Annual Drinking Water Quality Report for 2024
Village of Nunda
9510 Nunda Dalton Road, Nunda, New York, 14517
Public Water Supply ID#2501024

INTRODUCTION

To comply with State regulations, the Village of Nunda, will be annually issuing a 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 any maximum contaminant level (MCL) but did have a monitoring violation which is detailed below. 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 Troy Bennett, Chief Water Operator, 585-468-5983. 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 on the second Monday of each month, at 6:00 PM, at the Nunda Government Center, 4 Massachusetts Street, Nunda, New York 14517.

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. To ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the number of certain contaminants in water provided by public water systems. The State Health Departments 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 1,600 people through 636 service connections. Our water source is a man-made impoundment reservoir which is in the Town of Nunda. During 2024, our water system did not experience any restrictions from our water source. Prior to distribution, the water is received through two clarification tanks. Stern-Pac (a coagulant) is added to optimize settling. The gravity-fed multimedia filters remove the finer organic and inorganic matter and an optimum turbidity (clarity of water) is the result. The last stage of treatment is disinfection with chlorine. Chlorine is an oxidizing agent and is most widely used means of disinfection prior to distribution. Ortho-phosphates are added for corrosion control in the distribution system.

The total water produced in 2024 was 42,878,000 gallons. The daily average of water treated and pumped into the distribution system was 117,474 gallons per day. Our highest single day was 205,000 gallons on September 1, 2024. The amount of water delivered to customers was 28,247,294 gallons. This leaves a total of 14,630,706 gallons which was used to provide bulk water to customers, the Nunda Government Center, Village DPW Department, Village Water Treatment Plant and Waste Water Treatment (Sewer) Plant for capital project requirements, backwashing, flushing mains, fighting fires, storage, leakage, and accounts for the remaining 34.1% of the total amount produced. In 2024, water customers were charged $50.50 for the entire calendar year - for the minimum usage of 5,000 gallons per quarter; and $3.60 per 1,000 gallons of water over the minimum usage. The annual *average water* charge per service connection, less the debt service charge was $283.81, billed quarterly with an average of $70.95 (or monthly average charge of $23.65). These service charges are determined through 741 metered connections.

The New York State Department of Health has evaluated the Village of Nunda's water source susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraphs below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this Public Water Supply (PWS). This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

For the reservoir, located in the Town of Nunda, this assessment found an elevated susceptibility to contamination for this source of drinking water. The number of agricultural lands in the assessment area results in elevated potential for microbial and pesticides contamination. No permitted discharges are found in the assessment area. There is also considerable contamination susceptibility associated with other discrete contaminant sources, and these facility types include mines. Finally, it should be noted that hydrologic characteristics (e.g., basin shape and flushing rates) generally make reservoirs highly sensitive to existing and new sources of phosphorus and microbial contamination.

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 and synthetic organic compounds. 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. Some of our data, though representative, are more than one year old.

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 Livingston County Health Department at 585-243-7280.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Ave/Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MRDL, MCL, TT or AL)	Likely Source of Contamination
Chlorine Residuals Measured in Distribution							
Chlorine Residual	**No**	Daily	Range (0.80-1.44)	mg/l	N/A	MRDL=4.0	Water additive used to control microbes
Total Coliform	**No**	9/19	Present	N/A	0	TT=2 or more TC+	Naturally present in the environment
Contaminant	**Violation Yes/No**	**Date of Sample**	**Level Detected (Ave/Max) (Range)**	**Unit Measure-ment**	**MCLG**	**Regulatory Limit (MRDL, MCL, TT or AL)**	**Likely Source of Contamination**
Microbiological Contaminants							
Turbidity [(1)] (Raw)	No	Daily	**2.28 / 12.6**	NTU	N/A	N/A	Soil Runoff
Turbidity [(1)] (Treatment)	No	Daily	**0.046 / 0.105**	NTU	N/A	TT = 0.3	Soil Runoff
Turbidity [(1)] (Distribution)	No	5 per week	**0.121 / 0.28**	NTU	N/A	TT = 5	Soil Runoff and water pipe disturbance
Disinfection Byproducts							
Total Trihalomethanes	No	8/22/24	42	ug/L	N/A	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. Trihalomethanes are formed when source water contains organic matter.
Total Haloacetic Acids	No	8/22/24	11.1	ug/L	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.

Inorganic Contaminants							
Barium	No	10/7/24	.058	mg/l	2	MCL = 2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	No	10/7/24	ND	mg/l	N/A	MCL= 2.2	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Chloride	No	11/20/24	35.8	mg/l	N/A	MCL = 250	Naturally occurring or indicative of road salt contamination.
Sodium [(2)]	No	11/20/24	19.1	mg/l	N/A	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Nitrate	No	11/20/24	.56	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Unregulated Perfluoroalkyl Substances							
Perfluoro-n-butanoic acid (PFBA)	No	10/7/24	5.95	ng/L	N/A	No designated limits	Released into the environment from widespread use in commercial and industrial applications.
Lead and Copper							
Copper	No	9/26/2023	0.07[(3)] Range (0.027-0.076)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead	No	9/26/2023	2.3[(3)] Range (ND-2.7)	ug/l	0	AL = 15	Corrosion of household plumbing systems and service lines connecting building to water mains, erosion of natural deposits.

Notes:

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement, after treatment, for the year occurred on July 17, 2024 (0.105 NTU). State regulations require that turbidity, prior to distribution, must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU.

2 – Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets.

3 – The level presented represents the 90th percentile of the 10 sites tested. 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 values detected at your water system. The action level for lead was exceeded at one of the 10 sample sites tested.

Definitions:

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 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.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
N/A: Not applicable.
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).
Total Haloacetic acids (five) (HAA5): means the sum of the concentrations in milligrams per liter of five specific haloacetic acid compounds.
Total Trihalomethane (TTHM): means the sum of the concentration of trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromomethane (bromoform).

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no MCL violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements.

Although no action level for lead was exceeded, we are required to present the following information on lead in drinking water: *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. Alpine Manor 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 Alpine Manor. 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.*

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

We constantly test for various contaminants including coliform bacteria in the water supply to comply with regulatory requirements. A sample collected on September 19 tested positive for the presence of total coliform. The laboratory report was emailed to the LCDOH and had been received by the PWS on September 26, 2024. The total coliform positive sample was not initially reported to the LCDOH by the public water system and the required number of confirmation samples (three) were not collected in the required time frame (within 24 hours), resulting in a monitoring violation of the State Sanitary Code. Therefore we cannot be sure of the quality of the drinking water during those times with respect to total coliform, however, all other routine samples were negative for total coliform and none of our samples tested positive for E.coli.

Coliform bacteria are a group of bacteria that are commonly used as a measure of the sanitary quality of drinking water. The presence of a specific type of coliform known as *E.coli* is considered to be a potentially serious compromise to the sanitary quality. Bacteria in drinking water not only originate at the source, but also can be introduced through a variety of local distribution conditions.

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 at the Village Clerk office.

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).

INFORMATION FOR NON-ENGLISH-SPEAKING RESIDENTS

Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

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 several reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both necessities of life;
- Saving water reduces the cost of energy required to treat 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 firefighting 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 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.

CLOSING

The Village of Nunda Water Department continues its working collaboration with New York State Department of Conservation and the Livingston County Department of Health which has created a superb dynamic between personnel, processes, reporting requirements and increased functionality and safety measures of our municipal water source and Water Department.

This was the first year we added and ran an aerator near the inlet pipe at the reservoir. This added oxygen to the water and kept stagnant water to a minimum. This helped during heavy rain periods and with the hotter inclement weather. It also helped with our aesthetic issues of previous year. We will continue with this process moving forward.

In October of 2024 we sent out a mass mailing requesting residents to provide what material their water service line was made of. We had a successful response with approximately 50 still unknown. You can get access of this inventory at the Village Clerk's office.

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 our customers. Through collaboration with New York State Rural Water Association, the Village of Nunda continues to reduce loss of water by identifying leaks within the infrastructure and repairing our system. Continuous efforts are in place to monitor leakage through system checks. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

The Nunda Water Department asks that all our customers continue to help us protect our water sources, which is at the heart of the community. Please call our office at 585-468-2215 if you have questions or concerns.