Annual Water Quality Report for 2024
Village of Greenwich
6 Academy Street, Greenwich, NY 12834
(Public Water Supply Identification Number NY5700122)

INTRODUCTION
To comply with State regulations, the Village of Greenwich, 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. This report is 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 New York State standards. Our constant goal is and always has been, to provide to you 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 to protect our water resources. If you have any questions concerning this report or concerning your drinking water please contact: *Mr. Nicholas Casey, Water Treatment Plant Operator, 6 Academy Street, Greenwich, NY 12834; Telephone (518) 932-6071 or ncasey@villageofgreenwich.org*. We want our valued customers to be informed about their drinking water. If you want to learn more, please attend any of our regularly scheduled Village Board meetings. They are held on the 2nd Monday of each month, 7:00 PM at the *Community Center, 6 Academy Street*; *Telephone (518) 692-2755*.

WHERE DOES OUR WATER COME FROM?
The Village is served by three drilled wells located on Eddy Street, County Route 74 in the Village of Greenwich. Well #1 consists of a drilled well 56-feet deep with a 6-inch casing. The well was developed and used by the Village in 1957. Well #2 was also developed in 1957 and consists of a drilled well 55 feet deep with a 6-inch casing. Well #3 is a 60-foot drilled well with a 6-inch casing and was developed in 1980. All the wells are redeveloped and inspected on a rotating basis once every three years. The maximum peak daily demand for water in the summer months has reached 400,000 gallons. Pumping capacity for each well is approximately 185 gallons per minute. We have a 560,000-gallon storage tank located on Prospect Street in the Village to meet consumer demand and to provide adequate fire protection. Because our wells were designated as Ground Water Under the Direct Influence of Surface Water (GWUDI) we were required to install a filtration plant. We have a chlorine contact loop which increases the required contact time to provide adequate microbial disinfection. Our cartridge filtration plant consists of two filter vessels with a 5-micron filter followed by a 1 micron polishing filter. A 560,000-gallon storage allows us to meet consumer demand and to provide adequate fire protection. Two new wells have been drilled and will be tied into the treatment plant.

We have experienced lower pumping capacity on our wells at various times and need to increase our source capacity. We are under a judicial order from the New York State Department of Health Glens Fall District Office (NYSDOH GFDO). In addition, the transmission main from the treatment plant to the Village must be replaced. The deadline for completion of these projects was extended to December 31, 2023. Installation of two replacement wells 1R & 2R was completed and we are working with the Department of Health and our engineers to complete connection of these wells to the system and address the other needed system improvements. Construction to connect the 2 new wells to the system began March 2024 with completion some time in 2025.

We are under an Administrative Order from the NYSDOH to improve the distribution system. We have a project underway to replace old water mains along Bleeker St, Washington St, Van Ness St, Hill St, Academy St, Cottage St, Prospect St, Woodlawn St, and along Route 29. Pipeline from the water plant to the distribution system along Eddy St is also planned for replacement.

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 EPA prescribe regulations, which limit the amount of certain contaminants in water, provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

FACTS AND FIGURES
The Village provides water through 880 service connections to a population of approximately 2,000 customers. Our average daily demand is 229,222 gallons. Our single highest day was 350,000 gallons. In 2024 the Village pumped 83,666,000 gallons of water.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?
In accordance with State regulations, the Village of Greenwich routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, radiological contaminants, lead and copper, nitrate, volatile organic contaminants, haloacetic acids, trihalomethanes and synthetic organic contaminants. In addition, we test 2 samples for coliform bacteria each month. The table presented below depicts which contaminants were detected in your drinking water. The state allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old and is noted.

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 pose 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 New York State Department of Health Glens Falls District Office at (518) 793-3893.

WHAT DOES THIS INFORMATION MEAN?
As you can see by the table, our system had no violations. We have learned through our monitoring and testing that some contaminants have been detected; however, these compounds were detected below New York State requirements.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?
During 2024, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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 microbiological pathogens are available from the Safe Drinking Water Hotline (800-426-4791

INFORMATION ON LEAD SERVICE LINE INVENTORY

The Lead and Copper Rule Revisions (LCRR) requires every federally defined community and non-transient, non-community water system to develop a service line inventory (also called a lead service line inventory (LSLI)).

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.

The Village of Greenwich distribution system has some galvanized requiring replacement and unknown service lines. The complete inventory can be viewed by visiting the website at: https://www.health.ny.gov/environmental/water/drinking/service_line/NY5700122.htm

INFORMATION ON 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 Greenwich 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, Nicholas Casey (518) 321-0172, or ncasey@villageofgreenwich.org. 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*.

VILLAGE OF GREENWICH TABLE OF DETECTED CONTAMINANTS
Public Water Supply Identification Number NY5700122

Contaminant	Violation Y/N	Date of Sample	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants							
Barium Well#3 Raw	N	7/24/23	0.0884	mg/l	2	MCL=2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Barium Water Treatment Plant (WTP)		7/22/24	0.0952				
Chloride	N	7/24/23	33.6	mg/l	N/A	MCL=250	Naturally occurring or indicative of road salt contamination.
Chromium	N	7/24/23	2	µg/l	100	MCL=100	Discharge from steel and pulp mills; Erosion of natural deposits.
Copper Range of copper concentration	N	8/2/23 – 8/28/23	0.128[1] 0.0316-0.256	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead Range of lead concentration	N	8/2/23 – 9/28/23	3.0[2] ND-6.7	µg/l	0	AL=15	Corrosion of household plumbing systems and service lines connecting building to water mains, erosion of natural deposits
Manganese Well#3 Raw	N	7/24/23	107	µg/l	N/A	MCL=300	Naturally Occurring; Indicative of landfill contamination.
Manganese WTP	N	7/22/24	8.66				
Nickel Well#3 Raw	N	7/24/23	2.1	µg/l	N/A	N/A	Naturally Occurring
Nickel WTP	N	7/22/24	1.5				
Nitrate Well#3 Raw	N	7/24/23	0.776	mg/l	10	MCL=10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate WTP	N	7/22/24	0.800				
pH	N	7/24/23	7.50	units		6.5-8.5	Naturally Occurring
Sodium[3]	N	7/24/23	20.8	mg/l	N/A	(See Health Effects)[3]	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate	N	7/24/23	14.2	µg/l	N/A	MCL=250	Naturally occurring

Zinc	N	7/24/23	0.0061	mg/l	N/A	MCL=5	Naturally occurring; Mining waste
Radiological Contaminants							
Gross Alpha Activity (Including radium – 226 but excluding radon and uranium)	N	7/29/20	3.66	pCi/l	0	MCL=15	Erosion of natural deposits
Combined Radium – 226 and 228	N	7/29/20	0.385	pCi/l	0	MCL=5	Erosion of natural deposits
Microbiological Contaminants							
Highest Turbidity (Highest Turbidity)	N 95%	12/30/24	0.119[4]	NTU	N/A	TT=5 TT=95% of samples <1.0	Soil Runoff
Stage 2 Disinfection Byproducts)							
Chlorine (average) Range of chlorine residuals (based on daily testing)	N	Daily Testing	1.00 0.80-1.15	ppm	N/A	MCL=4	Used in the treatment and disinfection of drinking water
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	N	7/22/24	13.4	µg/l	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and di bromoacetic acid)	N	7/22/24	4.42	µg/l	N/A	MCL=60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Organic Carbon (quarterly samples 2024**)**							
Raw Water	N	Quarterly samples 2024	ND-3.31	mg/l	N/A	TT	Organic material both natural and man made

FOOTNOTES-

1. The level presented represents the 90th percentile of 10 test sites. The action level for copper was not exceeded at any of the 10 sites tested.
2. The level presented represents the 90th percentile of 10 test sites. The action level for lead was not exceeded at any of the 10 sites tested.
3. Water containing more than 20 mg/l should not be consumed by persons on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.
4. Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest-level detected. Our highest single turbidity measurement for the year 0.037 NTU occurred on State regulations require that entry point turbidity must always be below 1.0NTU. The regulations also require that 95% of the turbidity samples collected have measurements below 0.3 NTU. Although November 2023 was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.
5. Under the LT2 (Long Term Enhanced Surface Water Treatment Rule, small surface water or GUIDI systems could monitor for E. coli biweekly for 1 year instead of performing the more costly Crytosporidium/Giardia testing to determine treatment requirements for their water sources. An average E. coli concentration greater than 100/100 ml of sample would trigger Cryptosporidium and Giardia monitoring for 24 months.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.
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.
90th Percentile Value- The values reported for lead and copper represent the 90th percentile. 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
Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Action Level (AL) – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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.
Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
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
Locational Running Annual Average (LRAA): The LRAA is calculated by taking the average of the four most recent samples collected at each individual site
N/A-not applicable

WHAT IS THE SOURCE WATER ASSESSMENT PROGRAM (SWAP)?

To emphasize the protection of surface and ground water sources used for public drinking water, Congress amended the Safe Drinking Water Act (SDWA) in 1996. The amendments require that New York State Department of Health's Bureau of Public Water Supply Protection is responsible for ensuring that source water assessments are completed for all of New York's public water systems.

A source water assessment provides information on the potential contaminant threats to public drinking water sources:

each source water assessment will: determine where water used for public drinking water comes from (delineate the source areas)

- Inventory potential sources of contamination that may impact public drinking water sources
- Assess the likelihood of a source water area becoming potential contaminated

A SWAP summary for our water supply is attached to this report.

CAPITAL IMPROVEMENTS

In 2024 the following projects were completed:

- Installed 536 LF (Linear Feet) of 14-inch HDPE water main.
- Installed 3,224 LF 12-inch DI (Ductile Iron) pipe
- Installed 143 LF 10-inch HDPE pipe
- Installed 107 LF 8-inch HDPE pipe
- Installed 17,243 LF 8-inch DI pipe
- Installed 1,018 LF 6-inch DI pipe
- Installed 51 LF 4-inch DI pipe
- Replaced 339 service connections

Projects planned for 2025

- Connect new Wells 1R and 2R to the water system
- Install new chlorine pump
- With new wells coming on-line, existing Wells 1 &3 will serve as backup and Well 2 will be abandoned

WATER CONSERVATION TIPS

The Village of Greenwich encourages water conservation. There are a lot of things you can do to conserve water in your own home. Conservation tips include:

- Only run the dishwasher and clothes washer when there is a full load
- Use water saving showerheads
- Install faucet aerators in the kitchen and the bathroom to reduce the flow from 4 to 2.5 gallons per minute
- Water gardens and lawn for only a couple of hours after sunset
- Check faucets, pipes and toilets for leaks and repair all leaks promptly
- Take shorter showers

CLOSING

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit our customers. 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.

Greenwich Vi1lage
PWSID# NY5700122
Source Water Assessment Summary

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See section "[4]Are there contaminants in our drinking water?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The source water assessment has rated our wells as having an elevated susceptibility to microbials. These ratings are due primarily to the agricultural/pasture land use in the assessment area. In addition, the wells are high yielding wells that draw from an unconfined aquifer, which is a shallow aquifer that occurs immediately below the ground surface and has no overlying protective layer for protection from potential sources of contamination. While the source water assessment rates our well(s) as being susceptible to microbials, please note that our water is disinfected to ensure that that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

The county and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning and education programs. A copy of the full Source Water Assessment, including a map of the assessment area, is available for review by contacting us at the number provided in this report.