

Annual Drinking Water Quality Report for 2023
Guilford Water District
Administrative Office:
223 Marble Road
Guilford, NY 13780
(Public Water Supply ID# NY0801742)

Introduction

To comply with State regulations, the Guilford Water District, annually issues 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, we conducted tests for over 80 contaminants. We are proud to report that our system never violated a maximum contaminant level. 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 **Susan McIntyre, Town of Guilford Supervisor, at (607) 895-9966**. 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 Wednesday of each month, at 7:00 pm in the Guilford 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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial, inorganic compounds, pesticides, herbicides, organic compounds, and radioactive contaminants. To ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amounts 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 approximately 350 individuals through 97 service connections. Our water source is a lake located in the hamlet. A back- up well located on Hubbard Street is in place but requires additional treatment to be potable. The water is treated with, National Sanitation Foundation (NSF) approved liquid sodium hypochlorite (bleach) as the disinfection agent for the surface water source. NSF certified polyaluminum chloride is used as a coagulant to aid in the proper filtration of the raw water. Filtration is provided by a treatment system using mixed media and carbon filters. All treatment is prior to distribution. From the treatment plant, the water is pumped into the hamlet, and eventually to a 154,000-gallon steel storage tank.

Are there contaminants in our drinking water?

As State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, total trihalomethanes, haloacetic acids, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, synthetic organic compounds, radiological contaminants, 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.

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 Chenango County Health Department at (607-337-1673).

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Nitrate Lake	No	8/2/23	<0.20	mg/L	10	MCL = 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrate Hubbard ² (emergency well)	No	8/2/23	<0.20	mg/l	10	MCL=10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Lead	No	9/20/23	0.0024 ¹ (<0.0010-0.0028)	mg/L	0	AL= 0.015	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	No	9/20/23	0.474 ¹ (.170-0.481)	mg/L	1.3	AL= 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Barium Hubbard ² (Emergency Well)	No	5/16/22	0.284	mg/L	2	MCL = 2	Discharge of drilling wastes and metal refineries; Erosion of natural deposits
Fluoride Hubbard ² (Emergency Well)	No	5/16/22	0.20	mg/L	n/a	MCL = 2.2	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
Arsenic Hubbard ² (Emergency Well)	No (non-potable water source)	8/2/23	0.0139	mg/L	n/a	0.010	Erosion of natural deposits; Runoff from orchards.
Barium Lake	No	8/2/23	0.0035	mg/L	n/a	MCL=2	Discharge of drilling wastes and metal refineries; Erosion of natural deposits
Radiological Contaminants							
Gross Alpha Hubbard ² (Emergency Well)	No	4/12/23	2.14	PCi/L	0	MCL = 15	Erosion of natural deposits.
Gross Alpha Lake	No	8/2/17	0.5	PCi/L	0	MCL = 15	Erosion of natural deposits.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Radium-228 Hubbard ² (Emergency Well)	No	4/12/23	0.0	PCi/L	0	MCL = 5	Erosion of natural deposits.
Combined Radium Lake	No	8/2/17	1.358	PCi/L	0	MCL = 5	Erosion of natural deposits.
Organic Contaminants							
Disinfection Byproducts							
Total Tri-Halomethanes LRAA1	No	8/2/23	59	µg/L	n/a	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Total Haloacetic Acids LRAA1	No	8/2/23	25.9	µg/L	n/a	MCL = 60	By-product of drinking water chlorination needed to kill harmful organisms.

Emerging Contaminants (Synthetic Organic Contaminants)³

Perfluorooctane Sulfonic Acid (PFOS) Lake	No	8/2/23	0.754 ⁴	ng/l	n/a	MCL= 10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctanoic Acid (PFOA) Lake	No	8/2/23	1.33 ⁴	ng/l	n/a	MCL= 10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooheptanoic Acid (PFHPA) ³ Lake	No	8/2/23	1.48 ⁴	ng/l	n/a	MCL=10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorobutanoic Acid (PFBA)	No	8/2/23	7.03	ng/L	n/a	MCL=10	Released into the environment from widespread use in commercial and industrial applications.
Perfluoropentanoic (PFPeA)	No	8/2/23	2.16	ng/L	n/a	MCL=10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorobutanesulfonic Acid (PFBS)	No	8/2/23	1.07 ⁴	ng/L	n/a	MCL-10	Released into the environment from widespread use in commercial and industrial applications.

Perfluorohexanoic Acid (PFHxA)	No	8/2/23	1.73 ⁴	ng/L	n/a	MCL=10	Released into the environment from widespread use in commercial and industrial applications.
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1-90th Percentile Value: The values reported for lead and copper represent the 90th percentile. 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 and copper values detected at your water system. The action level for lead was exceeded at one of the test sites. There was no action level exceedance for copper. For more information about Lead contact your local health department or www.epa.gov.

2- This well cannot be activated as a potable water source without further treatment.

3-Due to the Emerging Contaminant regulation, sampling of PFAS is required.

4- These sample results were labeled by the laboratory as "J Qualifiers". This represents an estimated concentration for Tentatively Identified Compounds.

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.

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 to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

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

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers longer than 10 micrometers.

Disinfection By-Products (DBP): By-products which are the result of disinfection needed to kill harmful organisms.

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 New York State requirements.

Is our water system meeting other rules that govern operations?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. In 2023 The Guilford Water District was in compliance with applicable state drinking water operating and reporting requirements.

The Hubbard Well (emergency well) is continually monitored for arsenic levels. This well cannot be activated as a potable water source without further treatment. The village is actively pursuing alternative means to remediate this situation.

Important 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. Guilford 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. 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>.

Information for Non-English Speaking Residents:

Spanish: Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

French:

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien

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 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 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 questions.