

Annual Drinking Water Quality Report for 2024
Village of Afton
105 Main Street
Afton, NY 13730
(Public Water Supply ID# NY0801738)

Introduction

To comply with State regulations, the Village of Afton Water Department is issuing an annual report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact **Mr. Bailey DeBetta, Superintendent of Public Works, at (607) 639-1903**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held the second Monday of each month at 7:00 p.m. at the Afton Community Center.

Where does our water come from?

In general, 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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amounts of certain contaminants in water provided by public water systems. The State Health Department and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves approximately 1000 people through 400 service connections. Our water sources are a groundwater well (with groundwater drawn from a single 133-foot deep drilled well) and six springs located off from NYS Route 41 on a protected 100-acre parcel of land owned by the village. Water flows from the springs via gravity to the Spring Water Treatment Plant where it is treated with a NSF approved liquid Sodium Hypochlorite solution (bleach) for disinfection. Water is pumped from the well into the Well Treatment Plant where it is treated with NSF approved liquid Sodium Hypochlorite solution (bleach) for disinfection, and Polyphosphate for manganese removal. The treated water from the springs typically flows via gravity to the distribution system where it connects to the line carrying treated water from the well. This water then flows to the two storage facilities (210,000-gallon concrete tank and 180,000-gallon covered reservoir).

Are there contaminants in our drinking water?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological, synthetic organic compounds, PFAS and 1,4-Dioxane. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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) or the Chenango County Health Department at (607-337-1673).

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Nitrate- Spring	No	12/13/23	0.30	mg/L	10	MCL = 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrate- Well	No	12/23/23	<0.20	mg/l	10	MCL = 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Lead ⁵	No	7/22	0.0012 ¹ (<0.0010-0.0017)	mg/L	0	AL= 0.015	Corrosion of household plumbing systems and service lines connecting buildings to water mains; erosion of natural deposits.
Copper	No	7/22	0.130 ¹ (0.019-0.170)	mg/L	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Barium - Well	No	5/31/22	0.141	mg/L	2	MCL = 2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride- Well	No	5/31/22	<0.2	mg/L	n/a	MCL = 2.2	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
Arsenic - Well	No	5/31/22	0.0018	mg/l	n/a	MCL= 0.01	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Total Trihalo-methanes	No	8/8/24	3.1	ug/l	n/a	MCL=60	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
Total Haloacetic Acids	No	8/8/24	12.8	ug/l	n/a	MCL=80	By-product of drinking water disinfection needed to kill harmful microorganisms.
Radiological Contaminants							
Gross Alpha (Well)	No	4/11/23	1.53	PCi/L	0	15	Erosion of Natural Deposits
Gross Beta (Well)	No	4/11/23	0.84	PCi/L	0	50 ³	Decay of natural deposits and man-made emissions.
Radium 228 (Springs)	No	4/11/23	0.33	PCi/L	0	5	Erosion of natural deposits.

Bacteriological Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Total Coliform Distribution System	No	7/10/24	1 positive ² sample	Positive/Negative	n/a	TT = 2 or more positive samples in one month	Naturally present in the environment
Total Coliform Raw Water Springs	No	7/15/24	1 positive ² sample	Positive/Negative	n/a	TT = 2 or more positive samples in one month	Naturally present in the environment
<i>E. coli</i> Raw Water Springs	No	7/15/24	1 positive sample	Positive/Negative	n/a	TT=No 4-4 log virus treatment	Human and animal fecal waste.

1-The level presented represents the 90th percentile of 10 tested sites. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. The action levels for lead and copper were not exceeded at any of the test sites. For more information about lead contact your local health department or www.epa.gov

2- The table showed that in 2024, we had detections of Total Coliform and *E. coli*. On July 10th 2024, one of the two monthly distribution system samples collected indicated the presence of Total Coliform. Then three repeat distribution samples and two repeat raw (untreated) samples were collected on July 15, 2024. Four of the repeat samples were negative for Total Coliform and *E. coli* and one repeat sample (the raw springs sample) was positive for Total Coliform and *E. coli*.

3- The State considers 50 pCi/l to be the level of concern for beta particles.

4- 4-Log treatment means the reduction of a specified proportion of viruses, bacteria, protozoa, or other organisms present in drinking water. This treatment level has been fulfilled by increased chlorine dosage in 2023.

5-Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. **The Village of Afton** 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 have questions about how to have your water tested, contact **The Chenango County Department of Health at 607-337-1673**. 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>

Definitions:

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.

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 (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.

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 contamination.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

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

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

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

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers longer than 10 micrometers.

What does this information mean?

As you can see by the table, on July 15, 2024 we found *E.coli* bacteria in the untreated(raw) water from our springs. As the *E.coli* positive sample was collected before the disinfection process and the other treated water samples collected the same day were negative for Total Coliform and *E. coli*, there was no Violation. However, this *E. coli* positive sample indicates the need for additional testing of our springs, which we may pursue in the future.

Is our water system meeting other rules that govern operations?

During 2024, our system was in compliance with most applicable State drinking water operating, monitoring and reporting requirements. We were issued a Notice of Violation for failing to have our springs and well tested for Nitrate in 2024. Since our water supplies were not tested for Nitrate during 2024, we cannot be certain of our water quality during that time. Nitrate samples were collected and analyzed in Jan. 2025 and were of an acceptable level.

INFORMATION ON LEAD SERVICE LINE INVENTORY

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by providing you with the following link:

https://www.health.ny.gov/environmental/water/drinking/service_line/

Important Information Regarding Lead:

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. **The Village of Afton** 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 have questions about how to have your water tested, contact **the Chenango County Department of Health at 607-337-1673**. 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>.

Important information regarding *E. coli* bacteria:

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Do I Need to Take Special Precautions?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

Why Save Water and How to Avoid Wasting It?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

Information for Non- English Speaking Residents

Spanish

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien

French

Ce rapport contient des infromations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

Closing

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.