

**Annual Drinking Water Quality Report for 2022**  
**Four Corners Water System**  
**Four Corners Boulevard, Hopewell Junction, NY 12533**  
**(Public Water Supply ID# 1330614)**

**INTRODUCTION**

To comply with State regulations, Four Corners 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 VRI Environmental Services at (845) 677-3839. We want you to be informed about your drinking water.

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

Our water system serves 759 people through 253 service connections. Our water source is groundwater drawn from three drilled wells. Two wells are located off of Four Corners Boulevard and one well is located off of Sassafras Circle. Two wells are artesian rock wells and one is a gravel well. The rock wells are disinfected with sodium hypochlorite and the gravel well is filtered with cartridge filtration and disinfected with sodium hypochlorite prior to distribution in two separate water treatment facilities.

One of the rock wells was taken off-line in 2010 after a microscopic particulate analysis revealed that its water is under the influence of surface water. This well requires additional treatment before it may be operated. The Town of East Fishkill is in the process of preparing plans for submission to the Health Department for approval of the necessary water treatment upgrades.

A level sensor in the 660,000 gallon storage tank located off of Four Corners Boulevard operates on a timer for the rock wells. The gravel well is operated seasonally on a timer when the demand increases.

The permitted water taking capacities per well are 145, 130 and 200 gallons per minute. In 2022, we pumped a total of 33,044,600 gallons at an average of 90,533 gallons per day.

## 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, nitrate, primary inorganic compounds, lead and copper, principal organic compounds, total trihalomethanes, haloacetic acids, and radiologicals. 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, 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 and Community Health at (845) 486-3404.

**Table for 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
Chlorine Residual (Entry Points)	No	Yearly Average	0.96 (Range = 0.58 – 1.38)	mg/L	n/a	4.0	Water additive used to control microbes
Turbidity Entry Point	No	Yearly Average	0.05 (Range = 0.04- 0.06)	NTU	n/a	TT – 1.0	Soil Runoff
Copper *	No	9/10/2021 9/14/2021 9/16/2021	105 (Range = 23.5 – 161)	ug/L	1300	AL = 1300	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives;
Lead **	No	9/10/2021 9/14/2021 9/16/2021	3.71 (Range = ND – 11.0)	ug/L	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits;
Nitrate Water Treatment Plant #1 Entry Point	No	12/21/2022	2.4	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits;
Nitrate Water Treatment Plant #2 Entry Point	No	2/22/2022	1.10	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits;
Barium Water Treatment Plant #1 Entry Point	No	12/14/2022	0.024	mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits;

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
Nickel Water Treatment Plant #1 Entry Point	No	12/14/2022	0.0037	mg/L	n/a	n/a	Corrosion of plumbing systems; Erosion of natural deposits.
Barium Water Treatment Plant #2 Entry Point	No	5/14/2020	0.00427	mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits;
Nickel Water Treatment Plant #2 Entry Point	No	5/14/2020	0.00210	mg/L	n/a	n/a	Corrosion of plumbing systems; Erosion of natural deposits.
Beta Particle and Photon Activity from manmade radionuclides Water Treatment Plant #1 Entry Point	No	11/7/2016	2.47	pCi/L	0	50 ***	Decay of natural deposits and man-made emissions.
Combined Radium 226, 228 Water Treatment Plant #1 Entry Point	No	11/7/2016	1.17	pCi/L	0	5	Erosion of natural deposits.
Uranium Water Treatment Plant #1 Entry Point	No	11/7/2016	3.59	ug/L	0	30	Erosion of natural deposits.
Uranium Water Treatment Plant #2 Entry Point	No	11/7/2016	1.13	ug/L	0	30	Erosion of natural deposits.
Total Organic Carbon Well 4 GWUDI	No	10/3/2018	1.20	mg/L	n/a	TT	Naturally present in the environment.
Total Trihalomethanes Plant #2 Distribution	No	9/29/2022	36.1	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.
Haloacetic Acids Plant #2 Distribution	No	9/29/2022	15.77	ug/L	n/a	60	By-product of drinking water disinfection needed to kill harmful organisms.

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 Plant #1 Distribution	No	9/29/2022	35.5	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.
Haloacetic Acids Plant #1 Distribution	No	9/29/2022	17.06	ug/L	n/a	60	By-product of drinking water disinfection needed to kill harmful organisms.
Perfluorooctanoic Acid (PFOA) Well 2	No	Quarterly 2022	1.37 (Range = ND – 1.9)	ng/L	n/a	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctane Sulfonic Acid (PFOS) Well 2	No	Quarterly 2022	0.161 (Range = ND – 0.644)	ng/L	n/a	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctanoic Acid (PFOA) Well 1A	No	2/10/2021 6/18/2021 9/21/2021	1.08 3.04 2.69	ng/L	n/a	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctane Sulfonic Acid (PFOS) Well 1A	No	2/10/2021 6/18/2021 9/21/2021	0.671 0.927 0.828	ng/L	n/a	10	Released into the environment from widespread use in commercial and industrial applications.

Table of Unregulated Detected Contaminants					
Contaminant	Date of Sample	Level Detected (Max) (Range)	Unit Measurement	Likely Source of Contamination	
Perfluorobutanesulfonic Acid (PFBS)	Well 2	3/8/2022	17	ng/L	Released into the environment from widespread use in commercial and industrial applications.
		6/28/2022	11		
		9/27/2022	23		
		12/14/2022	26		
	Well 4	3/8/2022	2.30		
		6/28/2022	1.4		
Pefluorohexanoic Acid (PFHxA)	Well 2	3/8/2022	0.847	ng/L	Released into the environment from widespread use in commercial and industrial applications.
		6/28/2022	1.0		
Perfluoroheptanoic Acid (PFHpA)	Well 2	6/28/2022	0.69	ng/L	Released into the environment from widespread use in commercial and industrial applications.

**The following tests were sampled in 2022 and were non-detected:**

- 1,4 Dioxane
- PFOA (Well 4)
- PFOS (Well 4)
- Principal Organic Contaminants
- Arsenic
- Beryllium
- Cadmium
- Chromium
- Antimony
- Thallium
- Selenium
- Mercury
- Fluoride
- Cyanide

**Footnotes:**

\* The level presented represents the 90th percentile of the 10 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, 10 samples were collected at your water system and the 90th percentile value is the reported value. The action level for copper was not exceeded at any of the sites tested.

\*\* The level presented represents the 90th percentile of the 10 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, 10 samples were collected at your water system and the 90th percentile value is the reported value. The action level for lead was not exceeded at any of the sites tested.

\*\*\* The State considers 50 pCi/L to be the level of concern for beta particles.

**Definitions:**

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

**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).

**Action Level (AL)** - The concentrations of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's 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

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

**Nanograms per liter (ng/L)** – Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion – ppt).

**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.

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 higher than at other homes in the community as a result of materials used in your home's plumbing. Four Corners Water is responsible for providing high quality drinking water, but can not 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 the 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>.

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

During 2022, our system was in compliance with applicable State drinking water 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).

**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. 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.

## **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have any questions.