

**Annual Drinking Water Quality Report for 2023  
City of Plattsburgh Water System  
Plattsburgh, New York  
(Public Water Supply NY#0900217)**

**INTRODUCTION**

To comply with State and Federal regulations, we annually issue a report describing the quality of your drinking water. The purpose of this report is to enhance your understanding of drinking water and increase 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 concerns about your drinking water, please contact Mike Stoutenger, Chief Plant Operator at (518) 563-1188 or Jonathan P. Ruff, P.E. at 518-563-7731. The Mayor and Members of the Common Council hold meetings every Thursday evening at 5:30 p.m. in the Common Council Chambers at City Hall.

**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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: pesticides, herbicides, microbial, organic, inorganic, chemical and radioactive. 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 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 the public's health.

The City of Plattsburgh utilizes three upland gravity surface water sources (Mead Reservoir, WestBrook Reservoirs and the Saranac River) to supply drinking water to the City of Plattsburgh users. The two reservoirs are located approximately five miles west of the City of Plattsburgh, located near the intersection of Rand Hill Road and Route 374. Water taken from the reservoirs is piped to the City's water filtration plant located west of the city limits on New York State Route 3, Cornelia Street. Water can also be withdrawn from the Saranac River located on the Kent Falls Road in Cadyville and piped into the West Brook Reservoir. At the water filtration plant, the water has chlorination, sedimentation, filtration, and fluoridation treatments and is stored in an above ground storage tank. After treatment, the water is distributed to the City of Plattsburgh users. The city water system did not experience any water source restriction during 2023.

**FACTS AND FIGURES**

Our water system serves approximately 24,173 individuals (18, 816 population in 2000 census plus 6,358 SUNY enrollment) through 5,680 water meters. The cost for a customer using 6000 gallons per year is about \$321/year. The amount of water treated at the water filtration plant in 2023, was 680,705,000 gallons. The total amount of water delivered to customers was recorded at 649,989,000 gallons. This leaves an unaccounted total of 30,716,000 gallons. We believe this is due to the water used to flush hydrants, backwash filters, fight fires and leakage (water main breaks). Also, the water meters at the Water Filtration Plant are designed to measure high flows and are not as accurate with the lower flows. There may also be some inaccuracies with meters that record the water used by customers.

**SOURCE WATER ASSESSMENT REPORT SUMMARY**

The NYS DOH has completed source water assessments for this system, based on available information. Possible and actual threats to these drinking water sources 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 to the source. 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 "Are There Contaminants in Our Drinking



Turbidity (1) 100% Samples less than 1.0	No	1/1/2023 – 12/31/2023	Range = 0.02 (Low) - 0.52 (High)	NTU	N/A	95% of samples < 1.0 NTU (TT)	Soil runoff
Carbon, Total (Finished Water)	No	Jan. – Dec. 2023	Range = < 1.5 – 2.8	mg/l	N/A	N/A	Decomposition of natural organic matter
<b>Inorganic Contaminants</b>							
Copper (2)	No	6/27/2022 – 7/08/2022	90 <sup>th</sup> = 0.12 Range = BRL - 0.46	mg/l	1.3	1.3 (AL)	Corrosion of household plumbing systems
Fluoride	No	02/12/2023	0.6	mg/l	N/A	2.2 (MCL)	Erosion of natural deposits
Lead (3, 7)	No	6/27/2022 – 7/08/2022	90 <sup>th</sup> = 1.6 Range = BRL – 10.8	ug/l	0	15.0 (MCL)	Corrosion of household plumbing systems
Sodium (4)	No	02/14/2023	12.0	mg/l	N/A	See note (4)	Naturally occurring / road salt
Chloride	No	02/14/2023	22	mg/l	N/A	MCL = 250	Naturally occurring / road salt
Sulfate	No	02/14/2023	9.4	mg/l	N/A	MCL = 250	Naturally occurring
Radium 226	No	02/14/2023	0.27	pCi/L	N/A	MCL = 5	Erosion of natural deposits
Radium 228	No	02/14/2023	0.32	pCi/l	N/A	MCL = 5	Erosion of natural deposits
<b>Perfluorinated Alkyl Acids:</b>							
PFOA (Perfluorooctanoic Acid)	No	05/08/2023	2.68	ng/L	N/A	MCL = 10.0 PPT	Released into the environment from widespread use in commercial and industrial applications
PFOS (Perfluorooctanesulfonic Acid)	No		1.34(8)	ng/L	N/A	MCL = 10.0 PPT	
<b>Stage 2 Disinfection By-Products (DBP's) (6)</b>							
TTHM's (6) (Total Trihalomethanes) Loc. 1: SUNY Police	No	02/14/2023 05/09/2023 08/16/2023 11/15/2023	LRAA=78.7 Range = 36.8 - 130	ug/l	N/A	80.0	By-product of drinking water chlorination
TTHM's (6) (Total Trihalomethanes) Loc. 2: McDonald's Rt. 9	No		LRAA=72.2 Range = 35.3 - 101	ug/l	N/A	80.0	
TTHM's (6) (Total Trihalomethanes) Loc. 3: Water Plant	No		LRAA=76.8 Range = 36.2 - 119	ug/l	N/A	80.0	
TTHM's (6) (Total Trihalomethanes) Loc. 4: Lake Forest	No		LRAA=78.8 Range = 39 - 119	ug/l	N/A	80.0	
HAA5's (6) (Total Haloacetic Acids) Loc. 1: SUNY Police	No	02/14/2023 05/09/2023 08/16/2023 11/15/2023	LRAA=46.8 Range = 22.5 – 62.6	ug/l	N/A	60.0	By-product of drinking water chlorination
HAA5's (6) (Total Haloacetic Acids) Loc. 2: McDonald's Rt. 9	No		LRAA=49.2 Range = 25.6 – 71.7	ug/l	N/A	60.0	
HAA5's (6) (Total Haloacetic Acids) Loc. 3: Water Plant	No		LRAA=44.8 Range = 27 – 67.2	ug/l	N/A	60.0	
HAA5's (6) (Total Haloacetic Acids) Location 4: Lake Forest	No		LRAA=46.4 Range = 29.8 – 60.5	ug/l	N/A	60.0	

### Unregulated Perfluoroalkyl Substances

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit	MCLG or Health Advisory Level (9)
Perfluorobutanoic Acid (PFBA)	No	5/08/23	0.000115(8)	mg/L	0.007
Perfluorohexanoic Acid (PFHxA)	No	5/08/23	0.000882(8)	mg/L	N/A
Perfluoroheptanoic Acid (PFHpA)	No	5/08/23	0.00242	mg/L	N/A
Perfluorononanoic Acid (PFNA)	No	5/08/23	0.000767(8)	mg/L	N/A

**Notes:**

(1) Turbidity is a measure of the cloudiness of water. We test it because it is a good indicator of the effectiveness of our filtration system. In 2023, our highest turbidity measured was 0.252NTU occurring on 05/30/23. Regulations require that turbidity must not exceed 5.0 NTU and that 95% of the turbidity samples collected must measure below 1.0 NTU.

(2) The level presented represents the 90th percentile of 30 sites tested. A percentile is a value on the 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. 30 samples were collected and the 90th percentile value for copper was the 4th highest sample. The action level for copper was not exceeded at any site tested.

(3) 30 samples were collected and the 90th percentile value for lead was the 4th highest sample. The action level for lead was not exceeded at any site tested.

(4) Water containing more than 20 mg/l of sodium should not be used for drinking by people on very 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.

(5) Estimated Value – Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) / Estimated Detection Limit (EDL) for SPME-related analyses; estimated concentration for Tentatively Identified Compounds (TIC's).

(6) Four quarterly samples were analyzed for TTHM's and HAA5's. The levels presented are the running annual average (RAA) - the average of the four quarterly samples collected. This level represents the highest locational running annual average. (Stage 2 sampling began with the 1<sup>st</sup> quarter of 2020 - compliance is determined by the LRAA.)

(7) 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. Plattsburgh City WD is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Mike Stoutenger, Chief Plant Operator at (518) 563-1188. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

(8) Estimated Value – This represents an estimated concentration for Tentatively Identified Compounds (TIC's).

(9) All perfluoroalkyl substances, besides PFOA & PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 0.05 mg/L unless otherwise specified.

**DEFINITIONS:**

**N/A:** Not applicable.

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

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum 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 which 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.

**Below-Reportable Limits (BRL):** Laboratory analysis indicates that contaminant is not present above the reportable 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 (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).

**Picocuries per liter (pCi/L):** A measure of the radioactivity in water.

**RAA:** Running Annual Average- the average of all results collected over 4 consecutive quarters

**LRAA:** Locational Running Annual Average – the average of results collected at one location for 4 consecutive quarters.

**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.

The City of Plattsburgh Water System is one of many systems in New York State that adds a low level of fluoride to our drinking water in order to provide consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at levels that range from 0.7 to 1.2 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis. During 2023, monitoring showed fluoride levels in your water were in the optimal range 100% of the time. No monitoring results showed fluoride levels that approach the 2.2 mg/l MCL. Our fluoride addition facility is designed and operated to meet the optimal range.

### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2023, the City of Plattsburgh Water System was in compliance with all applicable state drinking water monitoring and reporting regulations. A total of 31 Boil Water Orders were issued by the City as a precautionary measure due to either system maintenance or repair.

In 2023, the Plattsburgh City WD was cited for a violation of Exercise Due Care and Diligence in the Maintenance and Supervision of All Sources of Water. This violation was issued in regards to concerns with the Mead Reservoir's dam integrity. To ensure that there are no issues with the dam, the water level in the reservoir has been lowered by approximately 10-15 feet below the spillway.

Another violation issued in 2023, was for Exercise Due Care and Diligence in the Operation and Maintenance of a Water System. This violation was issued due to concerns over the aging water treatment plant. The City of Plattsburgh has hired an engineering firm to provide recommendations for repairs/upgrades to the treatment plant.

### **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. Immune-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 the necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers;
- 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 our household is using, and by looking for ways to use less water whenever you can. Conservation is easy, tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity. Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons of water 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 advances, you have a leak.

### **SYSTEM IMPROVEMENTS AND OTHER PROGRAMS**

- The dams at the City reservoirs were inspected and evaluated for compliance with existing and proposed regulations. A program for performing maintenance and upgrades has been developed.
- Emergency Action Plans for the City dams were updated as necessary.

**CLOSING:** Thank you for allowing us to continue to provide you with quality drinking water. We ask that all our customers help us protect our water sources, which are the heart of our community and our way of life. Please call our office if you have questions.