



Volatile Organic Contaminants - 4/4/2024

Tested (ND) Benzene, Carbon tetrachloride, Chlorobenzene, O-Dichlorobenzene, p-Dichlorobenzene, 1,2-Dichloroethene, 1,1-Dichloroethylene, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Styrene, Tetrachloroethylene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Toluene, Vinyl Chloride, Xylenes.

Synthetic Organic Contaminants including Pesticides and Herbicides- 8/9/2024

Tested (ND) 2,4-d, 2,4,5-TP (Silvex), Acrylamide, Alachlor, Atrazine, Benzo(a) pyrene(PAH), Carbofuran, Chlordane, Dalapon, Di(2-ethylhexyl) adipate, Di(2-ethylhexyl)phthalate, Dibromochloropropane, Dinoseb, Diquat, Dioxin(2,3,7,8-TCDD), Entothall, Endrin, Epichlorohydrin, Ethylene, Dibromide, Glyphosate, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxamyl (Vydate), PCBs (Polychlorinatedbiphenyls), Pentachlorophenol, Picloram, Simazine, Toxaphene.

Asbestos Contaminant

Contaminant	Sample Date	MCL Violation Y/N	Your Water	Range Low/High	MCLG	MCL
Total Asbestos (MFL)	7/6/21	N	ND	N/A	7	7

* Likely source of contamination: Decay of asbestos cement water mains; erosion of natural deposits

Other Misc. Water Characteristics Contaminants

Contaminant	Sample Date	Your Water	Range Low/High	SMCL
Iron	4/4/23	<.060	N/A	0.3 mg/L
Manganese	4/4/23	<.010	N/A	0.05 mg/L
Nickel	4/4/23	<.10	N/A	N/A
Sodium	4/4/23	7.54	N/A	N/A
Sulfate	4/4/23	<15	N/A	250 mg/L
pH	4/4/23	7.4	N/A	6.5 to 8.5

Town of Waynesville Annual Water Quality Report

2024



WATER

We Can't Live Without It

Do you know where your water comes from?

Do you know how clean it is?

Do you know what is being done to protect it?

If not, now you do!

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant 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.

The Town of Waynesville is proud to report that our drinking water met all federal and state standards for drinking water during 2024. This report to consumers covers the calendar year from January to December, 2024. Annual reports such as this one will be provided by the Town of Waynesville each year in the future.

Where does Waynesville's water come from?

Waynesville's watershed is located southwest of Waynesville and covers an area of 8400 acres on the headwaters of Allens Creek. Tributary streams within the watershed flow into the Waynesville Reservoir, a 50-acre man-made lake created by a dam on Allens Creek. The reservoir and surrounding watershed are classified by the State of North Carolina as WS-1. This classification is the state's most stringent and forbids development within the watershed boundary.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) 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 Town of Waynesville was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

Source Name	Susceptibility Rating	SWAP Report Date
Allens Creek Reservoir	Moderate	September 2020

The complete SWAP Assessment report for Town of Waynesville may be viewed on the Web at: <https://www.ncwater.org/?page=600> Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this website may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@deq.nc.gov. Please indicate your system name, number, 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.

It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

Violations that Your Water System Received for the Report Year

During 2024, or during any compliance period that ended in 2024, we received a Treatment Technique violation for Turbidity that covered the time period of 10/1/24 ---- 10/31/24. We have repaired the defective equipment to assure this does not happen again.

Turbidity: 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.



How is Waynesville's water treated?

Raw water from the reservoir is treated at the Waynesville Water Treatment Plant. The treatment process has five main steps: rapid mixing, flocculation, sedimentation, filtration and post chemical treatment. The objective of rapid mixing and flocculation is to cause small suspended particles to clump together for removal by sedimentation and filtration. The filters are anthracite and sand. Final chemical treatment uses chlorine for disinfection, fluoride for prevention of dental caries and an orthophosphate to control corrosion in the distribution system.

For More Information

The Town of Waynesville encourages public participation in decisions that may affect water quality. The Board of Aldermen meet every second and fourth Tuesday of each month. The meetings are held at 7:00 p.m. in the Town Hall board room.

Or contact: Waynesville Water Treatment Plant
Superintendent, Kyle H. Cook (828) 820-7270

About Our Water

The Town of Waynesville routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2024, and the last test results of contaminants that were not due to be tested. Our system monitored for Cryptosporidium and found levels of 0.00 (00)cysts /L in our source water.

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 (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, 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) 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 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 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; and 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 prescribes 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.

Understanding the Water Quality Table

In the following tables you will find many terms and abbreviations you might not be familiar with. To help you better under-stand these terms, we've provided the following definitions.

Parts per million (ppm) – One part per million corresponds to one minute in two years or a single penny in \$10,000.

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

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

Parts per billion (ppb) or Micrograms per liter – One part per billion corresponds to one minute in 2,000 years, or to a single penny in \$10,000,000

Maximum Contaminant Level – 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.

Maximum Contaminant Level Goal – The “Goal” (MCLG) 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.

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
Non-Detects (ND) – Laboratory analysis indicates that the constituent is not present.

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

TOWN OF WAYNESVILLE WATER QUALITY TEST RESULTS

Turbidity* 2024					
Contaminant (units)	Treatment Technique (TT) Violation Y/N	Your Water	MCLG	Treatment Technique (TT) Violation if:	Likely Source of Contamination
Turbidity (NTU) - Highest single turbidity measurement	N	2.89 NTU	N/A	Turbidity > 1 NTU	Soil runoff
Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits	N	98.9 %	N/A	Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU	Soil runoff

*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. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

Nitrate/Nitrite Contaminants 2024						
Contaminant (units)	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)	N	ND	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Disinfectant Residuals Summary							
	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	2024	N	.99 ppm	.3 - 1.6	4	4.0	Water additive used to control microbes

Total Organic Carbon (TOC) 2024							
Contaminant (units)	TT Violation Y/N	Your Water (RAA Removal Ratio)	Range Monthly Removal Ratio Low - High	MCGL	MCL	Likely Source of Contamination	Compliance Method (Step1 or ACC# _____)
Total Organic Carbon (removal ratio) (TOC) - TREATED	N	1.0	1.0 - 2.86	N/A	TT	Naturally present in the environment	ACC 2

Note: Depending on the TOC in our source water, the system MUST have a certain % removal of TOC or must achieve alternative compliance criteria. If we do not achieve that % removal there is an alternative % removal. If we fail to meet alternative % removal, we are in violation of a Treatment Technique.

Unregulated Contaminants (UCMR 5) - 2024
Tested (ND) Litium, PFBA, PFMPA, PFPeA, PFBS, PFMBa, PFEESA, NFDHA, 4:2FTS, PFHxA, PFPeS, HFPO DA, PFHpA, PFHxS, ADONA, 6:2FTS, PFHpS, PFOA, PFNA, PFOS, NCI-PF3ONS, PFDA, 8:2FTS, PFUnA, 11CI-PF3OUdS, PFDaA, NMeFOSAA, NeFOSAA, PFTTrDA, PFTA

Total Trihalomethanes (TTHM) and Haloacetic Acids (five) (HAA5)								
Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination	
TTHM (ppb)	2024	N	32	21 45	N/A	80	Byproduct of drinking water disinfection	
HAA5 (ppb)	2024	N	23	17 25	N/A	60	Byproduct of drinking water disinfection	

Radiological Contaminants							
Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	8/6/18	N	ND	N/A	0	15	Erosion of natural deposits
Beta/photon mitter(pCi/L)	8/6/18	N	ND	N/A	0	50*	Decay of natural and man-made deposits
Combined radium (pCi/L)	N/A	N	ND	N/A	0	5	Erosion of natural deposits
Uranium (pCi/L)	8/6/18	N	ND	N/A	0	20.1	Erosion of natural deposits

Inorganic Contaminants							
Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	2024	N	0.7 ppm	.68 - .80	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

Tested (ND) Antinomy, Arsenic, Berylium, Chromium, Cyanide, Mercury (inorganic), Selenium, Thalium, Barium, Iron, Manganese, Nickel.

Lead and Copper Contaminants							
Contaminant (units)	Sample Date	Your Water (90 th Percentile)	Number of sites found above AL	Range Low High	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90th percentile)	9/4/24	<0.050	0	<0.050 .076	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90th percentile)	9/4/24	<0.003	0	<0.003 <0.003	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

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 kcook@waynesvillenc.gov.

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, go to <https://pws-ptd.120wateraudit.com/waynesvillenc>

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 Town of Waynesville 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. If you are concerned about lead in your water and wish to have your water tested, contact Waynesville Water Treatment Plant, Supt. Kyle H. Cook.. 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>.

NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER TOWN OF WAYNESVILLE Did Not Meet Treatment Requirements

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we did (are doing) to correct this situation.

We routinely monitor your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. Normal turbidity levels at our plant are less than 0.3 nephelometric turbidity units (NTU). Water samples taken on October 8, 2024, showed levels of a maximum of 2.89 NTU. This was above the standard of 1 NTU. Because of the high level of turbidity, there was an increased chance that the water may have contained disease-causing organisms.

What should I do?

- There is nothing you need to do. You do not need to boil your water or take other corrective actions. 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 healthcare providers about drinking this water.

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.

What is being done?

We have repaired a defective chemical pump. We anticipate resolving the problem within the day.

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	System Name	System Address (Street)
Kyle H. Cook	WAYNESVILLE, TOWN OF	341 Rocky Branch Rd.
Phone Number	System Number	System Address (City, State, Zip)
(828) 820-7270	NC0144010	Waynesville, NC 28786

Violation Awareness Date: March 10, 2025

Date Notice Distributed: Distributed to wholesale customers on 3/31/25
Distributed to Waynesville customers via CCR

Method of Distribution: CCR

Public Notification Certification:

The public water system named above hereby affirms that public notification has been provided to its consumer in accordance with all delivery, content, format, and deadline requirements specified in 15A NCAC 18C .1523.

Owner/Operator: 
(Signature)

Kyle H. Cook
(Print Name)

3/31/25
(Date)



Town of Waynesville Annual Water Quality Report 2024

COMING SOON: Starting July 1, 2025, you will be able to view the Town of Waynesville annual water quality report online at <https://tinyurl.com/2024towquality>. This report contains important information about the source and quality of your drinking water. Please call 828-456-8497 if you would like a printed report delivered to your home.