

Annual Drinking Water Quality Report for 2023
Rhinebeck Village Water
76 Slate Dock Rd.
Rhinebeck, NY 12572

Public Water Supply ID #1302776

INTRODUCTION

To comply with State regulations, Rhinebeck Village Water will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. 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 Chief Operator, Bryan Alix at 876-7331 or your Water Clerk, Karen McLaughlin at 876-7015. We want you to be informed about your drinking water. If you want to learn more, please watch online any of our regularly scheduled village board meetings held on the second Tuesday of the month at 7:30 pm.

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. 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 and our treatment plant is located off Slate Dock Road in the Hamlet of Rhinecliff, just south of the Kingston-Rhinecliff Bridge. During 2023, our system did not experience any restriction of our water source. The facility was completed in 1968 and is certified by the State of New York to produce 1.5 million gallons of potable water per day. The system utilizes 25 miles of pipeline and a 2 million-gallon water storage facility located off Violet Hill on Hilee Road, Rhinebeck. The plant utilizes direct filtration and conventional filtration utilizing rapid mix, coagulation, flocculation, sedimentation, filtration, and disinfection by the monitored use of chlorine. Orthophosphate is also added to reduce corrosion of any customer lead fixtures. Potassium permanganate is used as a pretreatment for the control of Zebra Mussels during the warm water months.

A source water assessment conducted by the Water Department in 2005 reveals the Hudson River, as our raw water source, is open to the public. It is susceptible to contamination due to traffic from both pleasure and commercial vessels on the river. The U.S. Coast Guard and local law enforcement perform patrols. This is the extent of our source water assessment and no other information is available.

FACTS AND FIGURES:

Our water system serves approximately 6000 people through 1,782 accounts. The total water produced in 2023 was 226 million gallons. The daily average of water treated and pumped into the distribution system is 618,000 gallons per day. Our highest single day was July 25th 2023, at 1,005,000 gallons. The amount of water delivered to customers was 194 million gallons. Total water not billed but accounted for was 10 million gallons. This leaves an unaccounted total of 21 million gallons. In 2023, water customers were charged \$7.00 per 1,000 gallons of water. The average water bill per user is \$132.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER? As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, principal organic compounds, total trihalomethanes, total haloacetic acids, synthetic organic compounds, polyfluorinated alkyl substances (PFAS), 1,4-Dioxane, asbestos, and radiologicals,. The information 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, are more than one year old.

It should be noted that all drinking water, including bottled water, might 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 Health Department, 85 Civic Center Plaza, Suite 106 Poughkeepsie, NY 12601-3316 at 845-486-3404.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of sample	Level Detected (Avg./Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely source of contamination
Zinc	No	12/15/23	0.0108	mg/L	N/A	5	Naturally occurring; Mining waste.
Manganese	No	12/15/23	5.58	ug/L	N/A	300	Naturally occurring; Indicative of landfill contamination.
Chloride	No	12/15/23	28.7	mg/L	N/A	250	Naturally occurring or indicative of road salt contamination.
Sodium	No	12/15/23	15.9	mg/L	N/A	(see Health Effects) ⁽¹⁾	Naturally occurring; Road salt; Water softeners; Animal waste.
Nitrate-Nitrite	No	12/15/23	0.35	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	No	12/15/23	0.015	mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nickel	No	12/15/23	ND	ug/L	N/A	N/A	Naturally occurring.
Odor	No	12/15/23	2.0	T.O.N.	N/A	3	Organic or inorganic pollutants originating from municipal and industrial waste discharges; natural sources.
Total Haloacetic acids Northern Dutchess Hospital	1Q No 2Q No 3Q No 4Q No	Quarterly LRAA ⁽²⁾	39.1 37.4 48.4 50.3	ug/L	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Haloacetic acids Baptist Home	1Q No 2Q No 3Q No 4Q No	Quarterly LRAA ⁽²⁾	36.3 35.5 40.2 43.1	ug/L	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes Northern Dutchess Hospital	1Q No 2Q No 3Q No 4Q No	Quarterly LRAA ⁽²⁾	53.9 49.9 57.4 57.5	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.

Contaminant	Violation Yes/No	Date of sample	Level Detected (Avg./Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely source of contamination
Total Trihalomethanes Baptist Home	1Q No 2Q No 3Q No 4Q No	Quarterly LRAA ⁽²⁾	57.9 56.3 62.5 60.4	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.
Chlorine Residual	No	Continuous	1.2	mg/L	N/A	4.0	Water additive used to control microbes.
Lead	No	11/28/23 Thru 11/30/23	2.1 ⁽³⁾ (ND-24.5)	ug/L	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	No	11/28/23 Thru 11/30/23	0.1310 ⁽⁴⁾ (0.0112-0.4090)	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Perfluorooctanoic acid (PFOA)	No	8/24/23	2.69	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctane sulfonate acid (PFOS)	No	8/24/23	2.16	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
Table of Unregulated Detected Contaminants							
Peffluorohexanoic Acid (PFHxA)	No	8/24/23	1.83	ng/L	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.

(1) 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.

(2) LRAA (Locational Running Annual average) An average of sample analytical results during the previous four calendar quarters taken at a particular monitoring location.

(3) The level presented represents the 90th percentile of 20 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 lead values detected at your water system. In this case, 20 samples were collected at your water system and the 90th percentile value was 2.1 ug/L. The action level for lead was exceeded at one of the sites tested.

(4) The level presented represents the 90th percentile of 20 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, 20 samples were collected at your water system and the 90th percentile value was 0.1310 mg/L. The action level for copper was not exceeded at any of the sites tested.

DEFINITIONS:

- 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.
- 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.
- 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).
- Nanograms per liter (ng/l): Corresponds to one part of liquid in one trillion parts of liquid (parts per tillion - ppt).
- Picocuries per liter (pCi/L): A measure of the radioactivity in water.

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.

Pt-Co: platinum cobalt color standard.

TON: threshold odor number.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no 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.

WE ARE REQUIRED TO PRESENT THE FOLLOWING INFORMATION ON LEAD IN DRINKING WATER.

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. Rhinebeck Village Water 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 Rhinebeck Village Water (845) 876-7331. 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>.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2023, our system received a violation for failing to take lead and copper sampling in the proper timeframe.

DREDGING OF THE RIVER

Dredging of the northern reach of the river began in the spring of 2009. The New York State Health Department monitored for any irregularities during the dredging. Information concerning the dredging can be found at “www.hudsonredgingdata.com”.

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).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ 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 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 brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Repair it 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. Repair it and you could save more than 30,000 gallons per year.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then make note of the meter reading. Go back and check the meter after 15 minutes. If the reading has changed, you have detected a leak somewhere in your home.

SYSTEM IMPROVEMENTS

In 2014 7 old or damaged fire hydrants were replaced.

In 2015 4 old or damaged fire hydrants were replaced.

In 2016 2 old or damaged fire hydrants were replaced.

In 2017 2 old or damaged fire hydrants were replaced.

In 2018 the village received two grants for infrastructure improvement.

In 2019 work began on replacing water mains and service lines on Livingston St, Chestnut St, Platt Av, and Montgomery St.

In 2020 The water main replacement project on Livingston, Chestnut St, Platt Av, and Montgomery St was successfully completed.

In 2023 The water main on Center St. was replaced.

CLOSING

Thank you for allowing us to continue to provide you and your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. Please report any suspicious activity around the treatment plant or storage tank to local police by calling 911 or by calling the Village Office at 845-876-7015.

Bryan Alix, Chief Operator