

*Annual Drinking Water Quality Report for 2023*  
*Keene Water District # 1*  
*P.O. Box 89 Keene NY*  
*(Public Water Supply ID NY1500281)*

**Introduction**

To comply with State regulations, the Town of Keene, 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. 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 Savana Li, Water Operator, at (518) 576-4444. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held the second Tuesday of each month, 7:30 PM at the Town 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, 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 concentration 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 system serves approximately 300 people through 100 service connections. Our water source is two 8" drilled wells, the water is disinfected with chlorine solution at the water treatment plant and is pumped into the distribution system and the new 330,000-gallon storage tank.

The NYS Dept. of Health has completed a source water assessment for this system based on available information. The source water assessment has rated these sources as having an elevated susceptibility. No significant sources of contamination were identified. The wells draw water from an unconfined aquifer and overlying soils are not known to provide adequate protection from potential contamination. Please note that our water supply is disinfected to ensure that the finished water delivered to your home meets the New York State's drinking water standards for microbiological contamination.

**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, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds, including PFAS and 1,4-dioxane. 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, 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 Health Department at (518) 891-1800.

**Table of Detected Contaminants**

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Inorganic Contaminants</b>							
Copper	No	2023	0.06 <sup>1</sup> 0.0011-0.35 <sup>2</sup>	mg/L	0	1.3 (AL)	Corrosion of household plumbing systems.
Lead	No	2023	0.0 <sup>1</sup> ND-ND <sup>2</sup>	ug/L	0	15 (AL)	Corrosion of household plumbing systems.
Nitrate	No	2023	1.18	mg/L	10	10 (MCL)	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits.
Chloride	No	2019	13	mg/L	n/a	250 (MCL)	Naturally occurring or indicative of road salt contamination.
Odor	No	2019	2	TON	n/a	3 (MCL)	Natural sources; Organic or inorganic pollutants originating from municipal and industrial waste discharges
Zinc	No	2019	0.50	mg/L	n/a	5 (MCL)	Naturally occurring; mining wastes
Sulfate	No	2019	6.6	mg/L	n/a	250 (MCL)	Naturally occurring
Sodium	No	2022	2.4	mg/L	n/a	See Note 3	Naturally occurring; Road salt; Water softeners; Animal waste.
<b>Disinfection Byproducts</b>							
Haloacetic Acids (HAA5s)	No	2023	1.7	ug/l	n/a	60 (MCL)	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	No	2023	3.9	ug/L	n/a	80 (MCL)	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.

**Notes:**

- 1 – The level presented represents the 90<sup>th</sup> percentile of the 5 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 90<sup>th</sup> percentile is equal to or greater than 90% of the lead values detected at your water system.
- 2 - The level presented represents the range of the 5 samples collected. The action level for copper and lead was not exceeded at any sampling location.
- 3 - 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.

**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.

**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.

**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).

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

EPA Test Method 533 is used to measure PFOA and PFOS which are regulated perfluoroalkyl analytes with an MCL level of 10 nanograms per liter (ng/L) or 10 parts of liquid per 1 trillion parts of liquid. As part of EPA Test Method 533 a total of 25 analytes are also measured as part of that test. Unregulated perfluoroalkyl analytes that were found in our water samples and had detectable levels are shown in the Unregulated Perfluoroalkyl Substances table provided below.

Unregulated Perfluoroalkyl Substances					
MCL level for each Unregulated PFAS Substance = 50,000 ng/L					
Contaminant	Violation (Yes/No)	Date of Sample	Level Detected	Unit Measurement	MCGL or Health Advisory Level <sup>1,2</sup>
Perfluorobutanoic Acid (PFBA)	No	2023	0.959	ng/L	NA

1 USEPA Health Advisory Levels identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects are not anticipated to occur over specific exposure durations. Health Advisory Levels are not to be construed as legally enforceable federal standards and are subject to change as new information becomes available.

2 All perfluoroalkyl substances, besides PFOA and PFOS, are considered Unspecified Organic Contaminants (UOC) which have a MCL = 50,000 ng/L.

### 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. Are lead levels are low; however, we are required to provide the following information regarding lead: 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. The Keene Water District 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 Savana Li, Water Operator, at 518-576-4444. 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?

Last year our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

### 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. 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.
- 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.

### **Closing**

Thank you for allowing us to continue to provide your family with quality drinking water. 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 questions.