

# Annual Drinking Water Quality Report for 2022 Town of Glenville 18 Glenridge Road, Glenville NY 12302 Public Water Supply ID# 4600091 www.townofglenville.org Office (518) 688-1240



# Introduction

To comply with State regulations, the Town of Glenville annually issues 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 a maximum contaminant level. 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. David Ferris, Plant Operator at (518) 382-1410 (dferris@townofglenville.org) or Craig D'Allaird, Commissioner of Public Works at (518) 688-1246. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held on the 1<sup>st</sup> and 3<sup>rd</sup> Wednesdays of the month at 7:00 P.M. in the Glenville Municipal Center located at 18 Glenridge Road.

## 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 amount of certain contaminants in water provided by the public water systems. The State Department of Health and the F.D.A. enact regulations that establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water source is located west of the Village of Scotia between New York State Route 5 and the Mohawk River, actually a little west of the Route 5 and Van Buren Lane intersection. The Glenville water supply is taken from the Great Flats Aquifer (also known as the Schenectady Aquifer) through four drilled wells approximately 50-feet deep. The Great Flats Aquifer is one of the most productive in the State of New York and supplies the nearby Village of Scotia wells, the City of Schenectady well field, and the Town of Rotterdam wells. The aquifer is an extensive bed of sands and gravel underlying the Mohawk River channel. The Great Flats Aquifer produces clear, clean water without any major chemical constituents except the hardness.

Prior to distribution, the well water is given a disinfecting treatment with chlorination and pumped into a clear well where it is allowed contact time to disinfect before being pumped into the transmission and distribution system. As required by New York State Department of Health Regulations, a free chlorine residual of at least 0.2 mg/l is maintained throughout the distribution system as continued insurance against any bacterial growth occurring within the system. The N.Y.S. D.O.H. 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. The section of the report entitled, "Are there contaminants in our drinking water?" provides a list of the contaminants that have been detected. As mentioned earlier in this report, our drinking water is derived from 4-drilled wells. The Source Water Assessment has rated these wells as having an elevated susceptibility. In addition, the wells draw from an unconfined aquifer and the overlying soils are not known to provide adequate protection from potential contamination. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted above.

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A copy of this assessment, including a map of the assessment area, can be obtained by contacting us, as noted below.

While the source water assessment rates our well(s) as being susceptible to microbials, please note that our drinking water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

The Glenville Water District # 11 recognizes the importance of watershed protection by implementing Watershed Rules and Regulations along with zoning restrictions. In 2004, many of the water related sites in the Town of Glenville were fenced off and alarm systems added for increased security.

#### **FACTS AND FIGURES**

Our water system serves approximately 16,000 people through 6284 service connections. The total water produced in 2022 was 900,008,000 gallons. The daily average of water treated and pumped into the distribution system is 2,461,000 gallons per day. Our highest single day in 2022 was 4,386,000 gallons in July. The amount of water delivered to customers was 720,006,000 gallons. The 180+ million gallons difference is water that was used for firefighting, hydrant and system flushing and leaks in the system. In 2022, water customer charges were a minimum of \$40.00 for water usage of up to 30,000 gallons. Water usage above 30,000 gallons is charged \$2.35 per 1,000 gallons of water.

# Are there contaminants in our drinking water?

In accordance with State regulations, we routinely test your drinking water for numerous potential contaminants including: inorganic compounds, radiological contaminants, lead and copper, nitrate, volatile organic compounds, haloacetic acids, trihalomethanes and synthetic organic compounds. In addition, there were 180 microbiological samples taken throughout the system. We are required to collect 15 samples every month that are tested for coliform bacteria and free chlorine residual. The enclosed table 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 typically change little from year to year. Some of the data, though representative, is more than one year old.

All drinking water, including bottled water, may contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate 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 Schenectady County Health Department at (518) 386-2818.

In 2020, the town conducted sampling at 32 sites for lead. The 90<sup>th</sup> percentile for the lead tests was 0.002 mg/l. The sample results ranged from <0.001 mg/l to 0.003 mg/l. We comply with the state because less than 5 percent of the samples exceeded the .015 mg/l Action Level. In 2020, the town also conducted sampling at 32 sites for copper. The 90<sup>th</sup> percentile for the copper tests was 0.0873 mg/l. The sample results ranged from 0.022 mg/l to 0.139 mg/l. The Action Level for copper is 1.3 mg/l. In the summer of 2023, we will again test for lead and copper in our system.

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 Glenville 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

**PFOA/PFOS**, **1,4 Dioxane** In 2020 New York state adopted new MCLs of 10 ppt (parts per trillion) for PFOA 10 ppt for PFOS and 1 ppb (parts per Billion) for 1,4 Dioxane. Testing Began in October 2020. In 2021 testing was expanded to quarterly samples to be taken at the Entry point into the system. It was then changed from taking the sample at the entry point to sampling all sources (all four of our wells). All samples were at or below the MCLs set by the state. We will continue to monitor for these contaminants on a quarterly basis as Directed by the department of health. More information on New York States standards can be found at health.ny.gov/drinkingwater

Many test results were NON-DETECTABLE. In 2022, there were 59 volatile organic compounds undetected.

#### What does this information mean?

We have learned through our testing that some contaminants have been detected; however, these compounds were detected below New York State requirements. MCL's are set at very stringent levels.

As illustrated in the table, our monitoring and testing detected some contaminants: all our contaminants were below the maximum levels permitted by the State, known as the maximum contaminant levels (MCL).

# **DID WE HAVE ANY VIOLATIONS IN 2022?**

In 2022, The Town of Glenville received one PFAS monitoring violation. All analytes in the method 533 were not reported. Once concluded that the laboratory used was in error and failed to test for all analytes, corrective measures resolved this error and all subsequent reportings for the year were satisfactory.

#### 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 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; and
- 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 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 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.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes; if it moved, you have a leak.

#### **SYSTEM IMPROVEMENTS**

The Town is continuously auditing and planning improvements and updates to our treatment and distribution systems. In 2022, Clearwell #1 was relined to mitigate any leakage that was occurring. We have also upgraded communication systems between our storage tanks and our treatment plant. We are continuing our process of replacing commercial water meters with remoteread meters for more accurate readings and usage data. Currently we are looking into adding a tank mixer to the Extension 10 water tank to prevent ice buildup and interior tank deterioration. There are plans for more upgrades to the treatment plant in the coming future as well.

# **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office at (518) 688-1240 if you have questions.

Parameter	Sample Date	Violatio n (Y/N)	Level Detected	Units	MCL	MCLG	Likely Source of Contamination			
Inorganic Contaminants										
Nitrate	9/15/22	N	0.25	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits			
Barium	10/20/21	N	0.024	mg/l	2	2	Some people who drink water containing barium in excess of the MCL, over many years could experience an increase in their blood pressure.			
Lead Range of lead concentrations	9/2020	N	0.002 See note(2)	mg/L	AL=0.015	0	Corrosion of household plumbing systems.			
Copper (samples from 9/2020-10/2020) Range of copper concentrations	9/2020	N	0.0873 See note(3)	mg/L	AL=1.3	1.3	Corrosion of household plumbing systems.			
Secondary Inorganic Stand		1								
Hardness (CaCo3)	2/11/19	N	202(11.8gr. )	mg/l	N/A	N/A				
Sodium	8/16/22	N	29.0	mg/l	N/A see note (1)	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.			
Synthetic Organic Chemica	ıls									
PFOS Well#1	3/15/22	N	2.8	ppt	10	N/A	Released into the environment from widespread use in commercial and industrial applications			
PFOS Well#2	3/15/22	N	2.6	ppt	10	N/A				
PFOS Well#3	3/15/22	N	2.3	ppt	10	N/A				
PFOS Well#4	3/15/22	N	2.0	ppt	10	N/A				
PFOA Well#1	3/15/22	N	7.2	ppt	10	N/A				
PFOA Well#2	3/15/22	N	5.8	ppt	10	N/A				
PFOA Well#3	3/15/22	N	3.5	ppt	10	N/A				
1,4 Dioxane Well#1	3/15/22	N	0.27	ppt	1.0	0.02				
1,4 Dioxane Well#2	3/15/22	N	0.20	ppt	1.0	0.02				
1,4 Dioxane Well#3	3/15/22	N	0.20	ppt	1.0	0.02				
1,4 Dioxane Well#4	3/15/22	N	0.086	ppt	1.0	0.02				
PFOS Well#1	6/16/22	N	2.2	ppt	10	N/A				
PFOS Well#2	6/16/22	N	1.9	ppt	10	N/A				
PFOS Well#3	6/21/22	N	2.2	ppt	10	N/A				
PFOS Well#4	6/21/22	N	1.9	ppt	10	N/A				
PFOA Well#1	6/16/22	N	5.0	ppt	10	N/A				
PFOA Well#2	6/16/22	N	3.7	ppt	10	N/A				
PFOA Well#3	6/21/22	N	2.7	ppt	10	N/A				
PFOA Well#4	6/21/22	N	1.2	ppt	10	N/A	- - - -			
1,4 Dioxane Well#1	6/21/22	N	0.11	ppt	1.0	0.02				
1,4 Dioxane Well#2	6/21/22	N	0.074	ppt	1.0	0.02				
1,4 Dioxane Well#3	6/21/22	N	0.058	ppt	1.0	0.02				
PFOS Well#1	9/15/22	N	4.5	ppt	10	N/A				

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PFOS Well#2	9/15/22	N	3.7	ppt	10	N/A	
PFOS Well#3	9/15/22	N	4.1	ppt	10	N/A	
PFOS Well#4	9/15/22	N	4.1	ppt	10	N/A	
PFOA Well#1	9/15/22	N	4.7	ppt	10	N/A	
PFOA Well#2	9/15/22	N	10.0	ppt	10	N/A	
PFOA Well#3	9/15/22	N	7.4	ppt	10	N/A	
PFOA Well#4	9/15/22	N	4.1	ppt	10	N/A	
1,4 Dioxane Well#1	9/15/22	N	0.062	ppt	1.0	0.02	
1,4 Dioxane Well#2	9/15/22	N	0.12	ppt	1.0	0.02	
1,4 Dioxane Well#3	9/15/22	N	0.045	ppt	1.0	0.02	
PFOS Well#1	12/20/22	N	3.7	ppt	10	N/A	
PFOS Well#2	12/20/22	N	3.6	ppt	10	N/A	
PFOS Well#3	12/20/22	N	3.3	ppt	10	N/A	
PFOS Well#4	12/20/22	N	2.4	ppt	10	N/A	
PFOA Well#1	12/20/22	N	10.0	ppt	10	N/A	
PFOA Well#2	12/20/22	N	9.0	ppt	10	N/A	
PFOA Well#3	12/20/22	N	4.0	ppt	10	N/A	
PFOA Well#4	12/20/22	N	0.46	ppt	10	N/A	
1,4 Dioxane Well#1	12/20/22	N	0.25	ppt	1.0	0.02	
1,4 Dioxane Well#2	12/20/22	N	0.18	ppt	1.0	0.02	
1,4 Dioxane Well#2	12/20/22	N	0.18	ppt	1.0	0.02	
1,4 Dioxane Well#4	12/20/22	N	0.12	ppt	1.0	0.02	
Disinfection Byproducts							
Chloroform	7/21/22	N	5.70	ug/l	80	N/A	By-product of drinking water
Bromodichloromethane	7/21/22	N	6.40	ug/l	80		chlorination needed to kill harmful
Dibromochloromethane	7/21/22	Ν	7.10	ug/l	80		organisms. THMs are formed when
Bromoform	7/21/22	Ν	<u>3.00</u>	ug/l	80		source water contains large amounts
Total Trihalomethanes	7/21/22	N	22.20	ug/l	80		of organic matter.

- 1. Water containing more than 20 mg/l sodium should not be used for drinking water by people on severely restricted sodium diets.
- The level presented represents the 90<sup>th</sup> percentile of 32 test sites. The sample results ranged from <0.001 mg/L to 0.003 mg/L. The action level for Lead (0.015 mg/L) was not exceeded at any of the 32 sites.</li>
   The level presented represents the 90<sup>th</sup> percentile of 32 test sites. The sample results ranged from 0.022 mg/L to 0.139 mg/L. The
- action level for Copper (1.3 mg/L) was not exceeded at any of the 32 sites.

#### **Definitions:**

<u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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 that 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.

<u>Nephelometric Turbidity Unit (NTU)</u>: 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 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 that are longer than 10 micrometers.