Annual Drinking Water Quality Report for 2021
Glenerie Water District
1 Town Hall Drive – Lake Katrine, New York 12449
(Public Water Supply ID# 5530247)

INTRODUCTION

To comply with State and Federal regulations, the Glenerie Water District 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 your awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. 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 **John Rose, Water Superintendent,** at **845-382-1833** or the **Ulster County Health Department at 845-340-3010.** If you would prefer contacting us via e-mail, our address is **watersewer@townofulster.org.** 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 at **7:00 p.m.** on the **third Thursday** of each month at the Town Hall located at 1 Town Hall Drive in Lake Katrine, New York.

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 and the FDA's regulations establish limits for contaminants in bottled water as well, which must provide the same protection for public health.

Our water source is drawn from wells, which are located on Fording Place Road and Parish Lane in Lake Katrine. The water is pumped from the wells to the treatment plant where it is softened and chlorine and potassium permanganate are added to enhance the iron removal process as it passes through the Ferrosand "cr" filters. The water is disinfected again with chlorine as it leaves the plant. During 2020, our system did not experience any restrictions of our water source.

Through an agreement with the City of Kingston's Board of Water Commissioners, the Ulster Water Department purchased 700,000 gallons of water per day from the Kingston Water Department in 2021. Some of this water is blended with water produced at our Ulster Water plant and is part of the total gallons of water purchased by the Glenerie Water District listed below under facts and figures. A copy of the City of Kingston's Annual Drinking Water Quality Report is available by contacting the Ulster Water Department at 845-382-1833.

FACTS AND FIGURES

As of 12/31/2021 there were 185 water services throughout the district. The total water purchased in calendar year 2021 was 7,515,590 gallons or an average of approximately 20,591 per day. The amount of water delivered to customers was 8,039,614 gallons. In 2021 there was an unaccountable water loss total of approximately 0%. Unaccountable water loss comes from various sources such as, but not limited to, water main breaks, main flushing, street sweeping and firefighting. Water rates for the Glenerie Water District were as follows: The first 5000 gallons (minimum charge) was $26.00; 5001 gallons and above was $4.20 per thousand gallons or portion thereof.

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, and synthetic organic compounds. 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, may be more than one year old.

Table of Detected Contaminants

Contaminant	Violation Yes / No	Date of Sample	Level Detected/ Average (Range)	Unit of Measurement	MCLG	Regulatory Limit MCL,TT, or AL	Likely Source of Contaminant
Lead (1)	No	9/22/2021	2.1 (<1.0-4.1)	ug/L	0	AL=15	Corrosion of household plumbing; Erosion of natural deposits.
Copper (2)	No	9/22/2021	250 (<10-510)	ug/L	1300	AL=1300	Corrosion of household plumbing systems; Erosion of natural deposits.
Sodium (3)	No	12/16/14	86.1	mg/L	N/A	See footnote #3	Naturally occurring; Water softeners; Road salt; Animal waste.
TTHM's stage 2 **(4)** Trihalomethanes	Yes	2021	71 (52-87)	ug/L	N/A	MCL=80	By product of drinking water chlorination.
HAA5's stage 2 (4) Haloacetic Acid	No	2021	25.88 (17-35)	ug/L	N/A	MCL=60	By product of drinking water chlorination.
Turbidity (5)	No	2021	.26	NTU	NA	TT=<1NTU	Soil Run off
Barium	No	10/21/2021	0.083	mg/l	2	2	Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries.
Nitrate	No	5/25/2021	0.073	mg/l	10	MCL=10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nickel	No	10/21/2021	0.00081	mg/L	N/A	N/A	

Notes:

1- The level presented represents the 90th percentile of the 20 sites tested. The action level for lead was not exceeded at any of the sites tested.

2- The level presented represents the 90th percentile of the 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 our water system. Out of the 20 samples that were collected the 90th percentile value was .41mg/l. The action level for copper was not exceeded at any of the sites tested.

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.

4- This level represents the highest locational running annual average calculated from data collected.

5- Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Of the 52 total tests taken for turbidity this year the highest turbidity measurement was .29 State regulations require that 95% of turbidity samples collected have measurements below 0.3NTU and that all turbidity samples results are less than 1NTU.

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.
***Maximum Residual Disinfection Level* (MRDL):** The highest level of a drinking water disinfection allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
***Maximum Residual Disinfection Level Goal:* (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
***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).
***Treatment Technique* (TT):** A required process intended to reduce the level of a contaminant in drinking water.
Nephelometric Turbidity Unit (*NTU*): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
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 Ulster County Health Department at 340-3010.

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.
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 be higher than at other homes in the community as a result of materials used in your home's plumbing. The Ulster Water District is responsible for providing high quality drinking water, but cannot 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 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

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 Cyptosporidium, Giardia and other microbial pathogens are available from the Safe Water Hotline (800-426-4791)

Is Our Water System Meeting Other Rules That Govern Operations?
During 2021 our system was in compliance with all applicable State drinking water operating, monitoring and reporting requirements.

Why Save Water and How Do We Avoid Wasting It?
Although our area is very fortunate to have access to a water supply which more than meets our demands, conservation efforts by both the town and the consumer are prudent in deterring increasing costs. As a consumer you can participate in this water conservation effort. The following are some ideas that can be directly applied to your individual homes: 1) Use water-saving, flow-restricting shower heads and low flow faucets (aerators): 2) Repair dripping faucets and toilets that seem to flush by themselves: 3) Replace your toilet with a low flush model or place a brick in your tank to reduce the volume used on each flush: 4) Water your garden and lawn only when necessary. Remember that a layer of mulch in the flower beds and garden is not only aesthetically pleasing but will help retain moisture: 5) Water your lawn after 6:00pm, as this prevents water loss due to evaporation: 6) When washing your car don't let the hose run continuously; and 7) When brushing your teeth, or when shaving or shampooing your hair try to avoid running the water unnecessarily; and lastly try whenever possible to wash clothes and run the dishwasher only when you have a full load.

Source Water Assessment:
The New York State Department of Health has completed a source water assessment for Well #2 and Well #3 of this system, based on available information. Possible and actual threats to these drinking water sources were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of source water, but it **does not** mean the water delivered to consumers is, or will become contaminated. The source water assessments provide resource managers with additional information for protecting source waters in the future.
The source water assessment has rated these wells as having a high susceptibility to microbials, nitrates, industrial solvents and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facility (industrial\commercial facilities that discharge wastewater into the environment and are regulated by the state and\or federal government); a hazardous waste facility; a toxic chemical release facility; and low intensity residential activities in the assessment area. In addition, the wells draw from an unconfined aquifer and the overlying soils do not provide adequate protection from potential contamination. Please note that, while the source water assessment rates our wells as being susceptible to microbials, our water is disinfected to ensure that the finished water delivered to your home meets the New York State drinking water standards for microbial contamination.
A copy of this assessment, including a map of the assessment area, can be obtained by contacting us at the number listed above.

System Improvements:
8/20/21 – Mixer at the Glenerie tower no longer working. Pulled Grid-bee mixer out of the tower.
12/2021 Installed New Mixer (Kasco) for the Glenerie Tower.

System Maintenance:
October – Flushed all Hydrants in District
Summer – Worked valves in District

Security:
This water system has increased preventive security measures to protect the water supply from vandalism. The public can also assist us by reporting any suspicious activities around water department facilities or properties.

Closing:
Thank you for allowing us to continue to provide 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 and our way of life. Please call our office if you have any questions.