

Town of Elkin
Water System ID# 02-86-020
Quality Water Report
2023 Annual Report

A Tradition of Quality

The Town of Elkin is pleased to present to our customers its 2023 Annual Water Quality Report. This report is designed to inform you about the quality water and service we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. Our water source is Elkin Creek. The water is treated at our 3 million gallon per day design plant.

As water travels over the land our underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants.

It's important to remember that the presence of these contaminants does not necessarily pose a health risk. Contaminants that may be present in source water include: (A) *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife (B) *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 (C) *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses (D) *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production.



The Town of Elkin routinely monitors for over 80 contaminants to make sure your drinking water is safe according to Federal and State laws. This table shows the results of the contaminants detected for the period listed.

In the following table you will find terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

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.

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

Maximum Contaminant Level (MCL) – The “Maximum Allowed” 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 (MCLG) – The “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.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of disinfectant in drinking water below which there is no known or expected risk to health.

Maximum Residual Disinfection Level (MRDL) - The highest level of a disinfectant allowed in drinking water.

Nephelometric Turbidity Units (NTU) - The measure for water clarity

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

TEST RESULTS

Contaminant (Unit)	Violation Y/N	Level Detected	High	Low	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants							2023
Turbidity (NTU)*	N	0.21	0.21	0.02	N/A	TT=1.0	Soil Runoff
		100%				TT = percentage of samples < 0.3	
Inorganic Contaminants							2023
Lead (PPM) Sampled: June 2021	N	<0.003 90 th Percentile	<0.003	<0.003	0	AL = 0.015	Corrosion of household plumbing systems; erosion of natural deposits
Copper (PPM) Sampled: June 2021	N	<0.050 90 th Percentile	<0.050	<0.050	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (PPM)	N	1.90	1.90	0.45	4.0	4.0	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Total Organic Carbon (TOC)							2023
Total Organic Carbon – Treated Water (PPM)	N	1.13***	1.60	1.00	N/A	TT	Naturally present in the environment
Disinfectant Residual Summary							2023
Chlorine (PPM)	N	1.459***	1.78	1.25	MRDLG = 4	MRDL = 4	Water Additive used to control microbes
Disinfection By-Product Contaminants							2023
TTHM [Total Trihalomethanes] (PPB)							By-product of drinking water chlorination
161 Interstate Way [B01]	N	63.7***	141.3	23.1	0	80	
West Highland Apts [B02]	N	45.3***	68.6	20.4	0	80	
HAA [Total Haloacetic Acids] (PPB)							By-product of drinking water chlorination
161 Interstate Way [B01]	N	21.7***	25.0	17.9	0	60	
West Highland Apts [B02]	N	22.2***	25.7	20.6	0	60	

* Turbidity is the measure of the cloudiness of the water. The Town monitors Turbidity because it is a good indicator of the effectiveness of our filter treatment system. The turbidity rule requires that 95% or more of the monthly samples must be below 0.3 NTU.

** Our water system used an Alternate Compliance Criteria (ACC) as the method used to comply with disinfectants/disinfection by-product treatment technique requirements. The treated water TOC is required to be less than 2.0 mg/l.

*** Running Annual Average.

Unregulated 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 regulations are warranted. During the year 2023, the Elkin Water Treatment Plant participated in EPA's Unregulated Contaminant Monitoring (UCMR5) program. The UCMR5 included a group of compounds called per- and polyfluoroalkyl (PFAS). PFAS are man-made chemicals that have been in use since 1940 and are found in many different consumer, commercial, and industrial products. They have been used to make nonstick cookware, water-repellent clothing, stain resistant fabrics and carpets, some cosmetics, some firefighting foams, and products that resist grease, water, and oil. PFAS are very persistent in the environment because they break down very slowly. A total of twenty-nine (29) contaminants were tested and all of the test results were reported as not present in the drinking water at the detection level.

What Does This Mean?

As you can see by the table, our system did not exceed any drinking water standards. We're proud that your drinking water meets or exceeds all Federal and State requirements.

We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the 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 1-800-426-4791.

MCLs are set at very stringent levels. To understand the possible health effects described for may regulated constituents, a person would have to drink 2 liters of water every date at the MCL level for a lifetime to have a one-in-a-million change of having the described health effect.

Lead In Drinking Water

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. The Town of Elkin is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Source Water Assessment

Everyone wants clean, safe drinking water and we assume this naturally resource will always be available to us. However, surface water sources (lakes, rivers, streams, reservoirs) can be threatened by many potential contaminant sources (PCS). These include urban storm water runoff, permitted wastewater discharges, runoff produced by agricultural activity and land clearing for development. The Public Water Supply Section of the NC Department of Environment Quality conducted a source water assessment of Elkin Creek, our source water supply. The source water assessment is a determination of the susceptibility of Elkin Creek's potential to become contaminated by potential contaminant sources. The susceptible rating is 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 watershed and its delineated assessment area). The rating of our source water is as follows:

Source Name	Inherent Vulnerability Rating	Contaminant Rating	Susceptibility Rating
Yadkin River	Higher	Moderate	Higher
Big Elkin Creek	Moderate	Lower	Moderate

This information was obtained from the SWAP report dated September 10, 2020. The complete SWAP Assessment report for the Elkin Water Treatment Plant may be viewed on the Web at: https://www.ncwater.org/?page=600&Action=Swap_Search. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this Annual Report 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@ncdenr.gov. Please indicate your system the water system name and 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 systems’ potential to become contaminated by PCS’s in the assessment area.

Special Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised person such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems 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)

Consumer Views Welcome

If you have any questions about this report or concerning your water utility, please contact us at 794-6464. We want our valued customers to be informed about their water utility. If you want to lean more, please attend any of the Town’s regularly scheduled meetings. They are held the second Monday of each month at 7:00 pm.

En Espanol

Este folleto tiene information importante acerca de la calidad del Aqua que provee la Ciudad de Elkin Si necesita mayor information acerca Del contendito de este folleto ll hamar al 835-9800, puede ayudarlo

