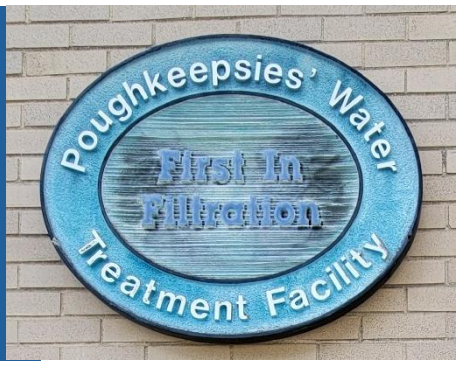
Poughkeepsies' Water Treatment Facility

Annual Drinking Water Quality Report for 2025

Public Water Supply NY1302774

70 Waterworks Road, Poughkeepsie NY 12601

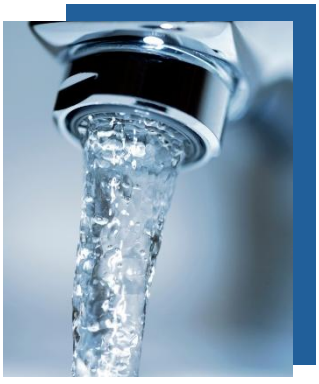


The Poughkeepsies' Water Treatment Facility, which is owned and operated by the City and Town of Poughkeepsie, provides drinking water to over 80,000 individuals within the City of Poughkeepsie, Town of Poughkeepsie, and areas of the Town of Hyde Park and the Town of East Fishkill. To comply with State regulations, The Poughkeepsies' Water Treatment Facility annually issues this 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, we conducted tests for many contaminants. We detected 25 of those contaminants and only found 1 of those contaminants at a level higher than the State allows. As we told you at the time, our water temporarily exceeded a drinking water standard for chloride. 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. We are pleased to provide you with this information because informed customers are our best customers.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

If you have any questions about this report or concerning your drinking water, please contact Dottie DiNobile, Water Plant Administrator, Poughkeepsies' Water Treatment Facility at 451-4173 x2003 or the Dutchess County Department of Behavioral & Community Health, 85 Civic Center Plaza, Suite 106, Poughkeepsie 12601 at 486-3404. If you want to learn more, please attend any of our regularly scheduled Joint Water Board meetings. The meetings are held the first Monday of every month at 70 Waterworks Road, Poughkeepsie, NY 12601. Minutes and information reviewed at those meetings are available on our website www.pokwater.com. For additional information you may also visit EPA's drinking water web site (*www.epa.gov/safewater/*) and the New York State Department of Health's web site (*www.health.state.ny.us)*.

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 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 public water systems and require monitoring for the contaminants. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is the Hudson River, which originates from the north in the Adirondacks at Lake Tear of the Clouds, located on the southwest shoulder of Mount Marcy; New York State's highest peak. The Hudson River Watershed is very expansive, covering nearly 12,500 square miles, of which the majority is within New York State, however, small portions are located in Vermont, Massachusetts, Connecticut and New Jersey. Raw water is taken from the Hudson River adjacent to our treatment plant, approximately 1,000 feet from shore at a depth of 48 feet below the mean river elevation. Water

quality tests have shown the river to be of very high quality. During 2025, our system did not experience any restriction of our water source.

The Poughkeepsies' Water Treatment Facility focuses on protecting our source of drinking water through work with the Hudson River Drinking Water Intermunicipal Council. Known as the "Hudson 7," the council focuses on protecting the Hudson River as the source of drinking water for seven mid-Hudson municipalities that are voting members: the City and Town of Poughkeepsie, the Village and Town of Rhinebeck, and the towns of Esopus, Hyde Park and Lloyd. Dutchess and Ulster County are also voting members. In addition to advocating for a range of actions to protect our drinking water in the last year, the Council drafted the first ever Drinking Water Source Protection Plan with support from New York State. Hudson 7 meetings are open to the public, and more information is available at hudson7.org.

Water Treatment Process

The Poughkeepsies' Water Treatment Facility utilizes a conventional, state-of-the-art, filtration process to treat the water supply. This process includes chemical application of polyaluminum chloride to stabilize the small particles in the raw water supply. Once stabilized the particles are combined with an organic polymer and previously settled solids, then slowly mixed to form larger particles. The larger particles are then removed through settling. Occasionally carbon dioxide is added prior to this process to aid coagulation for enhanced removal of organic compounds. Following the settling process, ozone is added to assist in the breakdown of organic compounds. The water is then passed through filters made of biologically activated carbon and sand. These filters help polish the water and reduce the organic compounds that can cause disinfection byproducts when water is chlorinated. Disinfection, the process used to kill disease-producing organisms, is accomplished through application of ultraviolet light followed by a carefully monitored chlorination process. Post treatment includes the addition of phosphoric acid and sodium hydroxide. Phosphoric acid is added at 1.7 mg/L to reduce corrosion of customer's lead piping and fixtures. Sodium hydroxide is added when necessary to increase the treated water to a pH of 7.7 in effort to minimize corrosion of pipes within the distribution system and customers plumbing.

Facts and Figures

The Poughkeepsies' Water Treatment Facility, which is located along the Hudson River within the Marist College Campus on Route 9, was constructed in 1962 and upgraded in 2004 and 2016. The Facility is currently rated at a maximum production capacity of 19.3 million gallons per day (MGD).

In 2025, the treatment facility produced 4,609,579,000 gallons of potable water, approximately 12.6 Million Gallons per Day (MGD). Total billed water to the City was 2,096,869,724 gallons (5.73 MGD) while gallons billed to the Town of Poughkeepsie was 1,995,590,696 (5.45 MGD). Our wholesale customers received a total of 517,118,580 MGD (1.41 MGD). The cost of water production in 2025 was $1.42 per 1,000 gallons.

Are There Contaminants in our Drinking Water

To insure maximum water quality for our customers, the Poughkeepsies' Water Treatment Facility staff monitors source, treated and distribution water daily. In addition to continuous plant effluent monitoring for turbidity, chlorine residuals, and pH, approximately 30,000 water quality tests were conducted by the water plant staff in 2025. Operators at our facility analyzed chlorine residual, effluent turbidity and pH 12 times daily and orthophosphate 2 times daily for combined annual total of 18,240 analyses. Treatment process testing included turbidity, alkalinity, UV transmittance and absorption, and conductivity. Additional analyses performed on raw water, plant effluent, and/or distribution system samples included inorganic contaminants, nitrate, volatile organic compounds, total trihalomethanes, haloacetic acids, and synthetic organic compounds. The table presented in this report 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, are more than one year old.

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) or the Dutchess County Department of Behavioral & Community Health at 486-3404.

Salt Front

Our water is taken from the Hudson River Estuary which is subject to increased sodium and chloride levels during low rainfall periods. The salt front of the Atlantic Ocean moves up the river when there is reduced freshwater flow coming down the river. The salt front is defined by USGS as chloride levels exceeding 100 mg/L. During 2025, the facility experienced a salt front episode from August 13th to October 31st. During the salt front episode, the plant effluent was tested 104 times for sodium with values ranging from 37 mg/L to 560 mg/L and an average of 129 mg/L. Chloride was tested 102 times with values ranging from 59 mg/L to 1,100 mg/L and an average of 223 mg/L.

During normal water conditions in 2025, the sodium level was tested 14 times (at least once per month) with sodium concentrations ranging from 23 mg/L to 40 mg/L with an average of 29 mg/L. **Customers that are on a salt restricted diet should consult with their physician concerning sodium in their drinking water.** Information concerning sodium levels in your water can be obtained at any time by contacting the Water Plant Administrator, Dottie DiNobile at 451-4173 x 2003.

Harmful Agal Bloom (HAB)

In 2025, a HAB was detected in the Hudson River which lasted from September through November. HABs contain a species of cyanobacteria that produced a toxin that may affect human health. The water treatment facility worked closely with federal, state, and local officials to monitor the situation. Testing showed that the treatment process was effective at removing the algal toxin before any water was distributed to customers. No toxin was detected in the finished drinking water.

Hardness

The water obtained from the Hudson River is considered moderately hard. The average hardness of the plant effluent in 2025 was 74.5 mg/L or 4.36 grains/gallon (range 57 mg/L to 120 mg/L)

Poughkeepsies' Water Treatment Facility
Table of Detected Contaminants 2025

Contaminant	Violation Yes/No	Sample Date(s)	Level Detected	Unit of Measure	MCLG	Regulatory Limit	Likely Source of Contamination
Plant Effluent - Inorganic Contaminants							
Orthophosphate (reported as Phosphorus)	N/A	2 per day	Average = 0.56 Range = 0.27 to 0.98	mg/L	N/A	N/A	Orthophosphate is added at the Poughkeepsies' Water Treatment Facility to inhibit corrosion of lead piping in the distribution system.
Total Organic Carbon	N/A	1 per week	Average = 1.52 Range = 1.17 to 2.26	mg/L	N/A	N/A	Naturally present in the environment
Turbidity (Plant Effluent)	No	Continuous Monitoring[1]	Average = 0.036 Range = 0.027 to 0.12	NTU	N/A	MCL = 1 NTU monthly average[2] MCL = 5 NTU two-day average	Soil runoff
Turbidity (Filter Effluent)	No	Continuous Monitoring[1]	Average = 0.050 Range = 0.003 to 0.229	NTU	N/A	TT = 95% of samples < 0.3 NTU[3]	Soil runoff
Aluminum	No	1 per week	Average = 32 Range = ND to 95	ug/L	200	N/A	Erosion of natural deposits; discharge of drilling wastes; water treatment process

Contaminant	Violation Yes/No	Sample Date(s)	Level Detected	Unit of Measure	MCLG	Regulatory Limit	Likely Source of Contamination
Barium	No	10/16/25	0.019	mg/L	2	MCL = 2	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
Chlorate	No	Monthly	Average = 227 Range = 78 to 440	µg/L	N/A	N/A	By-product of drinking water disinfection at treatment plants using sodium hypochlorite.
Chloride	Yes	At least weekly beginning 9/5/25 for a total of 114 samples	Average = 184 Range = 44 to 1100	mg/L	N/A	MCL = 250	Naturally occurring or indicative of road salt contamination
Fluoride	No	10/16/25	0.078	mg/L	2.2	N/A	Erosion of natural deposits; Discharge form fertilizer and aluminum factories
Magnesium	No	1/2/25, 10/2/25, 10/22/25, 11/6/25	Average = 13 Range = 4.7 to 26	mg/L	N/A	N/A	Naturally occurring
Nitrate	No	12/4/25	0.69	mg/L	10	MCL = 10	Runoff from fertilizer, Leaking septic tanks, sewage, erosion of natural deposits
Selenium	No	10/16/25	2.3	µg/L	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium	No	Monthly & more frequently during the salt front episode	Average = 97 Range = 23 to 560	mg/L	N/A	N/A[5]	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate	No	10/15/24	14	mg/L	N/A	MCL = 250	Naturally occurring
Plant Effluent - Disinfectants							
Free Chlorine Residual	No	Continuous Monitoring[1]	Average = 2.54 Range = 1.94 to 3.52	mg/L	N/A	MCL = 4[6]	Water additive used to control microbes.
Plant Effluent - Disinfection Byproducts							
Bromate	No	Monthly	Highest RAA = 5.97 (Range of detects = ND to 26)	µg/L	NA	MCL = 10	By-product of drinking water disinfection at treatment plants using Ozone.
Total Trihalomethanes (chloroform, bromo-dichloromethane, dibromochloro-methane, and bromoform)	No	2/12/25 5/14/25 8/13/25 11/12/25	Stage 2 Calculation[7] Highest LRAA = 4.4 (Range of detects = 1.44 to 7.49)	µg/L	N/A	MCL = 80 for four-quarter average	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and di-bromoacetic acid)	No	2/12/25 5/14/25 8/13/25 11/12/25	Stage 2 Calculation[7] Highest LRAA = 3.62 (Range of detects = 2.98 to 4.19)	µg/L	N/A	MCL = 60 for four-quarter average	By-product of drinking water disinfection needed to kill harmful organisms.
Plant Effluent – Synthetic Organic Contaminants							
Perfluorooctanoic acid (PFOA)	No	02/12/25 6/9/25 9/8/25 12/4/25	Average = 1.4 Range = ND to 3.7	ng/L	N/A	MCL = 10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctane sulfonic acid (PFOS)	No	02/12/25 6/9/25 9/8/25 12/4/25	Average = 0.50 Range = ND to 2.0	ng/L	N/A	MCL = 10	Released into the environment from widespread use in commercial and industrial applications.
Plant Effluent – Radiological Contaminants							
Beta particle and photo radioactivity from manmade radionuclides	No	10/22/25	4.86	pCi/L	0	MCL = 4 mrem per year[8]	Decay of natural deposits and man-made emissions.
Raw Water – Microbiology							
Microcystin	No	9/15/25, 9/17/25 9/23/25, 9/29/25 10/1/25, 10/6/25 10/8/25, 10/14/25 10/16/25, 10/21/25 10/28/25, 11/6/25, 11/13/25, 11/19/25	Range = ND to 5.4	µg/L	N/A	N/A	Algal toxin produced by cyanobacteria during a Harmful Agal Bloom (HAB).
Raw Water – Synthetic Organic Contaminants							
Perfluorooctanoic acid (PFOA)	No	09/8/25	3.3	ng/L	N/A	MCL = 10	Released into the environment from widespread use in commercial and industrial applications.

1. Continuous monitoring is performed by inline meters. The values in this table are from the bench readings taken by operators every two hours to confirm the inline meter readings.
2. 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. Our highest single turbidity measurement on the plant effluent (0.12 NTU) occurred on 08/20/25. An MCL violation occurs when the average of all daily entry point analyses for the month exceed the MCL of 1 NTU or when the daily two-day average exceeds 5 NTU.
3. The turbidity of each filter is monitored to determine treatment compliance. State regulations require that turbidity must always be below 1 NTU. State regulations require that 95% of samples are below 0.3 NTU. In 2025, 100% of samples were less than 0.3 NTU. The highest filter turbidity reading (0.229 NTU) occurred on 02/22/25.
4. If iron and manganese are present, the total concentration of both should not exceed 500 ug/L
5. Water containing more than 20 mg/L of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets.
6. The value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects.
7. The regulation requires a Locational Running Annual Average (LRAA) be calculated by averaging the results of the 4 most recent quarters.

The LRAA reported in this table is the highest LRAA obtained in 2025.
8. The State considers 50 pCi/L to be the level of concern for beta particles.

Table Definitions
NYSDOH: New York State Department of Health
USEPA: United States Environmental Protection Agency
MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in the drinking water.
MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
MRDL (Maximum Residual Disinfectant Level): 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.
MRDLG (Maximum Residual Disinfectant Level Goal): 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.
NTU (Nephelometric Turbidity Unit): A measure of the clarity of the water. Turbidity in excess of 5.0 NTU is just noticeable to the average person.
TT: Treatment Technique
N/A: Not Applicable
ND: Not Detected
ng/L (nanograms per liter): Corresponds to one mass part in one trillion parts of another liquid (parts per trillion)
mg/L (milligrams per liter): Corresponds to one mass part in one million parts of another liquid (parts per million)
µg/L (micrograms per liter): Corresponds to one mass part in one billion parts of another liquid (parts per billion)
pCi/L (Picocuries per liter): A measure of the radioactivity in water.
mrem/yr (millirems per year): A measure of radiation absorbed by the body.

Lead in Your Drinking Water

The facility adds phosphoric acid at 2.3 mg/L to the treated water in order to protect lead plumbing in customer's homes. This program has resulted in significantly reducing lead levels in most homes. We are required to present the following information on lead in drinking water:

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Poughkeepsies' Water Treatment Facility is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Poughkeepsies' Water Treatment Facility at 845-451-4173. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead

What Does This Information Mean?

The table shows that our system uncovered some problems this year. Due to the salt front episode, chloride levels exceeded the maximum contaminant level. The duration of the violation was from 9/5/25 to 10/31/25. Chloride is essential for maintaining good health. Research has not conclusively demonstrated that human exposure to chloride itself causes adverse health effects, although exposure to high levels of certain chloride salts has been associated with adverse health effects in humans. For example, high dietary intake of sodium chloride can be a contributing factor to high blood pressure, but this has been attributed mainly to the presence of sodium. The New York State standard for chloride is 250 milligrams per liter and is based on chloride's effects on the taste and odor of the water.

Sodium levels were also elevated due to the salt front episode. Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

We have also 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 2025, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

Do I Need to Take Special Precautions?

Although our drinking water met or exceeded state and federal regulations, 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).

System Improvements

There were no system improvements made in 2025. In 2026, capital improvement projects include the replacement of the filter underdrains. The replacement is needed to improve reliability of the filters because several have failed causing significant repairs. Additionally in 2026, a Comprehensive Facility Study will be started to evaluate the water plants' capacity and condition. This study will help guide future decisions and plans for improvements and capacity growth.

Why Save Water and How to Avoid Wasting It

Although our water source 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;
- 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.

Thank you for allowing us to continue to provide you 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 and our way of life.

Poughkeepsies' Water First in Filtration Treatment Facility

save water