryptosporidium*, per 40 CFR 141.170(a)(1)

NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

City of Asheville Did Not Meet Treatment Requirements and Had Levels of Turbidity Above Drinking Water Standards

Our water system violated a drinking water standard during October 2024 after Tropical Storm Helene. **This is no longer an emergency as water treatment has been restored since November 2024.** As our customers, you have a right to know what happened, what you should do, what was done during the violation and how the situation was corrected.

The North Carolina Rules Governing Public Water Systems requires us to provide adequate treatment to our source water. The treatment technique requirements consist of operating our facility so that it reliably achieves at least 99 percent (2-log) removal of cryptosporidium. From October 4th -30th, 2024, the water treatment facility fed untreated water into the distribution system. Monitoring results for the untreated water samples, collected during that same period, showed that our system exceeded the maximum contaminant level (MCL) for turbidity. The MCL for turbidity is 5 NTU. The 2-day running average level of turbidity during the monthly compliance period ranged between 15 to 28

NTU. The need for fire protection, and the ability for customers to flush toilets and perform basic sanitation drove our decision. The entire City of Asheville Water System was placed on a Boil Water Notice and potable water stations were available for several weeks.

What should I do?

- There is nothing you need to do. Customers do not need to boil their water or take other corrective actions as the results from the testing performed throughout October and November 2024 allowed the Water Resources department to lift the Boil Water Advisories and Notices on November 18, 2024. However, if you have specific health concerns, consult your doctor.
- If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water. This is suggested at any time for any customers that are immunocompromised.

What does this mean? This is not an emergency. If it had been, you would have been notified within 24 hours. 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. This is why Boil Water Advisories and Notices were sent starting on October 4th, 2025 until they were lifted on November 18, 2024.

What is being done? The city monitored the water quality in the distribution system and the treatment process to reduce the potential for bacterial contamination into the system. Results showed no Total Coliform or E.Coli in the water provided. The Water Resources Department has worked with FEMA & NC DEQ to install temporary turbidity reduction systems at both North Fork and William DeBruhl Water Treatment Facilities until permanent turbidity reduction systems can be installed.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information, please contact:

Responsible Person: Water Customer Service	System Name: City of Asheville	System Address (Street): 70 Court Plaza
Phone Number: 828-251-1122	System Number: NC0111010	System Address (City, State, Zip): Asheville, NC 28801

Violation Awareness Date: March 3, 2025

Date Notice Distributed: March 13, 2025

Method of Distribution: CCR