Annual Drinking Water Quality Report for 2023
Blue Mt. Lake Water District (Indian Lake Water District #1)
PO Box 730 Indian Lake, NY 12842
Public Water Supply ID NY2000135

INTRODUCTION

To comply with State and Federal regulations, the Town of Indian Lake annually issues 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 for 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 Water Superintendent Pat Mahoney at (518) 648-5303. We want our customers to be informed about their water. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. They are held on the second Monday of every month at 7:00 pm at the Town Hall.

Where does our water come from?

In general, all 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 or inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and even radioactive contaminants. To ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the number of contaminants in water provided by public water systems. The New York 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 source of water for Indian Lake Water District #1 is Blue Mt. Lake. An 8" intake line extends approximately 350' into the lake at a depth of 20'. Water flows through the intake line to a wet well where one of two 200-gpm raw water pumps conveys water to the filtration plant. Two vacuum diatomaceous earth filters provide filtration. Sodium hypochlorite solution is added for disinfection. A blended ortho-phosphate is used for corrosion control. The treated water is stored in a 13,760-gallon clearwell located under the filter room. The filtered and treated water is pumped into the distribution systems by one of two 200-gpm high lift pumps. Satisfactory chlorine contact time has been provided through the clearwell and transmission line. A 300,000-glass lined steel tank provides storage for the system. Our water system serves 400 people through 150 service connections.

The New York State Department of Health completed a source water assessment for this system based on available information. This assessment found an elevated susceptibility to contamination for this source of drinking water. Land cover and its associated activities within the assessment area does not increase the potential for contamination. There is also a high density of sanitary wastewater discharges which results in elevated susceptibility for all contaminate categories. In addition, it appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to further raise the potential for contamination (particularly for protozoa). There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include the landfill. Additional sources of potential contamination include septic systems and a roadway. 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.

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, turbidity, organic compounds, inorganic compounds, nitrate, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds, including PFAS and 1,4-dioxane. The table below depicts which compounds were detected. The DOH allows us to test for some contaminants less than once per year because concentrations of these do not change frequently. Therefore, some of our data, though representative, is 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 called the EPA's Safe Drinking Water Hotline (800-426-4791) or the New York State Department of Health at (518) 891-1800.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measure -ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Microbiological Contaminants							
Turbidity[1]	No	07/12/2023	0.70	NTU	n/a	TT=<5NTU	Soil Runoff
Turbidity[1]	No	2023	100% < 1.0	NTU	n/a	TT=95%of samples <1.0NTU	Soil Runoff
Inorganic Contaminants							
Barium	No	2023	0.0078	mg/l	2	2(MCL)	Erosion of natural deposits
Fluoride	No	2021	ND	mg/l	n/a	2.2 (MCL)	Naturally occurring.
Iron	No	2019	0.03	mg/l	n/a	0.3 (MCL)	Naturally occurring
Sulfate	No	2019	2.33	mg/l	n/a	250 (MCL)	Naturally occurring
Color	No	2019	5	Units	n/a	15 (MCL)	Natural color may be caused by decaying leaves, plants, and soil organic matter.
Zinc	No	2019	0.005	mg/l	n/a	5 (MCL)	Naturally occurring; mining waste
Sodium	No	2022	14	mg/l	n/a	See Note 6	
Manganese	No	2019	0.006	mg/l	n/a	0.3 (MCL)	Naturally occurring or indicative of landfill leachate
Chloride	No	2019	22.6	mg/l	n/a	250 (MCL)	Naturally occurring or indicative of road salt contamination
Nitrate	No	2023	0.06	mg/l	10	10 (MCL)	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits.
Copper	No	2022	0.10[2] 0.ND-0.16[3]	mg/L	1.3	1.3 (AL)	Corrosion of household plumbing systems.
Lead	No	2022	0.001[2] ND-0.0011[3]	mg/L	0	0.015 (AL)	Corrosion of household plumbing systems.
Disinfection Byproducts							
Total Trihalomethanes (TTHMs)	No	2023	58.3[4] 24.3 – 82.9[5]	ug/L	n/a	80 (MCL)	By-products of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains measurable amounts of organic matter.
Haloacetic Acids (HAA5s)	Yes	2023	42.8[4] 35.4 – 118.0[5]	ug/l	n/a	60 (MCL)	By-product of drinking water chlorination

NOTES:

[1] Turbidity is a measure of the cloudiness of our water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Our highest measurements for the year occurred on 07/12/2023 (0.70 NTU). State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 1.0 NTU. 100% of the samples collected in 2023 were below 1.0 NTU.

[2] The level presented represents the 90th percentile of the 5 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 90th percentile is the average of the highest and second highest value when 5 samples are collected.

[3] The level presented represents a range of the lead and copper samples collected. The action level for lead and copper was not exceeded at any of the 5 test sites.

[4] The value represents the highest Locational Running Annual Average of the quarterly samples collected during 2023.

[5] The values represent the range of the quarterly samples collected during 2023.

[6] 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.

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.

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

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity more than 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).

Picocuries per liter (pCi/L) – picocuries per liter is a measure of the radioactivity in water.

Nanograms per liter (ng/l) corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

EPA Test Method 533 is used to measure PFOA and PFOS which are regulated perfluoroalkyl analytes with an MCL level of 10 nanograms per liter (ng/L) or 10 parts of liquid per 1 trillion parts of liquid. As part of EPA Test Method 533 a total of 25 analytes are also measured as part of that test. Unregulated perfluoroalkyl analytes that were analyzed in our water samples and had detectable levels are shown in the Unregulated Perfluoroalkyl Substances table provided below.

Unregulated Perfluoroalkyl Substances MCL level for each Unregulated PFAS Substance = 50,000 ng/L					
Contaminant	**Violation (Yes/No)**	**Date of Sample**	**Level Detected**	**Unit Measurement**	**MCGL or Health Advisory Level[1,2]**
Perfluorobutanoic Acid (PFBA)	No	2023	ND	ng/L	NA

1 USEPA Health Advisory Levels identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects are not anticipated to occur over specific exposure durations. Health Advisory Levels are not to be construed as legally enforceable federal standards and are subject to change as new information becomes available.

2 All perfluoroalkyl substances, besides PFOA and PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 50,000 ng/L.

What does this information mean?

We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. It should be noted that the action level for lead and copper was not exceeded. Even though lead and copper concentrations were low and did not exceed Action Levels, we are required to present the following information on lead in drinking water: 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 Blue Mountain Lake Water District is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Pat Mahoney, Water Superintendent, at 518-352-7313. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at *http://www.epa.gov/safewater/lead*.

During 2023, we had two Maximum Contaminant Level (MCL) violations for the disinfection byproduct Haloacetic Acids (HAA5s) during the 3rd and 4th quarters of 2023. Violations were issued and public notification was provided to all water users.

Compliance for TTHMs is based on a locational running annual average (LRAA). In other words, the sample result for the most recent calendar quarter is averaged with the three prior quarterly sample results for each sampling location. The LRAA is compared with the maximum contaminant level (MCL) allowed per regulations. A violation exists if the LRAA exceeds the MCL. The MCL for HAA5 is 60 ug/l (micrograms per liter). The table below shows the quarters where violations were issued for TTHMs.

Parameter	Quarter	MCL	LRAA	Violation
HAA5s	3rd 2023	60	62.1	Yes
HAA5s	4th 2023	60	65.9	Yes

Haloacetic Acids are formed in drinking water during treatment by chlorine (the most commonly used disinfectant in New York State) which reacts with certain acids that are in naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae, o other aquatic plants) in surface water sources such as rivers and lakes. The amount of HAAs in drinking water can change from day to day depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. For this reason disinfection of drinking water by chlorination is beneficial to public health.

Some studies suggest that people who drank chlorinated drinking water containing disinfection by-products (possibly including HAAs) fo long periods of time (e.g., 20 to 30 years) have an increased risk for certain health effects. These include an increased risk for cancer However, how long and how frequently people actually drank the water as well as how much HAAs the water contained is not known fo certain. Therefore, the evidence from these studies is not strong enough to conclude that the observed increased risk for cancer is due t HAAs, other disinfection by-products, or some other factor. Studies of laboratory animals show that the individual HAAs, dichloroaceti

cid and trichloroacetic acid, can cause cancer following exposure to high levels over their lifetimes. Dichloroacetic acid and richloroacetic acid are also known to cause other effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, nd nervous system and on their ability to bear healthy offspring. The effects reported in studies of laboratory animals occur at exposures uch higher than exposures that could result through normal use of the water. The risks for adverse health effects from HAAs in drinking ater are small compared to the risk for illness from drinking inadequately disinfected water.

Is our water system meeting other rules that govern operations?

Last year our system was in compliance with all applicable State drinking water operating, monitoring and reporting requirements. Our water plant is very old and needs to be upgraded which will address the Disinfection Byproduct issue. We are currently working on a water system improvement project to replace our water filtration system which will help to reduce disinfection byproducts, including Haloacetic Acids and Trihalomethanes.

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).

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 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.
- 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 you and your family with quality drinking water this year. To maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.