

# 2023 Annual Water Quality Report of the Gloversville Board of Water Commissioners

## This report is a requirement of the EPA and is distributed each year.

**A note from the Gloversville Board of Water Commissioners: Commissioner Matthew Capano, President, Commissioner Timothy White, Vice Pres., Commissioner Gary J. Antonucci, Commissioner Christopher Satterlee, Commissioner James Chittenden.** We are proud to distribute our Annual Water Quality Report (AWQR) to the citizens of Gloversville and the surrounding areas to whom we supply continuous, safe, sanitary and high-quality pure water.

**IMPORTANT WATER CONSERVATION AND CONSUMER COST REDUCTION INFORMATION:**

Many times, during the year we speak with unhappy customers whose water / sewer bills have gone up unexpectedly. In almost every case a leak called a "silent leak" in the toilet tank or a toilet handle that has to be "jiggled" is responsible. The silent leaks are caused by a worn-out rubber flapper seal in the toilet tank or a faulty float shut off, also found in the tank. The most common float shut off is the long arm with the big ball at the end. The handle that needs to be jiggled can also be traced back to the flapper seal. Silent Leaks and a faulty flush handle can cost hundreds of dollars per year. All of these problems have an easy solution with parts available in most of the local hardware stores and also chain stores that carry hardware. Even if a plumber is needed, the job will most likely pay for itself within the next bill or two. We offer a free toilet tank dye test that will indicate if you are experiencing a Silent Leak or not. Please stop down and pick up your free test.

**Water Loss in Gallons**

Leak this Size	Loss per Day	Loss per Month
•	120	3,600
••	360	10,800
•••	693	20,790
••••	1,200	36,000
•••••	1,920	57,600
••••••	3,096	92,880
•••••••	4,296	128,980

Another waste of money and water is a leaky or dripping faucet on your sinks, tub or outside hoses. The table to the right indicates how many gallons can be wasted due to a leak similar in size to the dots in the chart. It is certainly surprising that a leak that is as little as the first dot can waste 3,600 gallons per month and remember we bill every six months. This little leak can cost as much as \$300 per year. If the hot water is leaking, then the cost of fuel added in could double your cost. We also encourage all our customers to sign up for the Water-Smart portal which offers instant leak alerts, water usage tracking, step by step leak detection videos, e-billing, etc. This portal can help reduce any excessive water bills caused by what is listed above. For more information on how to sign up please contact our office at 518-773-4520.

**Annual water usage and Financial Statement**

The total amount of water delivered to the city during the year was 602,520,000 gallons; an average daily use of 1,650,739 gallons (based on 365 days in 2023). Of this amount, 63,227,362 gallons were used for manufacturing purposes, with an average daily use of 207,424 gallons (based on 300 working days in the year). The amount used for domestic and commercial consumption was 357,985,042 gallons, with an average daily use of 980,780 gallons (based on 365 days in 2023). During the year, the daily average use per capita for all public and domestic was 64 gallons based on a population of 15,300.

The remaining amount was consumed in uses such as, hydrant flushing, hydrant testing, street cleaning, sewer flushing, firefighting, fire department training, ice skating rink, water leaks, industrial-commercial developments under construction and semi-annual testing of sprinkler systems by insurance carriers. city departments were furnished water for all purposes without charge. This includes city hall, all department of public works buildings, street and sewer flushing, fire department, parks department, and transit system.

Annual revenues for the year 2023 were \$3,271,838.02 and the average consumer cost of 1000 gallons of water was \$3.02.

**State Inspection Findings:**

1. All water entering the system from the filtration plant was of sanitary quality.
2. **System Description**

The Gloversville Water Works water delivery system is comprised of 3 basic components.

- Reservoirs and Watersheds
- Treatment
- Distribution and pure water storage.

**Reservoirs and Watersheds****Total untreated water in storage****935,000,000 Gallons****Treatment Plant**

The treatment plant was built in 1939 and has been upgraded several times to maintain its capacity to treat and produce high quality potable water at the rate of 12 million gallons per day. Untreated water is allowed to flow to the treatment plant where it is treated and filtered. First, the water undergoes poly aluminum chloride coagulation to aid in the filtering process and is then treated with soda ash for pH control, sodium hexametaphosphate to protect the pipes and plumbing within the system, fluoride is added to improve oral health, and chlorine is added to sanitize the water before it enters the distribution system. The treatment plant operates the only State certified commercial bacteriological laboratory in Fulton, Montgomery, and Hamilton counties.

**Pure and Treated Water Storage****Total Pure water in storage****4,552,000 Gallons**

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 human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water sources include, Jackson Summit Reservoir, Cameron Reservoir and Dixon Pond, all located in the Town of Mayfield, Rice Reservoir and Port Reservoir located in the Town of Johnstown and Lake Edward Reservoir located in the Town of Bleeker.

**Analytical Results**

Our water has been tested for **27 inorganic compounds, 54 volatile organic compounds, nitrate, nitrite, 50 synthetic compounds, 6 radiological elements, lead and copper, disinfection by-products, PFOA and 1,4-Dioxane, and Absteos.** We also test our water daily for **pH, alkalinity, hardness, iron, color, and turbidity.** 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. Therefore, some of the data, though representative of the water quality, is more than one year old. The table on page 3 depicts the compounds that were detected. Many of the test results were **NON-DETECTABLE.**

**Contaminants:**

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).

Unregulated Contaminant Monitoring 4 was conducted during 2022. This is a requirement of the 1996 Safe Drinking Water Act amendments. This monitoring provides a basis for future regulatory action to protect public health. The number in parentheses refers to the number of analytes measured for a total of 32 analytes. The breakdown of analytes is as follows: semi volatile organic chemicals (3), pesticides and pesticide manufacturing byproduct (9), metals (2), alcohols (3), cyanotoxin chemical contaminants (10), brominated halo acetic acid groups (3) and indicator compounds (2). There are no associated MCL's for these compounds currently, with the exception of Manganese. We have listed those compounds that were detected in the table of Detected Contaminants for Gloversville.

**GLOVERSVILLE WATER WORKS TABLE OF DETECTED CONTAMINANTS**  
**Public Water Supply Identification Number NY1700018**

Contaminant	Violation Y/N	Date of Sample	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Turbidity	N	3/3/23	0.15 <sup>1</sup>	NTU	N/A	TT=1.0 NTU	Soil runoff
						100%	
<b>Inorganic Contaminants</b>							
Chloride	N	6/19/23	7.07	mg/l	N/A	250	Geology; Naturally occurring
Copper	N	7/26/23-7/31/23	0274 <sup>2</sup>	mg/l	1.3	AL=1,3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Range of copper concentrations			0.0219-0.402				
Lead	Y	7/26/23-7/31/23	15.5 <sup>3</sup>	µg/l	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Range of lead concentrations			ND-0.0487				
Manganese	N	6/19/23	8.47	µg/l	N/A	MCL=300	Geology; Naturally occurring
Nitrate	N	6/19/23	0.202	mg/l	10		
Odor <sup>4</sup>	Y	6/19/23	4	units	N/A	MCL=3	Natural sources
Odor <sup>4</sup>	N	7/24/23	2				
pH	N	6/19/23	7.36	units	N/A	6.5-8.5	
Sodium <sup>5</sup>	N	6/19/23	7.34	mg/l	N/A	N/A	Geology; Road Salt
<b>Stage 2 Disinfection Byproducts (quarterly samples)</b>							
Halooacetic Acids (HAA5) average <sup>6</sup> (range of values)	N	2/8/23 5/16/23	25.97 1.26-44.2	µg/l	N/A	60	By-product of drinking water chlorination
TTHM [Total Trihalomethanes] average <sup>6</sup> (range of values)	N	8/1/23 11/1/23	57.45 15.2-66.6	µg/l	N/A	80	
Chlorine (continuous monitoring) average Range of chlorine residuals	N	daily testing	1.1 0.9-1.36	mg/l	MRDLG 4	MRDL 4	Used in the treatment and disinfection of drinking water
<b>Total Organic Carbon<sup>7</sup> (monthly samples)</b>							
Finished Water	N	2023	ND-1.9	mg/l	N/A	TT	Organic material both natural and man made; decaying vegetation.
<b>Unregulated Contaminant Monitoring Rule 5 Detected Contaminants (quarterly samples)</b>							
Lithium	N/A	7/18/23	9.02	µg/l	N/A	N/A	Erosion of natural deposits Released into the environment from widespread use in commercial and industrial applications.
PFBA	N/A	7/18/23	1.8	ng/l	N/A	N/A	
HFPO-DA	N/A	10/3/23	2.3				
ADONA	N/A	10/3/23	2.5				

**Footnotes-**

- Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest level detected. We also measure turbidity in the distribution system 5 times a week with 0.2 NTU being the average.
- The level presented represents the 90<sup>th</sup> percentile of 30 test sites. The action level for copper was not exceeded at any of the 30 sites tested.
- The level presented represents the 90<sup>th</sup> percentile of 30 test sites. The action level for lead was exceeded at 4 of the 30 sites tested.
- The 1<sup>st</sup> odor sample was greater than the MCL but the resample was below the MCL and the average of the two values was 3 units and not an MCL violation.
- Water containing more than 20 mg/l should not be consumed by persons on severely restricted sodium diets
- The average is based on a Locational Running Annual Average (LRAA). The average shown is the highest LRAA for the 4 sites monitored in 2023. The highest LRAA for the HAA5s was in the 4<sup>th</sup> quarter of 2023 while the highest LRAAs for the TTHMs was in the 1<sup>st</sup> quarter of 2023.
- The Interim Enhanced Surface Water Treatment Rule (IESWTR) requires monitoring of raw and finished water Total Organic Carbon (TOC). Depending on the raw water alkalinity value, proper water treatment should remove between 15% to 35% of the raw water TOC thus reducing the amount of disinfection byproducts produced.

**Glossary of Terms**

*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 (µg/l)* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*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.

*90<sup>th</sup> Percentile Value*- The values reported for lead and copper represent the 90<sup>th</sup> 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 90<sup>th</sup> percentile is equal to or greater than 90% of the lead and copper values detected at your water system

*Action Level* - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.

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

*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.

*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*

### **Information on Cryptosporidium**

Cryptosporidium is a microbial pathogen found in a surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. During September 2017 through August 2019, as part of our sampling plan, 24 samples of our Raw collected was presumed positive for Cryptosporidium and was confirmed positive. Therefore, our monitoring indicates the presence of Cryptosporidium in our source water. Current test methods do not allow us to determine if the organism is dead or if they can cause disease. 23 additional source water samples did not show the symptoms of infection include, nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection.

### **Information on Giardia**

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. During September 2017 through August 2019, as part of our sampling plan, 24 samples from our Raw Reservoir source water were collected and analyzed for Giardia cysts. Of these samples, 4 were confirmed positive for Giardia cysts. Therefore, our monitoring indicates the presence of Giardia in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. 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 handwashing practices are poor.

Testing was performed by JH Consulting Group, PO Box 705, Newtonville, NY 12128 using NYS DOH certified labs #10248, 11216, 10350 and 10917

### **Information on Fluoride Addition**

Our system is one of many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.6 to 0.8 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires we monitor fluoride levels on a daily basis. During 2022, monitoring showed fluoride levels in your water were in the optimal range 100% of the time. None of the monitoring results showed fluoride levels that approach the 2.2 mg/l MCL for fluoride.

### **Information on Lead**

The Gloversville Water Department found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and children 6 years and younger. Please read this notice closely to see what you can do to reduce lead in your drinking water. Health Effects of Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development. Sources of Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The primary source of lead exposure for most children is lead-based paint. Other sources of lead exposure include lead-contaminated dust or soil, and some plumbing materials. Lead is found in some toys, some playground equipment, some children's metal jewelry, and some traditional pottery. Although most lead exposure occurs when people eat paint chips and inhale dust, or from contaminated soil, exposure to lead can come from lead in drinking water. Lead is rarely found in source water but enters tap water through corrosion of plumbing materials. Homes built before 1988 are more likely to have lead pipes or lead solder. However, new homes are also at risk: even legally "lead-free" plumbing may contain up to 0.25% lead on a weighted average. The most common is with brass or chrome-plated brass faucets and fixtures which can leach significant amounts of lead into the water, especially hot water. Exposure to lead is a significant health concern, especially for young children and infants whose growing bodies tend to absorb more lead than the average adult. Although your home's drinking water lead levels were below the action level, if you are concerned about lead exposure, parents should ask their health care providers about testing children for high levels of lead in the blood. Steps You Can Take to Reduce Your Exposure To Lead In Your Water 1. Run your water to flush out lead. Before drinking, flush your home's pipes for several minutes by running the tap, taking a shower, doing

laundry, or doing a load of dishes. The amount of time to run the water will depend on whether your home has a lead service line or not, and the length of the lead service line. Residents should contact their water utility for recommendations about flushing times in their community. 2. Use cold water for cooking and preparing baby formula. Do not cook with or drink water from the hot water tap, lead dissolve more easily into hot water. Do not use water from the hot water tap to make baby formula. 3. Do not boil water to remove lead. Boiling water will not reduce lead. 4. Replace your plumbing fixtures if they are found to contain lead. Plumbing materials including brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. The law previously allowed end-use brass fixtures, such as faucets, with up to 8 percent lead to be labeled as "lead free." As of January 4, 2014, end-use brass fixtures, such as faucets, fittings and valves, must meet the new "lead-free" definition of having no more than 0.25 percent lead on a weighted average. Visit the National Sanitation Foundation website at: [http://www.nsf.org/newsroom\\_pdf/Lead\\_free\\_certification\\_marks.pdf](http://www.nsf.org/newsroom_pdf/Lead_free_certification_marks.pdf) to learn more about lead-containing plumbing fixtures and how to identify lead-free certification marks on new fixtures. 5. Use bottled water or use a water filter. If your home is served by a lead service line, and/or if lead containing plumbing materials are found to be in your home, you may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or visit <http://www.nsf.org/consumer-resources/what-is-nsf-certification/faucets-plumbingcertification/lead-older-homes>, for a consumer guide of approved water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality. Any measure you take to reduce your exposure to lead should be continued until the lead source(s) has been minimized or eliminated. Should you test your water for lead? If lead-containing plumbing materials are identified in your home, you may want to consider testing your water for lead to determine how much lead is in your drinking water. To access information on service type for your home please visit our website at [www.gloversvillewater.com](http://www.gloversvillewater.com) and click on link "service type" and type in your address. You can also call our office at 518-773-4520 to find out how to get your water tested for lead. Should your child be tested for lead? New York Public Health Law requires primary health care providers to screen each child for blood lead levels at one and two years of age as part of routine well-childcare. In addition, at each routine well-child visit, or at least annually if a child has not had routine well-child visits, primary health care providers assess each child who is at least six-months of age, but under six years of age, for high lead exposure. Each child found to be at risk for high lead exposure is screened or referred for lead screening. If your child has not had routine well-child visits (since the age of one year) and you are concerned about lead exposure to your child, contact your local health department or healthcare provider to find out how you can get your child tested for lead. What Happened? What is Being Done? The Gloversville Water Works sampled 30 homes with lead service line supplying the house throughout the city as per NYS DOH requirements. Results were received on September 21st, 2023, and it was found that 4 out of the 30 samples had elevated lead levels. Additional possible sources for contamination were interior plumbing and water fixtures. The Gloversville Water Works remains committed to providing safe and potable drinking water to all our residents. Since 2017 we have been replacing lead line services throughout the city working under a NYS DOH grant to do so. We have also pursued funding through the Bi-Partisan Infrastructure bill that was passed to continue to replace lead line services. Our goal is to completely eradicate lead service lines from our distribution system. Additional samples are being done to determine if a different corrosion control treatment process is necessary to prevent lead leaching from the pipes. An additional 120 lead samples will be taken for increased monitoring and evaluation. More information will be provided to the residents after the next set of sampling has been concluded. To see what type of service is supplying your home please visit [www.gloversvillewater.com](http://www.gloversvillewater.com) and click on "service type". Enter your address to find out what type of material is supplying your home. If you experience any issues doing so you can contact our office for this information at 518- 773-4520. Dating back to 1992, this is the first time Gloversville has exceeded the action level for lead monitoring. Apart from changing sample sites for lead monitoring over the years we have yet to discover any cause of the action level exceedance which is why additional testing will be done in 2024. For More Information Call us at 518-773-4520 or visit our website [www.gloversvillewater.com](http://www.gloversvillewater.com). For more information on lead in drinking water, contact your local health department New York State Department of Health, Herkimer District Office at 315-866-6879 or the New York State Department of Health directly by calling the toll-free number (within New York State) 1-800-458-1158, extension 27650, or out of state at (518) 402-7650, or by email at [bpwsp@health.state.ny.us](mailto:bpwsp@health.state.ny.us). For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's Web site at [www.epa.gov/lead](http://www.epa.gov/lead), or call the National Lead Information Center at 1-800-424-LEAD.

### **Do I Need to Be Concerned About My Water?**

Although our drinking water met or exceeded state and federal regulations it should be noted that 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 about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

**Public Participation** We encourage the public to become informed about their drinking water. The Gloversville Board of Water Commissioners meets on the second Tuesdays of each month, at 6:00 PM, unless otherwise noted, at their office at 67-73 South Main Street in Gloversville. The public is encouraged to attend.

For additional information concerning this report, please contact Anthony Mendetta, Superintendent, Gloversville Water Works, (518)-773-4520 ext. 1000, Email at: [amendetta@gloversvillewater.com](mailto:amendetta@gloversvillewater.com), Safe Drinking Water Hotline, 1 800-426-4791 or NYSDOH Herkimer District Office (315)866-6879.



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