Annual Drinking Water Quality Report for 2021
Town of Stillwater, New York
881 Hudson Ave., Stillwater, New York 12170
(Public Water Supply ID# NY4530267 & NY4530219)

INTRODUCTION

To comply with State regulations, the Town of Stillwater, 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. In 2013, the Town consolidated former Water District #1, #3, and #4 into Water District #6. As of November 7, 2017, the Saratoga County Water Authority (SCWA) has been the water supply to Water District #6. Following connection to the SCWA, Water District #6 has been renamed as Stillwater Town SCWA and permitted under Public Water Supply ID# 4530267.

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. Last year, we conducted the State required testing to identify potential drinking water contaminants. 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.

If you have any questions about this report or concerning your drinking water, please contact Matt Harris, Superintendent of Highway Water & Sewer, 1 Lansing Road, Still Water, New York, 12170, Phone: (518) 664 – 4611. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the first and third Thursday evening of each month at 7:00 p.m. in the Town Government Complex, located at 881 Hudson Ave., Stillwater, NY 12170.

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.

STILLWATER TOWN SCWA WATER DISTRICT

As previously indicated, the Town formed Water District #6 in 2013 by consolidating former Water Districts #1, #3, and #4. Water District #6 was created in preparation of the district being supplied by the SCWA system following the completion of the water system connection project. The connection to the new supply was completed in November of 2017 and the district renamed as Stillwater Town SCWA.

STILLWATER TOWN SCWA WATER DISTRICT FACTS AND FIGURES

The Stillwater Town SCWA Water District system services customers through 984 service connections. This includes the connection on Cordero Boulevard servicing the Kings Isle Apartments (formerly Water District #6 Ext. #1). In 2021 Town of Stillwater SCWA Water District users purchased a total of 78,972,000 gallons. The daily average amount of water used by the SCWA Water District customers in 2021 was approximately 216 thousand gallons per day (GPD). The maximum day production of 487,000 gallons occurred on October 21, 2021, to refill the water storage tanks. In 2021, water customers within Stillwater Town SCWA Water District paid $7.55 per thousand gallons of water.

TOWN OF STILLWATER WATER DISTRICT #5

The Town of Stillwater Water District #5 does not have its own supply of raw water or a water treatment facility. Therefore, the Town is a secondary water purveyor and purchases its regular supply of drinking water from the Village of Stillwater (SCWA supply).

DISTRICT #5 FACTS AND FIGURES

The Town of Stillwater Water District #5 system serves approximately 40 customers through 12 service connections. In 2021, Water District #5 customers purchased a total of 897,310 gallons. The daily average amount of water used by Water District #5 customers in 2021 was approximately 2,458 gallons per day (GPD). In 2021, water customers within Water District #5 paid $8.95 per thousand gallons of water.

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 bacteria, lead and copper and disinfection byproducts (total trihalomethanes and haloacetic acids). Source water monitoring is completed by the Saratoga County Water Authority. The water sources are tested for inorganic compounds, volatile and semi volatile organic compounds, synthetic organic compounds, PCBs, nitrate, and radiologicals. The table presented below summarize the test results for the Town Stillwater SCWA Water District. The Table of Detected Contaminants for the Saratoga County Water Authority is also included below. Water District #5 is tested by the Village of Stillwater and the Town receives a report if there are any violations. No violations were reported in District #5 in 2021.

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).

Table of Detected Contaminants Stillwater Town SCWA - NY4530267							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Compounds							
Copper	No	9/8/2021	0.145 [1] 0.011-0.158[2]	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; and erosion of natural deposits.
Lead	No	9/8/2021	0.0012 [1] ND-0.0029[2]	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfection Byproducts							
TTHMs	No	Quarterly 1st, 2nd, 3rd and 4th Quarter-2021	44.4[3] 21.60-58.30[4]	ug/L	N/A	MCL=80	By-product of drinking water chlorination.
HAA5s	No	Quarterly 1st, 2nd, 3rd and 4th Quarter-2021	51.05[3] 28.0-68.8[4]	ug/L	N/A	MCL=60	By-product of drinking water chlorination.

1. The level presented represents the 90th percentile of the sites tested. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. During September 2021, 10 samples were collected for lead and copper analysis. Lead and copper were not detected above the action level at any of the sites tested during the sampling round.
2. The levels presented are the range of the samples collected.
3. Compliance for TTHM and HAA5 MCLs is based on a running annual arithmetic average, computed quarterly, of quarterly averages of all samples. The running averages were calculated by taking the average of each Quarter and the Quarter(s) before. For example, 1st Quarter 2021 Running Annual Average was calculated using data collected during the 1st Quarter 2021, the 4th Quarter 2020, the 3rd Quarter 2020, and the 2nd Quarter 2020. During 2021, the highest running annual average for TTHMs occurred during the 3rd Quarter of 2021 and HAA5s occurred during the 4thQuarter of 2021. The running annual average for TTHMs and HAA5s did not exceed the MCL in 2021.
4. The levels presented are the range of TTHM and HAA5 sample results collected during 2021.

Table of Detected Contaminants Saratoga County Water Authority – Y4530222							
Contaminant	**Violation Yes/No**	**Date of Sample**	**Level Detected Avg/Max (Range)**	**Unit Measurement**	**MCLG**	**Regulatory Limit (MCL,TI or AL)**	**Likely Source of Contamination**
Microbiological Contaminants							
Total Coliform Bacteria	No	Monthly	None	Monthly	0	Systems with less than 40 samples per month – two or more samples positive for Total Coliform represents an MCL violation.	Naturally present in the environment.
Turbidity (Highest Result -Entry Point)	No	6-8-2021	0.117[1]	NTU	NIA	TT-1.0	Soil Runoff.
Turbidity Transmission System	No	6-6-2021	0.18	NTU	NIA	TT-5.0	
Total Organic Carbon (TOC)	No	Raw Avg Treated Avg	4.38 1.88	mg/l	NIA	TT	Naturally present in the environment.

Inorganics							
Contaminant	**Violation Yes/No**	**Date of Sample**	**Level Detected Avg/Max (Range)**	**Unit Measurement**	**MCLG**	**Regulatory Limit (MCL,TI or AL)**	Likely Source of Contamination
Nitrate	No	2-23-21	0.14	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Manganese	No	4-8-20	2	ug/l	NIA	300	Naturally occurring; Indicative of landfill contamination
Sodium	No	4-8-20	8.7	mg/l	NIA	270*	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	4-8-20	11.3	mg/l	NIA	250	Naturally occurring or indicative of road salt contamination.
Barium	No	2-23-21	5	ug/l	2	2000	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Copper	No	6-10-21	.38[2] 0.06-0.39[3]	mg/l	NIA	1.3	Corrosion of household plumbing
Lead	No	6-10-21	ND	mg/l	NIA	0.015	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfection Byproducts							
Haloacetic Acids – (mono-, di, and trichloroacetic acid, and mono- and di-bromoacetic acid2, [3,4]	No	LRAA#1[4] Average Rankge LRAA#2 Average Range LRAA#3 Average Range LRAA#4 Average Range	39.6[5] 18.3-51.4 22.51 11.6-30.0 31.70 15.3-44.0 31.51 12.9-56.1	ug/l	NIA	60	By-product of drinking water chlorination needed to kill harmful organisms
Trihalomethanes-(Chloroform, Bromodichloromethane, dibromochloromethane, and bromoform)[2, 3, 4]	No	LRAA#1[4] Average Rankge LRAA#2 Average Range LRAA#3 Average Range LRAA#4 Average Range	35.9 13.0-62.0 21.3 7.1-31.0 30.9 16.0-50.4 30.1 9.4-6.0	ug/l	NIA	80	By-product of drinking water chlorination needed to kill harmful organisms.

1. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The level detected represents the highest level detected. The standard for distribution, or transmission, system turbidity is 5 NTU.

2. The level presented represents the 90th percentile of the 10 samples collected.
3. The levels represent the range of results. The copper action level was not exceeded at any of the sites tested. Lead was not detected at any of the sites tested.
4. LRAA means Locational Running Annual Average. This is a calculation of all samples collected during the running 4 quarter sampling period and averaged for that specific location. Location #1=LFTC Tank Out; Location #2=Wilton Connection; Location #3=LFTC Tank In; Location #4=Ballston Connection.
5. The highest locational running annual average for each sample site is shown, followed by the range of results. The highest LRAA occurred during the 4th quarter in 2021. Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

* Water containing more than 20 mg/1 of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/I of sodium should not be used for drinking by people on moderately restricted sodium diets. SCWA results are well below these levels.

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.

Level 1 Assessment: A Level 1 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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 that are longer than 10 micrometers.

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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

The Town of Stillwater is 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. We were not issued any monitoring and reporting violations in 2021 for any of the water districts.

INFORMATION ON CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. The Saratoga County Water Authority utilizes membrane filtration technology which removes these contaminants at higher rates than conventional water treatment technologies. During 2018 as part of our routine sampling, eight samples were collected of untreated Hudson River source water and analyzed for Cryptosporidium oocysts. Of these samples, no oocysts were detected. Therefore, our testing indicates there was no presence of Cryptosporidium in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

INFORMATION ON GIARDIA

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. During 2018 as part of our routine sampling, eight samples were collected of untreated Hudson River source water and analyzed for Giardia cysts.
Of these samples, seven samples showed a total of seventy-nine cysts and one sample showed no cysts. Therefore, our testing indicates the presence of Giardia in our source water. No results were detected in the treated water distributed to customers. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Giardia may cause giardiasis, an intestinal illness. The Saratoga County Water Authority utilizes membrane filtration technology which removes these contaminants at higher rates than conventional water treatment technologies. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms

at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand washing practices are poor.

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).

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 Town of Stillwater 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.

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

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 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 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. 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.

Annual Drinking Water Quality Report 2021
Saratoga County Water Authority
260 Butler Road, Gansevoort, NY 12831
(Public Water Supply ID#NY4530222)

INTRODUCTION

To comply with Part 5-1.72 of the New York State Sanitary Code (10 NYCRR), the Saratoga County Water Authority (SCWA) 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. Included are details about where the 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 us at (518) 761- 2058. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Water Authority board meetings. The meetings are held monthly in the Board of Supervisor's meeting room at the Saratoga County Office Building located at 40 McMaster Street, Ballston Spa, NY 12020. For the next meeting date and time please go to our website: www.saratogacountywaterauthority.com.

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

The water source for the SCWA is the upper Hudson River. Water treatment consists of addition of a coagulant and filtration through 0.1-micron membrane filters and granular activated carbon filters. Caustic soda is added for pH adjustment and orthophosphates are added for corrosion control. Sodium hypochlorite is added for disinfection and to maintain a residual through the transmission system. There are two 1 million-gallon water storage tanks (clearwell) at the water plant. These tanks provide contact time for proper disinfection of water and provides storage for our pumping and transmission system. Our water treatment plant has been in service since February of 2010.

Our drinking water is derived from a surface water source, the Hudson River. Hydrologic characteristics generally make rivers highly sensitive to existing and new sources of nitrate, phosphorus and microbial contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this Public Water System (PWS). This PWS provides treatment and regular monitoring to ensure that the water delivered to consumers meets all applicable standards. Continued vigilance in compliance with water quality protection and pollution prevention programs as well as continued monitoring and enforcement will help to continue to protect our source water quality.

FACTS AND FIGURES

In 2021 our water system served ten customers: The Town of Moreau, the Wilton Water & Sewer Authority, the Town of Ballston, the Clifton Park Water Authority, the Town of Malta, the Town of Halfmoon, the Village of Stillwater, the Town of Stillwater, the City Of Mechanicville and the Luther Forest Technology Campus. The total water provided to our customers in 2021 was 2.593 billion gallons. The annual daily average water consumption was 7.106 million gallons a day. Our highest monthly average daily flow was recorded during July 2021 at 11.09 million gallons per day. In 2021, municipal water customers were charged $2.322 per 1,000 gallons of water.

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, color, pH, chlorine residual, turbidity, inorganic compounds, nitrate, nitrite, volatile organic compounds, disinfection byproducts, radiologicals, 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.

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. Saratoga County Water Authority 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 the 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- 426-4729) or at http://.epa.gov/safewater/lead.

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 Glens Falls District Office at (518)793-3893.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TI or AL)	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria	No	Monthly	None	Monthly	0	Systems with less than 40 samples per month- two or more samples positive for Total Coliform represents an MCL violation	Naturally present in the environment.
Turbidity (Highest Result -Entry Point)	No	6-8-2021	0.117[1]	NTU	NIA	TT-1.0	Soil Runoff.
Transmission System	No	4-6-21	0.18	NTU	NIA	TT-5.0	
Total Organic Carbon (TOC)	No	Raw Avg Treated Avg	4.38 1.88	mg/l	NIA	TT	Naturally present in the environment.
Inorganics							
Contaminant	**Violation Yes/No**	**Date of Sample**	**Level Detected (Avg/Max) (Range)**	**Unit Measurement**	**MCLG**	**Regulatory Limit (MCL,TI or AL)**	Likely Source of Contamination
Nitrate	No	2-23-2021	0.14	mg/I	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Manganese	No	4-8-20	2	ug/l	NIA	300	Naturally occurring; Indicative of landfill contamination
Sodium	No	4-8-20	8.7	mg/l	NIA	270*	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	4-8-20	11.3	mg/l	NIA	250	Naturally occurring or indicative of road salt contamination.
Barium	No	2-23-21	5	ug/l	2	2000	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Copper	No	6-10-21	0.38[2] 0.06-0.39[3]	mg/l	NIA	1.3	Corrosion of household plumbing
Lead	No	6-10-21	ND	mg/l	NIA	0.015	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfection Byproducts							
Haloacetic Acids - (mono-, di, and trichloroacetic acid, and mono- and di-bromoacetic acid2, 3.4,	No	LRAA#1[4] Average Range LRAA#2 Average Range LRAA#3 Average Range LRAA#4 Average Range	39.6[5] 18.3-51.4 22.51 11.6-30.0 31.70 15.3-44.0 31.51 12.9-56.1	ug/l	NIA	60	By-product of drinking water chlorination needed to kill harmful organisms.
Trihalomethanes-(Chloroform, Bromodichloromethane, dibromochloromethane, and bromoform) [2] [3] [4]	No	LRAA#1 Average Range LRAA#2 Average Range LRAA#3 Average Range LRAA#4 Average Range	35.9 13.0-62.0 21.3 7.1-31.0 30.9 16.0-50.4 30.1 9.4-63.0	ug/l	NIA	80	By product of drinking water chlorination needed to kill harmful organisms.

[1] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The level detected represents the highest level detected. The standard for distribution, or transmission, system turbidity is 5 NTU.

[2] The level presented represents the 90th percentile of the 10 samples collected.

[3] The levels represent the range of results. The copper action level was not exceeded at any of the sites tested. Lead was not detected at any of the sites tested.

[4] LRAA means Locational Running Annual Average. This is a calculation of all samples collected during the running 4 quarter sampling period and averaged for that specific location. Location #1= LFTC Tank Out; Location #2= Wilton Connection; Location #3= LFTC Tank In; Location #4= Ballston Connection.

[5] The highest locational running annual average for each sample site is shown, followed by the range of results. The highest LRAAs occurred during the 4th quarter 2021. Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

* 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.

Running Annual Average (RAA): The arithmetic average of the average results for each of four consecutive quarters. For disinfection byproducts the MCL and RAA are rounded to the nearest tenth when the results are given in micrograms per liter.

Locational Running Annual Average (LRAA): The average of all samples collected from that particular sampling location during each monitoring period over the Running Four Quarter Period.

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

Secondary Standards: Established standards that are based on aesthetics and are not based on health risk. These contaminants may cause color, taste or odor problems but will not cause illness.

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 (pJ:/1): Corresponds to one part per of liquid to one quadrillion parts of liquid (ppq).

Picocuries per liter (oCVLJ: A measure of the radioactivity in water.

Millirems per year (mrem/vr): 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 table our system had no violations in 2021 and had no detectable levels of lead. All samples in our distribution system were non-detectable.

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

We have learned through our monitoring and testing that some constituents have been detected; however, these compounds were detected at levels below New York State and federal requirements. These Maximum Contaminant Levels (MCLs) are set at very stringent levels. To understand the possible health effects for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the prescribed health effect.

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.

INFORMATION ON CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. The Saratoga County Water Authority utilizes membrane filtration technology which removes these contaminants at higher rates than conventional water treatment technologies. During 2018, as part of our routine sampling, eight samples were collected of untreated Hudson River source water and analyzed for Cryptosporidium oocysts. Of these samples, no oocysts were detected. Therefore, our testing indicates there was no presence of Cryptosporidium in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

INFORMATION ON GIARDIA

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. During 2018, as part of our routine sampling, eight samples were collected of untreated Hudson River source water and analyzed for Giardia cysts. Of these samples, seven samples showed a total of seventy-nine cysts and one sample showed no cysts. Therefore, our testing indicates the presence of Giardia in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Giardia may cause giardiasis, an intestinal illness. The Saratoga County Water Authority utilizes membrane filtration technology which removes these contaminants at higher rates than conventional water treatment technologies. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several

weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand washing practices are poor.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water meets 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 HN/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 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, and 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 office if you have questions.