

Annual Drinking Water Quality Report for 2019

Bolton Water District

Town of Bolton, 4949 Lake Shore Drive, Bolton Landing, NY 12814
(Public Water Supply Identification Number NY5600101)

INTRODUCTION

We are very pleased to provide you with this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to New York State standards. Our constant goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources. If you have any questions concerning this report or concerning your drinking water please contact: *Mr. Dylan Reid (ny0040928) Chief operator, Mr. Jeffery Dickinson (ny0036645) water system operator; 459 Edgecomb Pond Road, Bolton Landing, NY 12814 Telephone (518) 644-9350 or Town Supervisor Ron Conover (518) 644-2461. Additional information may be obtained at the Town Hall or at a regularly scheduled Town Board Meeting* Board meetings are held on the first Tuesday of each month, 6:00 PM at the Town Hall, 4949 Lake Shore Drive, Bolton Landing, NY 12814; Telephone (518) 644-2461; Webpage www.boltonnewyork.com

This report is being mailed to all water district customers in the spring 2020, billing cycle. This report is also available on the Town website and at the Town Clerk's Office in the Town Hall.

WHERE DOES OUR WATER COME FROM?

The Town of Bolton operates a surface water filtration plant. The source of our drinking water is Edgecomb Pond. The 35 acre pond has a storage capacity of 143 million gallons of usable water confined behind a 13' high concrete dam. There are about 1,152 acres of land in the watershed, of which 300 acres or approximately 25% is owned by the Water District, including all of the Pond's shoreline. A significant portion of the watershed is now owned by the Lake George Land Conservancy. The first water district was established in 1929 to provide water to the hamlet area. A second district was added in 1948 to extend water service south on 9N. Water is pumped from Edgecomb Pond to a surface water filtration plant. The Bolton Water Treatment Plant has two rapid sand filters capable of processing a total of one (1) million gallons per day. The treatment process consists of pH adjustment using soda ash followed by coagulation using polyaluminum chloride (PAC). Polyaluminum chloride is designed to cause fine particles in the water to bind together forming larger particles, which are then trapped on the sand filters. Liquid chlorine is added as a disinfectant to protect against harmful bacteria and other organisms. We add a polyorthophosphate corrosion control compound to serve as a shield on the interior of all pipes preventing lead and copper from leaching into the water from water pipes and solders. The finished water flows by gravity to a 500,000 gallon clearwell where the pH is adjusted using soda ash to enhance the anti-corrosion treatment and then flows by gravity to the distribution system. The clearwell provides storage to meet consumer demand and provide adequate fire protection.

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 NYSDOH and the United States Environmental Protection Agency (USEPA) prescribe regulations which limit the amount 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.

FACTS AND FIGURES

The Town provides water through 740 service connections to a population of approximately 1,800 people. Our average daily demand is 394,594 gallons. Our single highest day was 1,305,170 gallons. The total water produced in 2019 was 144,027,078 gallons. All water services are metered. This serves to promote water conservation and to provide a fair source of revenue. Water meter readings and billings are done on a quarterly basis- April, July, October and January. For a detailed water users rate schedule contact the Town of Bolton.

WHAT IS THE SOURCE WATER ASSESSMENT PROGRAM (SWAP)?

To emphasize the protection of surface and ground water sources used for public drinking water, Congress amended the Safe Drinking Water Act (SDWA) in 1996. The amendments require that New York State Department of Health's Bureau of Public Water Supply Protection is responsible for ensuring that source water assessments are completed for all of New York's public water systems. The NYSDOH has completed a Source Water Assessment Plan (SWAP) for our system, based on available information. Possible and actual threats to the drinking water source were evaluated. The SWAP 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 and surface water. 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. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The source water assessment did not identify any significant source of contamination to our water source Edgecomb Pond. There are no regulated facilities within the watershed of Edgecomb Pond, and the corresponding land cover and land uses within the assessment area do not pose any substantial threats to the source water quality. Continued vigilance in compliance with water quality protection and pollution and prevention programs as well as continued monitoring and enforcement will help to continue to protect our source water quality.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In accordance with State regulations, the Town of Bolton routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, radiological contaminants, lead and copper, nitrate, volatile organic contaminants, and synthetic organic contaminants. In addition, we test two (2) samples in the distribution system for coliform bacteria each month. The table presented on page 4 depicts which contaminants were detected in your drinking water. The state allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old and is noted.

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 pose 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.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table on page 4, our system did not exceed the lead action level at the 90th percentile during the year of 2019, however in December 2019 we had only collected 19 of the required 20 samples for testing due to residence not being here in the off season. We have made adjustments to our corrosion control treatment in 2018 which has been effective in controlling lead and copper levels.

We have learned through our monitoring and testing that some contaminants have been detected; however, these compounds were detected below New York State requirements. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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 described health effect.

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 Bolton 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 or at <http://www.epa.gov/safewater/lead>

Health Effects of Lead

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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During December 2019, we were required to collect 20 first draw lead and copper samples but were only able to collect 19. Also, we were required to collect second quarter disinfection byproduct samples in May, but we did not collect them until June. We will collect samples in 2020 in accordance with our sample schedule.

SPECIAL CONDITIONS

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 microbiological pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

WATER CONSERVATION TIPS

The Town of Bolton encourages water conservation. There are a lot of things you can do to conserve water in your own home. Conservation tips include:

- + Only run the dishwasher and clothes washer when there is a full load
- + Use water saving showerheads
- + Install faucet aerators in the kitchen and the bathroom to reduce the flow from 4 to 2.5 gallons per minute
- + Water gardens and lawn for only a couple of hours after sunset
- + Check faucets, pipes and toilets for leaks and repair all leaks promptly
- + Take shorter showers

CLOSING

Our goal is to continue to furnish high quality, safe drinking water to our community. Thank you for reading the information that we have provided in the annual report. We know it is important to keep our consumers informed; we welcome your comments and suggestions.

TOWN OF BOLTON TABLE OF DETECTED CONTAMINANTS
Public water supply identification number (5600101)

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform	N	No sample positive	Cfu/100mL	0	MCL= 2 or more positive samples	Naturally present in the environment.
Turbidity	N	0.16 ¹	NTU	N/A	TT=5 NTU	Soil runoff
		100%			TT= % samples <0.3	
Inorganic Contaminants						
Barium 7/10/19	N	5.8	Ug/L	2000	2000	Erosion of natural deposits
Chloride 9/12/17	N	10.1	Mg/l	N/A	250	Geology; Naturally occurring
Lead	N	June 2019 1 ² (ND-4) ³ December 2019 ND ² (ND-ND) ³	Ug/L	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Copper	N	June 2019 67035 ² (100-890) ³ December 2019 580 ² (100-760) ³	Ug/l	1300	AL=1300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	N	0.059	Mg/l	N/A	MCL=2.2	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	N	0.0098	Mg/l	10	MCL=10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Manganese 9/12/17	N	8	Ug/L	N/A	300	Geology; Naturally occurring
Sodium 7/10/19	N	7.43	Mg/L	N/A	N/A ⁴	Geology; Road Salt
Sulfate 9/12/17	N	3.52	Mg/L		250	Geology
Zinc 9/12/17	N	369	Ug/L	N/A	5000	Galvanized pipe; Corrosion inhibitor
Stage 2 Disinfection Byproducts (sample data from quarterly samples collected 2/21/19, 6/5/19, 8/21/19 & 11/20/19)						
Haloacetic Acids (HAA5) Range of values for HAA5	N	32.3 ⁵ 8.7-25.5 ⁶	Ug/L	N/A	60 ⁶	By-product of drinking water chlorination.
Total Trihalomethanes (TTHM) Range of values for TTHM	N	28.8 ⁵ 14.9-23.6 ⁶	Ug/L	0	80	By-product of drinking water chlorination
Chlorine Residual average based on (daily testing) Range of values	N	1.05 0.83-1.3	ppm	MRDLG	MRDL	Used in the treatment and disinfection of drinking water
				N/A	4	

NOTES-

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. Distribution system turbidity performed *at least 5* times a week with 0.16 NTU being the average level detected with 2.46 NTU being highest level detected and 0.052 NTU being the lowest level detected. The standard for distribution system turbidity is 5 NTU.
2. The level presented represents the 90th percentile of sites tested. The action level for copper and lead was not exceeded in any of the samples collected.
3. The numbers represent the range of sample results.
4. Water containing more than 20 mg/l should not be used as a drinking water source by persons on severely restricted sodium diets. Water containing more than 270 mg/l should not be used as a drinking water source by people on moderately restricted diets.
5. The number represents the highest Locational Running Annual Average (LRAA) for the four quarters of 2019. The highest LRAA for the TTHM and HAAS was in the 1st quarter of 2019.
6. The numbers represent the range of results for the year.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000. Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

90th Percentile Value- The values reported for lead and copper represent the 90th percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system

Action Level - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal The "Goal" (MCLG) is 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

Locational Running Average (LRAA) - The LRA is calculated by taking the average of the four most recent samples collected at each individual site.

N/A-Not applicable