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Annual Drinking Water Quality Report for 2020
Charlton Water District
163 Stage Road
Charlton, NY 12019
(Public Water Supply ID#NY4503513)

INTRODUCTION

To comply with State regulations, the Charlton 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 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 Doug Flynn, Water Superintendent at 518-858-8032 or you can email us at waterdept@townofcharlton.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 on the 2nd and 4th Monday of each month at the town hall located at 758 Charlton Road, Charlton, NY.

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 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.

The Charlton Water District purchases drinking water from the Town of Glenville. The Town of Glenville's water system consists of four drilled wells in the Great Flats Aquifer just west of the Village of Scotia, between Route 5 and the Mohawk River. The aquifer is an extensive bed of sands and gravel underlying the Mohawk River channel. Glenville adds Sodium Hypochlorite (liquid chlorine) to the finished water for disinfection. A chlorine residual of 0.2 is maintained throughout the distribution system as required by New York State Department of Health Regulations as continuing insurance against any bacterial growth occurring within the system.

In 2020, the Charlton Water District provided water service to approximately 2,000 residents through 671 service connections. We purchased 40,728,910 gallons of water from the Town of Glenville. During 2020, The Town of Glenville did experience one violation from the EPA for failing to fully comply with UCMR 4 rule to meet the dead line for the UCMR4 sampling due to change over of operators. Glenville has since coordinated with the EPA to make up the test and are now back in compliance. During 2020 the Town of Glenville did not experience any violations that required any restriction of our water source.

The NYSDOH has completed a source water assessment for the Town of Glenville's drinking water sources. The source water assessment was based on available information. Possible and actual threats to the 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 the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See section "Are there contaminants in the drinking water?" for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The source water assessment rated the Glenville wells as having an elevated susceptibility to microbials and nitrates. The rating is due primarily to the fact that wells draw from an unconfined aquifer and the overlying soils are not known to provide adequate protection from potential contamination. While the source water assessment rates the wells as being susceptible to microbials, please note that the water is disinfected to ensure that that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination. The Town of Glenville recognizes the importance of watershed protection by implementing Watershed Rules and Regulations along with zoning restrictions. In 2004, many of the water related sites in the Town of Glenville were fenced off and alarm systems added for increased security.

The Health Department will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning and education programs. A copy of the assessment can be obtained by contacting the Town of Glenville.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants 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 Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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 New York State Department of Health (NYSDOH), Glens Falls District Office at 793-3893.

Charlton Water District staff is responsible for testing the water in the park's distribution system. The water is tested monthly for Total Coliform bacteria (2 samples per month), once every 3 years for lead and copper and disinfection byproducts and once every 9 years for asbestos. Source water monitoring is completed by the Town of Glenville. The Town of Glenville tests the source water for inorganic compounds, volatile organic compounds, synthetic organic compounds, nitrate, and radiologicals. The tables presented below summarize the test results for your drinking water. The State allows some contaminants to be tested less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

Table of Detected Contaminants
Source Water Samples Collected by the Town of Glenville

Parameter	Sample Date	Violation (Y/N)	Level Detected	Units	MCL	MCLG	Likely Source of Contamination
Inorganic Contaminants							
Nitrate	12/14/20	N	0.67	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Secondary Inorganic Standards							
Hardness (CaCo3)	2/11/19	N	202 (11.8 gr.)	mg/l	N/A	N/A	
Sodium	6/19/19	N	24.6	mg/l	N/A see note (1)	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Fluoride	6/19/18	N	<0.107	mg/l	2.2	N/A	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Barium	6/19/18	N	0.0207	mg/l	2	2	Some people who drink water containing barium in excess of the MCL, over many years could experience an increase in their blood pressure.
Principle Organics							
None measurable	12/22/20	N	ND	Ug/l			
Synthetic Organic Chemicals							
None measurable	6/26/20	N	ND	Ug/l			

(1) Water containing more than 20 mg/l sodium should not be used for drinking water by people on severely restricted sodium diets.

Table of Detected Contaminants
Distribution System Samples Collected by the Charlton Water District

Contaminant	Violation Yes/No	Date of Sample	Detected Level	MCLG	NYSDOH Limits or Guidelines (MCL or AL)	Likely Sources of Contamination
Disinfection Byproducts						
Total Trihalo-methanes	No	9/24/20	22.8 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
Total Haloacetic Acids	No	9/24/20	ND	N/A	60 (MCL)	By-product of drinking water chlorination needed to kill harmful organisms.
Inorganics						
Lead	Yes	7/28/20 8/19/20	20.4[1] (0.5-31)[2]	N/A	15 (AL)	Corrosion of household plumbing. Erosion of natural deposits.
Copper	No	7/28/20 8/19/20	0.0989[1] (0.027-0.196)[2]	N/A	1.3 (AL)	Corrosion of Household plumbing. Erosion of natural deposits.
Asbestos	No	6/20/13	1.72 MFL	7 MFL	7 MFL	Decay of asbestos cement in water mains. Erosion of natural deposits.

Notes:
1 - 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 the second highest sample result. Lead was detected above their Action Levels in two of the 10 sites tested. The ten sites were retested and Lead was not detected above their Action Levels in any of the 10 sites tested.
2 – The levels presented represent the range of the 10 samples.

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 that 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 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 that are longer than 10 micrometers.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the tables above, the Town of Glenville's water system did not exceed any contaminant MCL levels in 2020. During 2020 we exceeded the lead action level at the 90th percentile and were required to provide public notification. Repeat samples for the two sites that exceeded showed no exceedance; however, additional sampling is needed to confirm compliance. We are currently working with NYSDOH on a Monitoring Plan containing 20 test sites and will be testing those 20 sites once between January 1, 2021 and June 30, 2021 and again between July 1, 2021 and December 31, 2021. Please refer to the section below regarding the health effects of lead in drinking water.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2020, both our system and the Town of Glenville water system were in compliance with applicable State drinking water operating, 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).

INFORMATION ON LEAD.

If present, elevated levels of 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 Charlton WD 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 or at *http://www.epa.gov/safewater/lead*

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 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.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes; if it moved, you have a leak.

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. Please call our at 384-0152 ext. 210 office if you have questions.