

INTRODUCTION

To comply with New York State regulations, the Town of Ballston is issuing this report to describe 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 your water comes from, what it contains, and how it compares to State standards. Copies of Town of Ballston, Town of Glenville and Saratoga County Water Authority (SCWA) Annual Reports are posted on the above websites.

If you have any questions about this report or concerning your drinking water, please contact Joseph Whalen, Town of Ballston Water Superintendent at (518) 885-7660 Ext. 24 or Mr. Lawrence , Town of Glenville Plant Operator at (518) 382-1410 (lcolleton@townofglenville.org) or Thomas Coppola, Commissioner of Public Works at (518) 382-1406, or SCWA at 518-761-2058, website: www.saratogacountywaterauthority.com 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 second and the last Tuesday of the month at 6:30 PM at the Town of Ballston Municipal Center, 323 Charlton Road.

WHERE DOES OUR WATER COME FROM?

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 Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department 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 Town of Ballston purchases drinking water from the Town of Glenville and the SCWA. 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. Prior to distribution the Glenville well water is pumped into a clear well where it is given disinfecting treatment with chlorine before being pumped into the transmission and distribution mains. A free chlorine residual is maintained throughout the distribution system as required by New York State Department of Health regulations as continued insurance against any bacterial growth occurring within the system. The water source for the SCWA is the Hudson River. Water treatment consists of addition of a coagulant and filtration through 0.1 micron membrane filters, and then carbon filters. Caustic soda is added for pH adjustment and orthophosphates is added for corrosion control. Sodium hypochlorite is added for disinfection and to maintain a residual through the transmission system. There is a one million-gallon water storage tank (clearwell) at the water plant. This tank provides contact time for proper disinfection of water and provides storage for the pumping and transmission system.

The NYSDOH has completed a source water assessment for the Town of Glenville and the SCWA 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 a well or be collected in a watershed and carried overland to a surface water source. 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 our 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. These ratings are due primarily to the fact that the 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 the finished water delivered into your home meets New York State's drinking water standards.

SCWA's 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 water system as treatment is provided and routine monitoring is performed to ensure that the water delivered to consumers meets all applicable standards.

FACTS AND FIGURES

During 2016, the Town of Ballston Water District provided water service to approximately 7716 people through 2572 service connections. During 2016 we purchased 111,277,803 gallons of water from the Town of Glenville and 128,053,780 gallons from Saratoga County Water Authority. The daily average for all of 2016 was 655,703 gallons. The entire distribution system has been designed to provide the fire flows required by the Insurance Services Organization for recognition as acceptable for "protected" fire insurance rates. All water services and customers are metered in the town. During 2016, our system did not experience any restriction of our water source.

Current water rates for the Town of Ballston are \$4.05 per 1,000 gallons with a minimum annual charge of \$30.00. Additional information regarding other charges such as tapping fees can be found on our Web Page or by calling the Town of Ballston Water Dept. at 518-885-7660 Ext. 24. Metered usage charges pay for the water system operation and maintenance. Water system capital costs are raised through additional ad valorem charges, which vary with age of the particular extension which brought water service to the property, and the particular capital recovery charge system adopted for that extension at the time. All customers also share in ad valorem tax charges for system capital improvements benefiting everyone.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. Town of Ballston staff is responsible for testing the water in the distribution system. The water is tested monthly for Total Coliform bacteria (8 samples per month), once every 12 months for lead and copper, calendar quarterly for disinfection byproducts, and once every 9 years for asbestos. Source water monitoring is completed by the Town of Glenville and the SCWA. Source water sampling includes inorganic compounds, volatile organic compounds, synthetic organic compounds, nitrate, and radiological compounds. 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.

It should be noted that all drinking water, including bottled 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 risks. 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 793-3893.

Table of Detected Contaminants Source Water Samples Collected by the Town of Glenville							
Parameter	Sample Date	Violation (Y/N)	Level Detected	Units	Regulatory Limit (MCL, TT or AL)	MCLG	Likely Source of Contamination
Inorganics							
Barium	6/8/15	N	0.022	mg/l	0.1	2	Some people who drink water containing barium in excess of the MCL, over many years could

Nitrate	12/13/16	N	0.636	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewer; erosion of natural deposits:
Table of Detected Contaminants Distribution System Samples Collected by the Town of Ballston							
Parameter	Sample Date	Violation (Y/N)	Level Detected	Units	Regulatory Limit (MCL, TT or AL)	MCLG	Likely Source of Contamination
Disinfection Byproducts							
Total Trihalomethanes	2/12/16 5/10/16 8/10/16 11/9/16	N	388 Goode 35 ¹ (13.8-36.1) ² McCrea Tank 50.5 ¹ (32.6-49.2) ²	ug/l	80	N/A	By-product of drinking water chlorination needed to kill harmful organisms. THMs are formed when source water contains large amounts of organic matter.
Total HAA5s	2/12/16 5/10/16 8/10/16 11/9/16	N	388 Goode 23.6 ¹ (8.3-17.5) ² McCrea Tank 31.1 ¹ (25-37) ²	ug/l	60	N/A	By-product of drinking water chlorination
Lead & Copper							
Lead	6/2016	N	8 ³ (ND-21) ⁴	mg/l	N/A	15 (AL)	Corrosion of household plumbing; erosion of natural
Copper	6/2016	N	0.154 ³ (ND-0.343) ⁴	mg/l	N/A	1.3 (AL)	Corrosion of household plumbing; erosion of natural deposits

Table of Detected Contaminants Saratoga County Water Authority							
Contaminant	Violation Yes/No	Date of Sample	Level Detected Avg/Max (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Microbiological Contaminants							
Turbidity (Highest Result Entry Point)	No	11/14/2016	0.158	NTU	N/A	TT-1.0	Soil Runoff.
Total Organic Carbon (TOC)	No	Raw Avg Treated Avg	3.6 mg/l 1.6 mg/l	mg/l	N/A	TT	Naturally present in the environment.
Inorganics							
Nitrate	No	2/24/2016	0.13	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Contaminant	Violation Yes/No	Date of Sample	Level Detected Avg/Max (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Manganese	No	1/22/2013	12	ug/l	N/A	300	Naturally occurring; Indicative of landfill contamination
Sodium	No	1/22/2013	8.44	mg/l	N/A	270*	Naturally occurring; Road salt; Water softeners; Animal waste.
Zinc	No	1/22/2013	21	ug/l	N/A	5000	Naturally occurring; Mining waste.
Chloride	No	1/22/2013	10.8	mg/l	N/A	250	Naturally occurring or indicative of road salt contamination.
Sulfate	No	1/22/2013	3.8	mg/l	N/A	250	Naturally occurring.
Barium	No	3/8/16	6.0	ug/l	2	2000	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

¹ Compliance for TTHM and HAA5 MCLs is based on a locational running annual arithmetic average, computed quarterly, of quarterly averages of all samples. For example, the 1st Quarter 2016 Running Annual Average was calculated using data collected during the 1st Quarter 2016, the 3rd Quarter 2015, the 2nd Quarter 2015 and the 1st Quarter of 2015. The highest locational running average is shown for each sample site.

² Represents the range of results for the year.

³ The level presented represents the 90th percentile of the 18 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 lead and copper values detected at your water system. The lead action level was exceeded at two sites that were tested. No sites exceeded the copper action level.

⁴ Represents the range of lead and copper results.

* 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).

Nano grams per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Pico grams 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 in 2016. 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 2016 we were required to sample 20 homes for lead and copper. We collected 21 samples; however, three of the sites did not meet the sample site selection requirements required by the code and we were only given credit for 18 samples. We are required to notify our customers when we miss samples.

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 Town of Ballston 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>.

INFORMATION ON CRYPTOSPORIDIUM – SARATOGA COUNTY WATER AUTHORITY

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. During 2016, as part of our routine sampling, three samples were collected of untreated Hudson River source water and analyzed for Cryptosporidium oocysts. Of these samples, one sample showed two oocysts and two samples showed no oocysts. Therefore, our testing indicates the 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 – SARATOGA COUNTY WATER AUTHORITY

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 2016, as part of our routine sampling, three samples were collected of untreated Hudson River source water and analyzed for Giardia cysts. Of these samples, one showed five cysts and two 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. 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.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

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. 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.