

Annual Drinking Water Report for 2023

Glens Falls Water Supply

Public Water Supply ID# NY5600104

Introduction

The Glens Falls Water Department is issuing this annual report describing the quality of your drinking water. The purpose of this report is to improve your understanding of drinking water and your awareness of the need to protect our drinking water sources. 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. William Norton, Water and Sewer Superintendent, at 2 Shermantown Road, Glens Falls, New York, 12801 or call (518) 761-3850. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Water and Sewer board meetings. The meetings are in the Wastewater Treatment Plant Conference Room at 6 PM on the first Monday of each month. The Wastewater Treatment Plant is located at 2 Shermantown Road, Glens Falls.

Sources of Drinking Water

In general, sources of drinking water (both tap 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; radioactive contaminants. In order to ensure that tap water is safe to drink, the New York State Department of Health and the EPA prescribe regulations which limit the amounts of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations also establish limits for contaminants in bottled water which must provide the same protection for public health.

Where does our water come from?

The City of Glens Falls water sources include four separate reservoir systems. There are three gravity-fed systems and a fourth system that is pumped to our filtration plant. At the filtration plant site, two 2.3-million-gallon water storage tanks store the treated water. The storage of water in these tanks is essential to the proper disinfection of water and to maintain the operating pressure in our distribution system. Our water treatment plant has been in service since November of 2003 and continues to be fully operational. Sodium permanganate treatment is added to the raw (untreated) water at the Halfway Brook pumping station and at Upper Junction to reduce disinfection byproduct formation and to address seasonal taste and odor issues. In 2023 we began pre-filtration oxidation treatment with Hydrogen Peroxide to assist with the reduction of disinfection byproduct formation. The water treatment facility treats the water by adding a coagulant, passing it through sand filters and lastly adding a disinfectant and a phosphate inhibitor (for corrosion control), prior to pumping it to the storage tanks and into the distribution system. The City of Glens Falls has 2 interconnections with the Town of Queensbury for emergency use. We test the primary interconnection, located at our filtration plant, annually.

During the calendar year 2019 the water meters used by the Water Treatment Facility to account for raw water brought to the plant, treated by the plant, and delivered to the distribution system were all replaced. These are large meters, and a phased-in operation was employed. Meter installation was completed in late December 2019. With several new meters in the system, it was necessary to do calibrations on all meters as well as adding them to the SCADA system. This was accomplished throughout the first half of 2020. In the second half of the calendar year of 2020 the two water storage tanks located near the Water Treatment Plant were cleaned and painted. This project also included the replacement of several valves associated with the storage tanks. Again, because we did the maintenance on these tanks while the system was in full operation, it was accomplished in phases. This work was completed in November 2020.

In December of 2021 we began the work to rehabilitate the water treatment plant filters. The contractor began his work by removing the sand beds in Filters #4 and #5. The work that was completed included removal of all sand, full inspection of all valves, piping, struts, supports, air lines and all other components of each of the filters. When that was completed the filters, and the overhead ceiling were cleaned and painted before the new sand beds were placed back in each of the units. This work was completed during the Spring of 2022. In the latter part of 2023 water storage tank #1 was taken out of service for a small repair, cleaning and painting. The contractor completed his work in December of 2023 and the tank was placed back in service upon completion.

The NYS DOH has evaluated this water system's 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 System (PWS). This PWS provides treatment and regular monitoring to ensure that the water delivered to consumers meets all applicable standards.

This assessment found Halfway Brook Reservoir to have an elevated susceptibility to contamination for this source of drinking water. The amount of residential land cover in the assessment area results in elevated potential for microbials, (the growth of microorganisms such as algae). No permitted wastewater discharges are found in the assessment area. There are no contamination threats associated with other discrete contaminant sources. The assessment areas for Wilkie, Keenan, and Butler reservoirs contain no discrete potential contaminant sources. However, the high mobility of microbial contaminants in reservoirs results in this drinking water intake having medium-high susceptibility ratings for protozoa and enteric bacteria and viruses. 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.

The State Health Department will use this information to direct future source water protection activities. These activities may include water quality monitoring, resource management, planning, and education programs. A copy of the assessment can be obtained by contacting us, as noted above.

Facts and Figures

Our water system serves about 14,600 people through approximately 5,200 service connections. The total water brought to the water plant in 2023 was 898,133,480 gallons. The total amount of water sold to our customers in 2023 was 818.168 million gallons this is an increase of .275154 million gallons when compared to last year's demand. The total amount of water treated and delivered from the water plant was 860,493,050 gallons of water. The Daily Average of consumed water through the distribution system was 2.359.16 million gallons a day. The peak water usage month was May. The City's water production averaged 2.908.4 million gallons per day for that month. The maximum day's production of 3.4939 million gallons per day occurred on April 17, 2023. In 2023 water customers were charged \$1.545/100 cubic feet of water and a capital water charge of \$ 1.349 per \$1,000 of Assessed Value per year.

Are there contaminants in our drinking water?

As the State regulations require, we routinely test your drinking water for numerous contaminants. The contaminants tested for include total coliform, color, pH, chlorine residual, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, disinfection byproducts, 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, is more than one-year old.

It should be noted that all drinking water, including bottled water, may be reasonably expected to contain at least some small amounts of 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 New York State Department of Health Glens Falls District Office at (518) 793-3893.

The following charts are a list of the compounds we analyzed for and detected in your drinking water.

City of Glens Falls Table of Detected Contaminants							
Contaminant	Violation	Date of Sample	Level Ave/	Unit	MCLG	Regulatory Limit MCL, TT, AL	Likely Source of Contamination
	Yes/No		Max Range	Measurement			
Barium	No	2/8/2023	0.003	mg/l	2	2 = MCL	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Manganese	No	5/17/2023	0.072	mg/l	0.3	0.3	Naturally occurring; indicative of landfill contamination
Chloride	No	5/17/2023	9.5	mg/l	N/A	250= MCL	Naturally occurring or indicative of road salts
Sodium	No	5/17/2023	6.8	mg/l	N/A	20 Mg/l not to be used by people on restricted sodium diets	Naturally occurring and sixth most abundant element in the earth's crust; the most abundant anion (negative charge) in the hydrosphere.
Copper ¹	No	6&7-2023	0.156	mg/l	1.3	1.3=AL	Corrosion of household plumbing system; Erosion of natural deposits
		Range (0.0178-0.189)					
Lead ²	No	6&7-2023	<1.0	ug/l	0	15=AL	Corrosion of household plumbing systems; Erosion of natural deposits.
		Range (ND-2.4)					
Nitrate	No	2/8/2023	0.07	mg/L	10	10=MCL	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Synthetic Organic Contaminants							
1,4 Dioxane (Upper Junction)	No	2/22/2023	0.025	ug/l	1	N/A	Laboratory studies show that 1,4-Dioxane caused liver cancer in animals exposed at high levels throughout their lifetime. Whether 1,4 Dioxane causes cancer in humans is unknown. The USEPA considers 1,4 Dioxane as likely to be carcinogenic to humans based upon studies of animals exposed to high levels of this chemical over their entire lifetimes.
Turbidity ³	No	Annual Ave	0.032	NTU	>1	1-TT (WTP)	Clear well pump change-over caused by power interruption
Sample at Water Treatment Plant						Filters	
		Max. (5/27/2023)	0.08				
City of Glens Falls Table of Detected Contaminants							
Contaminant	Violation Yes / No	Date of Sample	Level Average/ Max Range	Unit Measurement	MCLG	Regulatory Limit MCL, TT, AL	Likely Source of Contamination
Turbidity ^{3a}	No	Annual Ave.	0.231	NTU	N/A	5	
From Distribution system		Max. (9/28/2023)	5.32				Soil run-off
Turbidity ^{3b} From Distribution system, highest month average	No	January	0.565	NTU	N/A	5	Soil run-off
Disinfection Byproducts							
<u>Stage 2 Total Trihalomethanes</u> ⁽¹⁾ Pruyn's Island	No	2/8/2023 5/17/2023 8/9/2023 11/8/2023	42.8 ⁴ (15.5 – 48.6) ⁵	ug/l	n/a	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
<u>Stage 2 Halo Acetic Acids</u> ⁽¹⁾ 175 Broad Street	No	2/8/2023 5/17/2023 8/9/2023 11/8/2023	31.5 ⁴ (9.3 – 44.5) ⁵	ug/l	n/a	60	By-product of drinking water disinfection needed to kill harmful organisms.

Unregulated Perfluoroalkyl Substances							
Perfluoropentanoic Acid (PFPEA)	No	4/05/23	2.0 (Halfway brook) 1.8 (Upper Junction)	ng/L	n/a	50,000 ng/L	Released into the environment from widespread use in commercial and industrial applications.
Perfluorobutanesulfonic Acid (PFBS)	No	4/05/23	1.8 (Halfway Brook)	ng/L	2,000 ng/L	50,000 ng/L	Released into the environment from widespread use in commercial and industrial applications.

UCMR5 Treatment Source and Distribution Samples for 2023

UCMR5	Lower Junction WTP	Lower Junction WTP	Lower Junction WTP	Lower Junction WTP	Units
Parameter	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
Date Collected	1/11/2023	4/5/2023	7/12/2023	10/11/2023	
Lithium	3.00	7.50	<9.0	7.50	ug/l
11Cl-PF3oudS	0.0018	0.0015	<0.0044	0.0015	ug/l
4:2 FTS	0.0011	0.00092	<0.0027	0.00089	ug/l
6:2 FTS	0.0018	0.0015	<0.0044	0.0015	ug/l
8:2 FTS	0.0018	0.0015	<0.0044	0.0015	ug/l
9CIPF3ONS	0.00074	0.00061	<0.0018	0.0006	ug/l
ADONA	0.0011	0.00092	<0.0027	0.00089	ug/l
HFPO-DA	0.0018	0.0015	<0.0044	0.0015	ug/l
NFDHA	0.00079	0.00061	<0.018	0.006	ug/l
Perfluorobutanesulfonic acid	0.0011	0.00092	<0.0027	0.00089	ug/l
Perfluorodecanoic acid	0.0011	0.00092	<0.0027	0.00089	ug/l
Perfluorohexanoic acid	0.001	0.00092	<0.0027	0.00089	ug/l
PFBA	0.0018	0.0015	0.0055	0.0015	ug/l
PFEESA	0.0011	0.00092	<0.0027	0.00089	ug/l
PFHpS	0.0011	0.00092	<0.0027	0.00089	ug/l
PFMBA	0.0011	0.00092	<0.0027	0.00089	ug/l

PFMPA	0.0015	0.0012	<0.0035	0.0012	ug/l
PFPeA	0.0011	0.00092	0.0045	0.00089	ug/l
PFPeS	0.0015	0.0012	<0.0035	0.0012	ug/l
Perfluorododecanoic acid	0.0011	0.00092	<0.0027	0.00089	ug/l
Perfluoroheptanoic acid	0.0011	0.00092	<0.0027	0.00089	ug/l
Perfluorohexanesulfonic acid	0.0011	0.00092	<0.0027	0.00089	ug/l
Perfluorononanoic acid	0.0015	0.0012	<0.0035	0.0012	ug/l
Perfluorooctanesulfonic acid	0.0015	0.0012	<0.0035	0.0012	ug/l
Perfluorooctanoic acid	0.0015	0.0012	0.0047	0.0012	ug/l
Perfluoroundecanoic acid	0.00074	0.00061	<0.0018	0.0006	ug/l
NEtFOSAA	0.00092	0.0015	<0.0045	0.0015	ug/l
NMeFOSAA	0.0016	0.0019	<0.0054	0.0018	ug/l
Perfluorotetradecanoic Acid	0.0019	0.0025	<0.0072	0.0024	ug/l
Perfluorotridecanoic Acid	0.0017	0.0022	<0.0063	0.0021	ug/l

City of Glens Falls Notes for the Table of Detected Contaminants:

- 1 – The copper level presented represents the 90th percentile of the 30 sites tested. A percentile is a value of 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 copper values detected at your water system. In this case, thirty samples were collected at your system and the 90th percentile value was the 0.135 mg/l value. The action level for copper was not exceeded at any of the sites tested in 2023.
- 2 – The level presented represents the 90th percentile of the thirty samples collected. The action level for lead was not exceeded at any site in 2023.
- 3 – 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. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU.
- 3a – Our highest single distribution system turbidity measurement for the year 2023 occurred on 3/17/2022 with a 2.66 NTU result. A violation occurs when the monthly average of the results of all distribution samples collected in any calendar month exceeds the MDL (5 NTU) rounded to the nearest whole number.
- 3b – Our highest monthly average for the distribution system in the calendar year 2022 occurred in the month of March with an average of 0.279 ntu.
- 4 – This level represents the highest locational running annual average (LRAA) calculated for each sample site during 2023.
- 5 – This represents the range of results for each sample site 2023.

DEFINITIONS:

Maximum Contaminant Level (MCL) –The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG)- The level of a contaminant in drinking water below which there is no known or expected risk to the 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, such as increased monitoring, which a water system must follow.

Locational Running Annual Average (LRAA)- Stage 2 of the Disinfection By-Products rule requires quarterly sampling for TTHM and HAA5 at specific distribution locations. The LRAA is the “rolling annual average” (four successive quarters) of those specific sites within the distribution system.

Secondary Standards: Established standards that are based on aesthetics and are not based on health risk. These contaminants may cause color, taste or odor problems but will not cause illness.

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

UCMR3- Unregulated Contaminant Monitoring Rule. The EPA is tasked with issuing a new list of no more than 30 unregulated contaminants once every 5 years. Data are collected to serve as a primary source of occurrence and exposure information. These results are reported in ug/l; 1 ug/l equals 1 ppb (part per billion). Note: “j” denotes estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

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.

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

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

Disinfection By-Products-(DBP) A contaminant formed by the reaction of disinfection chemicals (such as chlorine) with other substances in the water being disinfected.

What does this information mean?

The table shows that some constituents have been detected; however, none of these results were above the Maximum Contaminant Level (MCL) or the Maximum Contaminant Level Goal (MCLC).

Town of Queensbury Water 2023 Table of Detected Contaminants

Appendix B – Detected Contaminants

New York State Sanitary Code Compliance Monitoring Requirements

Regulated Contaminants Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit MCL	Likely Source of Contamination
Table 4A - Combined Filter Effluent Turbidity (5 filters)							
Turbidity 1	No	7/21/23	0.18	NTU	N/A	TT=<1 NTU	Soil Runoff
Turbidity 1	No	All 12 months	100%	%	100%	TT=95% of samples <0.3 NTU	Soil Runoff
Lead and Copper							
Copper	No	8/22/23	223 4-42	µg/l	1300 µg/l	AL – 1300 µg/l	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	8/22/23	3.5 4 ND – 17.3	µg/l	0	AL-15 µg/l	Corrosion of household plumbing systems; Erosion of natural deposits
Table 8B – Primary Inorganic Chemicals							
Barium	No	2/1/23	0.005	mg/l	2.0 mg/l	2.0 mg/l	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Table 8D – Secondary Inorganic Chemicals							
Sodium 2	No	2/2/23 5/2/23 12/7/23	20.0 2 18.6-22.2	mg/l	N/A	N/A	Naturally occurring, road salt, animal waste, sodium carbonate
Chloride	No	4/6/22	8.1	mg/l	N/A	250 mg/l	Erosion of natural deposits, water disinfection by-product
Manganese	No	4/6/22	6	µg/l	N/A	300 µg/l	Erosion of natural deposits
Sulfate	No	4/6/22	12.4	mg/l	N/A	250 mg/l	Erosion of natural deposits, Runoff from fertilizer
Zinc	No	4/6/22	0.004	mg/l	N/A	5.0 mg/l	Erosion of natural deposits
Iron	No	4/6/22	20	µg/l	N/A	300 µg/l	Erosion of natural deposits
Color	No	4/6/22	5	Unit	N/A	10	Organic Matter
Table 8C - Nitrates							
Nitrate	No	2/1/23	0.09	mg/l	10 mg/l	10.0 mg/l as Nitrogen	Erosion of natural deposits, Runoff from fertilizer
Total Trihalomethanes	No	Quarterly Samples 2/23, 5/23, 8/23, 11/23	63.8 – Highest running location annual averages 25.8 – 80.8 Annual Range	µg/l	N/A	80 µg/l	By-products of drinking water chlorination. THM's are formed when source water contains large amounts of organic matter.

**Long Term 2 Enhanced Surface Water Treatment Rule
(LT2ESWTR) ⁷**

Total Haloacetic Acids	No	Quarterly Samples 2/23, 5/23 8/23, 11/23	20.5 – Highest running location annual averages 7.7-24.0 Annual Range	µg/l	N/A	60 µg/l	By-products of drinking water chlorination. HAA5's are formed when source water contains large amounts of organic matter.
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Total Organic Carbon	No	Monthly	Annual Range 5 1.4-2.0 Average – 1.7	mg/l	N/A	TT	Naturally present in the environment
Giardia	No	Jan – Sept 2018	Range 0-21 Average 5.6	Total Count	N/A	N/A	Soil Runoff
Cryptosporidium	No	Jan – Sept 2018	0-1 Average 0.3	Total Count	N/A	N/A	Soil Runoff

UCMR 4⁹

Manganese (as per UCMR4)	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	4.3-6.8 Annual Range	ug/l	N/A	N/A	Erosion of Natural Deposits
Total Organic Carbon, Raw Water (as per UCMR4)	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	3.8-4.63 Annual Range	mg/l	N/A	N/A	Erosion of Natural Deposits

LRAA 1

HAA5	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	17.7-20.6 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct
HAA6Br	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	0.5-0.8 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct
HAA9	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	18.3-21.1 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct

LRAA 2

HAA5	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	16.2-20.0 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct
HAA6Br	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	<0.3-0.6 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct

HAA9	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	16.2-20.5 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct
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LRAA 3

HAA5	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	13.9-16.9 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct
HAA6Br	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	<0.3-1.0 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct
HAA9	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	13.9-16.9 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct

LRAA 4

HAA5	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	15.5-19.4 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct
HAA6Br	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	0.4-1.0 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct
HAA9	Quarterly Samples 3/13/19, 6/25/19, 9/12/19, 12/9/19	16.1-19.8 Annual Range	ug/l	N/A	N/A	Disinfection Byproduct

Town of Queensbury Notes:

1 - Turbidity is a measure of the cloudiness of the water. We measure it because it is a good indicator of the effectiveness of our filtration system. Our highest combined filter effluent turbidity measurement for the year occurred on 7/21/23 (0.18 NTU). State regulations require that combined filter effluent point turbidity must always be below 1.0 NTU. The regulations also require that 95% of the combined filter effluent point turbidity samples collected have measurements below 0.3 NTU. All levels recorded were well below the acceptable range allowed and did not constitute a treatment violation.

2 - Water containing more than 20 mg/l sodium should not be used for drinking by people on severely restricted diets. This represents 4.73 mg of sodium in one 8 fluid oz. glass of water.

3 – The level presented represents the 90th percentile of the 33 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 copper values detected at your water system. In this case, 33 samples were collected at your water system and the 90th percentile value was 22.0 µg/l. The action level for copper was not exceeded at any of the sites tested with the highest level being 42 µg/l.

4 – The level presented represents the 90th percentile of the 33 samples collected. The 90th percentile is equal to or greater than 90% of the lead values detected at your water system. In this case, 33 samples were collected at your water system and the 90th percentile value was 3.5 µg/L. Of the 33 samples taken 20 results were **NON-DETECT**. The highest level being 17.3 µg/l. ND (**NON-DETECT**) is any sample less than 1.0 µg/L.

5 - Total Organic Carbon is not regulated, but its calculated removal and compliance ratio must equal or exceed performance requirements established by the US-EPA. All levels recorded were well below the acceptable range allowed and did not constitute a treatment technique violation.

6 – Stage 2 of the Disinfection Byproduct Rule calculates the highest average at a single location-Location Running Annual Average (LRAA).

7- The Long Term 2 Enhanced Surface Water Treatment Rule was implemented by the US-EPA to monitor drinking water sources. Specifically, Giardia and Cryptosporidium which are highly resistant to traditional water treatment practices. Our system is required to test monthly for two years, starting October 2016. Please note that these results are prior to any water treatment. For more information, please review the US-EPA website.

- 8- In 2015, we were required to collect and analyze drinking water samples under the Unregulated Contaminant Monitoring Regulation 3 (UCMR3). The contaminants currently do not have a maximum contaminant level but are being tested for future regulations. More information can be found on the EPA website under UCMR3.
- 9 - In 2019, we tested according to Unregulated Contaminant Monitoring Rule 4 (UCMR4). Similar to UCMR3, the contaminants currently do not have a maximum contaminant level.
- 10- In 2023, we tested according to Unregulated Contaminant Monitoring Rule 5 (UCMR5). Similar to UCMR4, the contaminants currently do not have a maximum contaminant level.

INFORMATION ON LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. *The City of Glens Falls* 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

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 the level allowed by the State.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2023, our system was in compliance with applicable State drinking water operating, monitoring, and reporting requirements.

INFORMATION ON CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water and ground water under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immune-compromised people are at greater risk of developing life-threatening illnesses. We encourage immune-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

INFORMATION ON GIARDIA

Giardia is a microbial pathogen present in varying concentrations in many surface waters and ground water under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand washing practices are poor.

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 treating your water, both of these items directly affect your water rates.
- Saving water reduces the cost of energy required to pump water and the need to construct costly new sources, pumping systems and water tanks.
- 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 you are brushing your teeth.

- c. 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.
- d. 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.
- e. Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, read the meter number, you then check the meter after 15 minutes, if it moved, you have a leak.
- f. When watering your lawn or garden, consider using a rain gauge or empty soup cans to measure how much water you are applying and make sure you are not wasting water by over-watering.

Cross Connection Control

The Water Department has increased monitoring for cross connections between possible sources of contamination and the public water supply. Cross-connections may constitute a serious public health hazard. There are numerous, well documented cases across the country where cross connections have been responsible for contamination of drinking water or have resulted in the spread of disease. Cross connections are permanent or temporary physical connections created by users between potable drinking water and anything which can pollute or contaminate the water supply. We are currently focusing on the larger water users, and users where we feel a higher risk of cross connections may exist. More information is available at www.cityofglensfalls.com in the Water & Sewer Folder under the documents tab.

System Improvements

With the full operation of the water filtration plant, there is a reduced risk of Giardia and Cryptosporidium in our drinking water; filtration has reduced the disinfection byproducts as well. In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make further improvements to the water system, and the cost of these improvements may be reflected in water rates. Recent improvements include installation of new water mains on Warren Street (2005), Glen Street (2006) and Bay Street (2009). These improvements, and others like them, strengthen the water supply system and provide a greater potential for providing adequate water flow and pressure in the case of a fire.

In 2015, the City of Glens Falls began testing and operation of the interconnect between the City and the Town of Queensbury. Several tests were conducted in the fourth quarter of 2015 and the interconnect and chlorine booster station were found to be functional and ready for future use.

In 2016, the City of Glens Falls installed a new balancing valve at the water storage tank site. This allowed for both storage tanks to be drained, cleaned, and inspected so that a detailed plan for rehabilitation and painting of the tanks can be prepared.

In 2017 the City completed a computer model of the water system which will help to identify problem areas and improve water flow for firefighting.

In 2020, the City completed the rehabilitation of the water storage tanks located near the water treatment plant. The rehabilitation includes the cleaning and painting of both tanks (inside and out), as well as replacing several valves located in the same general area.

In 2021, the City began the rehabilitation of its water filtration plant which includes the removal and replacement of sand in each of the five filters, examination and repair or replacement of various components within the filters, cleaning and painting of the ceiling areas in the filter wing and painting of other areas in or near the filters. Simultaneously, the office area and control room areas were also painted, and various pieces of monitoring equipment are in the process of being updated and replaced.

Current or scheduled projects include water filtration plant optimization study, GPS mapping of the water system, upgrades to older fire hydrants and a leak detection program.

In 2022 and 2023 the City completed the overhaul of the water treatment plant and the upgrade of equipment within the facility. In accordance with requirements from the USEPA and the NYS DOH, we have begun to take an inventory of all piping materials utilized within the distribution system delivering water to our customers. This work will continue until we have completed the full system and must be completed by October 16, 2024. Following the completion of the inventory, we will begin the process of removing any part of the system that is found to contain lead.

Closing

Thank you for allowing us to provide you and your family with quality drinking water this year. Please call our office if you have any questions or comments.

This Annual Water Quality Report was prepared on behalf of the City of Glens Falls by DCK Services LLC