

*Annual Drinking Water Quality Report for 2021  
Moriah Water District #1 and #2  
38 Park Place, Suite 1  
Port Henry, New York 12974  
(Public Water Supply ID#1500287)*

## **INTRODUCTION**

To comply with State and Federal regulations, we 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. 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 Mr. Chip Perry, Water Superintendent, at (518) 942-3340. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held the second Thursday of every month at 6:00 p.m. in the Town Hall.

## **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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations, which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The source of water for the Moriah WD is Bartlett Pond. The water is filtered and chlorinated before distribution. The NYS Dept. of Health completed a source water assessment for this system based on available information. Based on the analysis of available information, this drinking water source does not have an elevated susceptibility to contamination. There are no regulated facilities within this watershed and the corresponding land cover does not pose any substantial risks to the source water quality.

## **FACTS AND FIGURES**

Our water system serves approximately 3,000 individuals through 1,100 service connections. The total volume of water produced in 2021 was 140 million gallons. On average, 382,000 gallons of water is treated and distributed to users of the water system each day, our single highest day was 592,000 gallons. In 2021, we charged a flat rate for water, \$295.00 per household per year.

## **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, inorganic contaminants, nitrate, nitrite, gross alpha, lead and copper, volatile organic contaminants, 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. Some of our data, though representative, are more than one year old.

During 2021, we started to sample our drinking water for the per- and polyfluorinated compounds PFOA and PFOS and 1,4-dioxane on a quarterly basis. We collected samples during all 4 quarters of 2021 for PFOS and PFOA and the results indicated that there were very low levels of PFOA and PFOS present in our water. The levels were detectable, but less than the reporting limit. 1,4-dioxane samples were collected quarterly in 2021 and the results were below the detection limit. We will collect PFOA, PFOS, and 1,4-dioxane samples again during the first quarter of 2022.

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 Health Department at (518) 891-1800.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Turbidity <sup>1</sup>	No	07/25/2021	2.0	NTU	n/a	TT=<1NTU	Soil Runoff
Turbidity <sup>1</sup>	No	7/2021	98.4% < 0.3	NTU	n/a	TT=95% of samples <0.3NTU	Soil Runoff
<b>Inorganic Contaminants</b>							
Copper	No	2020	0.23 <sup>2</sup> 0.027 – 0.24 <sup>3</sup>	mg/L	1.3	1.3 (AL)	Corrosion of household plumbing systems.
Lead	No	2020	0.002 <sup>2</sup> ND – 0.0041 <sup>3</sup>	mg/L	0	0.015(AL)	Corrosion of household plumbing systems.
Barium	No	2021	ND	mg/L	2	2 (MCL)	Erosion of natural deposits.
Sodium	No	2021	6.4	mg/L	n/a	See Note 6	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	2019	14	mg/L	n/a	250 (MCL)	Naturally occurring or indicative of road salt contamination
Nitrate	No	2021	ND	mg/L	n/a	10 (MCL)	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.
<b>Synthetic Organic Contaminants</b>							
Perfluorooctanoic acid (PFOA)	no	2021	ND – 0.671	ng/l	n/a	10 (MCL)	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctane Sulfonic acid (PFOS)	no	2021	ND – 0.611	ng/l	n/a	10 (MCL)	Released into the environment from widespread use in commercial and industrial applications.
Perfluoroheptanoic acid (PFHPA)	no	2021	0.286	ng/L	n/a	n/a	Released into the environment from widespread use in commercial and industrial applications.
<b>Disinfection Byproduct - Stage 2</b>							
TTHMs	No	2021	78.6 <sup>4</sup> 51.0 – 101 <sup>5</sup>	ug/L	0	80	By-products of drinking water chlorination needed to kill harmful organisms. HAA5 are formed when source water contains measurable amounts of organic matter.
HAA5s	No	2021	49.4 <sup>4</sup> 38.1 – 55.4 <sup>5</sup>	ug/L	0	60	By-products of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains measurable amounts of organic matter.
<b>Radioactive Contaminants</b>							
Gross Alpha	No	7/24/17	0	pCi/L	0	15 (MCL)	Erosion of natural deposits.
Radium 226	No	7/24/17	0	pCi/L	0	5 (MCL)	Erosion of natural deposits.
Radium 228	No	7/24/17	0.6	pCi/L	0	5 (MCL)	Erosion of natural deposits.
<b>Synthetic Organic Contaminants</b>							
Dalapon	No	2019	ND	ug/L	n/a	50 (MCL)	Runoff from herbicide used on rights of way.

**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 single highest measurement for the year occurred on 07/25/2021 (2.0 NTU). This turbidity level is not indicative of our treated water and is most likely due to bubbles in the turbidimeter plastic tubing interfering with the readings. The turbidity readings prior to and just after this 2.0 NTU reading were less than 0.1 NTU. The regulations require that 95% of the turbidity samples collected in a month have measurements below 0.3 NTU.
- 2 - During 2020, 10 samples were collected and analyzed for lead and copper. The 90<sup>th</sup> percentile is equal to or greater than 90% of the lead or copper values detected at your water system. In this case, 10 samples were collected at your water system and the 90<sup>th</sup> percentile value was the second highest value for both lead and copper. The action level for lead was not exceeded at any of the sites tested. The action level for copper was not exceeded at any of the sites tested. The range of lead levels measured was ND – 0.0041 mg/L. The range of copper levels measured was ND – 0.24 mg/L.
- 4 – The value represents the highest Locational Running Annual Average of the quarterly samples collected.
- 5 – The values represent the range of the quarterly samples collected.
- 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.

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

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

**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):** 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).

**WHAT DOES THIS INFORMATION MEAN?**

As you can see by the table, the 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?**

Last year, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

**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 Moriah 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>.

**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 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.