

**Annual Drinking Water Quality Report for 2021**  
**Village of Morrisville**  
**P.O. Box 955**  
**Morrisville, NY 13408**  
**PWS # NY2603521**

## **INTRODUCTION**

To comply with State regulations, the village of Morrisville 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. 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. 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 David Commins, Village of Morrisville at 315-684-3776. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the first Thursday of each month at 7:00 pm at the Town of Eaton Offices, 35 Cedar Street, Morrisville, NY.

## **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.

Our water system serves a population of 1500 through 312 metered service connections. Our water source is a groundwater source consisting of 2 drilled wells approximately 40 feet deep, located on Mill Street. The water is disinfected with sodium hypochlorite and fluoride is added for the prevention of dental caries prior to distribution.

## **NEW YORK STATE SOURCE WATER ASSESSMENT PROGRAM SUMMARY:**

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 the wells. 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.

Some of the potential sources of contamination have been removed. The State Source Water Assessment for this water system will be re-evaluated to include the removal of the potential sources of contamination. County and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. If you should have any questions please feel free to contact the Madison County Department of Health at 315-366-2526.

**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 compounds, nitrate, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological 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.

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 Madison County Department of Health at 315-366-2526.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample(s)	Level Detected (Avg/Max) (Range)	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination

**Inorganic Contaminants**

Barium	No	4/2/19	0.177	mg/L	2.000	2.000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Copper(1)	No	6/10/21	0.084 Range (0.019-0.121)	mg/L	1.300	AL=1.300	Corrosion of household plumbing systems; Erosion of natural deposits.
Fluoride	No	Monthly in 2021	0.56 Avg. Range (0.40- 0.78)	mg/L	N/A	2.2	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories.
Lead (2)	No	6/10/21	4.0 Range (ND – 51.8)	ug/L	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits.
Nitrate	No	8/5/21	1.36	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium (3)	No	8/5/21	91.2	mg/L	N/A	N/A	Naturally occurring, From road salt/softener/animal wastes.

### Disinfection By Product

Total Trihalo-methanes	No	8/5/21	19	ug/L	N/A	80	By-product of drinking water disinfection. TTHMs are formed when source water contains large amounts of organic matter.
Total Haloacetic Acids	No	8/5/21	5.3	ug/L	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.

### Radiological Contaminants

Ra226+Ra228	No	10/8/14	0.504	pCi/L	0	5	Erosion of natural deposits.
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### Microbiological Contaminants

Total Coliform Well #2 Raw Water (4)	No	9/18/19	Present	NA	0	TT = 2 or more positive samples after April 1, 2016. MCL= 2 or more positive samples before April 1, 2016	Naturally present in the environment.
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### Organic Contaminants

Methylene Chloride (5)	No	4/2/19	0.8	ug/L	N/A	5	Used as a solvent in paint strippers, as a propellant in aerosols, as a process solvent in the manufacturing of drugs, as a metal cleaning and finishing solvent.
Chloroform	No	4/2/19	0.8	ug/L	N/A	80	By-product of drinking water disinfection. TTHMs are formed when source water contains large amounts of organic matter.

### Organic Contaminants

Bromodichloromethane	No	4/2/19	1.4	ug/L	N/A	80	By-product of drinking water disinfection. TTHMs are formed when source water contains large amounts of organic matter.
Dibromodichloromethane	No	4/2/19	2.2	ug/L	N/A	80	By-product of drinking water disinfection. TTHMs are formed when source water contains large amounts of organic matter.
Bromoform	No	4/2/19	1.0	ug/L	N/A	80	By-product of drinking water disinfection. TTHMs are formed when source water contains large amounts of organic matter.

### Synthetic Organic Contaminants including Pesticides and Herbicides

Perfluorooctane Sulfonic Acid (PFOS) Well #1	No	2/16/21 – 11/18/21	2.76 Avg. Range (2.40 – 3.22)	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctane Sulfonic Acid (PFOS) Well #2	No	2/16/21 – 11/18/21	2.32 Avg. Range (2.15 – 2.62)	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctanoic Acid (PFOA) Well #1	No	2/16/21 – 11/18/21	1.18 Avg. Range (1.04 – 1.33)	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctanoic Acid (PFOA) Well #2	No	2/16/21 – 11/18/21	1.04 Avg. Range (0.86 – 1.37)	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorohexanoic Acid (PFHXA) Well #1	No	5/11/21	0.684	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications.

(1)– The level presented represents the 90th percentile of the 10 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 copper values detected at your water system. In this case, 10 samples were collected and the 90<sup>th</sup> percentile was 0.212 mg/L. The action level for copper was not exceeded at any of the sites tested.

(2) – The level presented represents the 90th percentile of the 10 samples collected. The action level for lead was not exceeded at any of the 10 sites tested.

(3) – Water containing more than 20 mg/L should not be used for drinking by those on severely restricted sodium diets. Water containing more than 270 mg/L should not be used for drinking by those on moderately restricted sodium diets.

(4) - We routinely test our wells for Total Coliform and e. coli before the water is treated with sodium hypochlorite. A raw water sample collected from Well #1 tested positive for Total Coliform and negative for e.coli. Raw water samples collected from Well # on 9/20/19 and 9/20/19 were negative for Total Coliform and e. coli. All Total Coliform samples collected in 2021 were negative for Total Coliform and e. coli.

(5) A water sample collected on 4/2/19 had a detection of methylene chloride. A second water sample was collected on 7/15/19 and no methylene chloride was detected.

### 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.

**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.

**Not Applicable (N/A):** Not applicable for this contaminant

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

### 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 New York State requirements. We are required to present the following information on lead in drinking water:

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. The Village of Morrisville 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

## **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2021, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

## **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).

## **INFORMATION ON FLUORIDE ADDITION**

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 mg/L. During 2021, monitoring showed that fluoride levels in your water were within 0.2 mg/L of the target level for 67% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/L MCL for fluoride.

## **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 fire fighting 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.

## **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.