

2021 ANNUAL DRINKING WATER QUALITY REPORT

CANANDAIGUA-FARMINGTON WATER DISTRICT

VILLAGE AND TOWN OF MANCHESTER WATER DISTRICTS

Introduction

To comply with State regulations, Canandaigua-Farmington Water District, 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, with the exception of one violation when Trihalomethane (TTHM) levels were higher than allowed by the State in 4th quarter samples. 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:

Canandaigua-Farmington:	Robin MacDonald, Water Superintendent	(585) 924-3158
Town of Manchester:	Kevin Lyke, Water Superintendent	(585) 289-3010
Village of Manchester:	Jeff Liberati, Water Superintendent	(585) 289-4340
New York State Department of Health	Geneva District Office	(315) 789-3030

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Town Board Meetings. The meetings are held:

Town of Farmington:	The second and fourth Tuesdays of each month at 7:00 p.m. at the Farmington Town Hall located at 1000 County Road 8, Farmington, New York.
Town of Manchester:	The second Tuesday of each month at 6:00 p.m. at the Manchester Town Hall located at 1272 County Road 7, Clifton Springs, New York.
Village of Manchester:	The first Monday of each month at 6:00 p.m. at the Manchester Village Hall located at 8 Clifton Street, Manchester, New York.

Where Does Our Water Come From?

Our water source is surface water source, Canandaigua Lake. The Canandaigua-Farmington Consolidated Water District is supplied from City of Canandaigua. The City of Canandaigua operates a Water Filtration Plant located on West Lake Road in the Town of Canandaigua. After filtration, carbon can also be added for taste and odor control. The water is disinfected by injection of gaseous chlorine, sodium hydroxide is added for pH control to reduce corrosion in the distribution system and then fluoride is added before being pumped to the distribution system. The treated water enters the Canandaigua-Farmington Consolidated Water District through meter pits located at the City of Canandaigua line or at the connection point with the City of Canandaigua's transmission main. The Canandaigua-Farmington Consolidated Water District supplies treated water from the City of Canandaigua to the Village of Manchester and the Town of Manchester Central District.

New York State Department of Health has completed a source water assessment for Canandaigua Lake with the following results:

This assessment found a moderate susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for protozoa, phosphorus, DBP precursors, and pesticides contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. However, 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: IHWS, CBS, landfills, mines, RCRA, and TRI.

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 human activity.

Contaminants that may be present in source water include:

- > **Microbial contaminants**
- > **Inorganic contaminants**
- > **Pesticides and herbicides**
- > **Organic chemical contaminants**
- > **Radioactive contaminants**

Facts and Figures

The **Canandaigua-Farmington water system** serves over 15,000 people through 4,780 service connections. The total water purchased for the year in 2021 was 661.886 million gallons. The daily average of water treated and pumped into the distribution system was 1.813 million gallons per day. Our highest day was 3.344 million gallons for the year. The amount of water delivered to customers was 506.782 million gallons for the year. 473,500 gallons were distributed through fire hydrant meter rentals. This leaves unaccountable water total of 155.293 million gallons for the year. Approximately 20% of our unaccountable water was used to flush water mains and hydrants, and for fighting fires and fire protection. Approximately 20% of our unaccountable total water was due to water main leakage. This leaves an unaccountable total of 93.176 million gallons, which is 14.10% of the total water purchased for 2021. In 2021, water customers were charged \$4.15 per 1,000 gallons for 0 to 6,000 gallons of water used and additional usage over 6,000 gallons is \$4.60 per 1,000 gallons or a minimum quarterly bill of \$24.90 for a ¾" service.

The **Canandaigua-Farmington Consolidated Water District** sells water to the Town and Village of Manchester. Their System facts and figures are as follows:

- The **Village of Manchester** services a population of 1,709 through 506 service connections. The total water purchased in 2021 was 40,032 million gallons. The daily average to the distribution system was 109,677 gallons per day. The single highest day was 371,000 gallons. The amount of water sold to customers was 36.780 million gallons. Approximately 200,000 gallons of water was used to flush water mains and hydrants, fighting fires, etc. Water loss due to water main breaks 250,000. There were two water main breaks in 2021, Clifton Street and North Avenue. This leaves an unaccounted total of 2.802 million gallons, which is 7.0% of the total purchased. In 2021, water customers were charged \$26.00 for 0 to 5,000 gallons of water used as the minimum quarterly bill. Additional usage over 5,000 gallons is \$4.50 per thousand. \$4.00 water meter rent per quarter.
- The **Town of Manchester Water Districts** services a population of 1750 through 598 service connections. The total water purchased in 2021 was 56.929 million gallons. The daily average to the distribution system was 155,970 gallons per day. The amount of water sold to customers was 44.927 million gallons. Zero gallons were lost due to water main breaks. Approximately 1,243,400 gallons of water was used to flush water mains, hydrants and fight fires. This leaves an unaccounted total of 10.759 million gallons, which is 18.9% of the total purchased. In 2021 water customers were charged \$42.75 from 0 to 5,000 gallons of water used as the minimum quarterly bill. Additional usage over 5,000 gallons is \$4.75 per 1,000 thousand. The Manchester Water Department retreats with Claritas, a chemical designed to reduce biofilm.

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. Fluoride is added to your drinking water by the City of Canandaigua before it is delivered to the Canandaigua-Farmington water system. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.7 to 1.2 mg/L (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that the City of Canandaigua monitor fluoride levels on a daily basis. In 2015 the City of Canandaigua's average was 0.79 mg/L. None of the monitoring results showed fluoride at levels greater than the 2.2 mg/L MCL for fluoride.

Are There Contaminants In Our Drinking Water?

In order to ensure that tap water is safe to drink, we routinely test your drinking water. The New York State Department of Health and the Environmental Protection Agency prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. 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.

Canandaigua-Farmington Water District is required to test for List 1 contaminants, one of which is strontium, under the third round of Unregulated Contaminant Monitoring Rule (UCMR3). This monitoring provides a basis for future regulatory requirements.

In accordance with State regulations, the **City of Canandaigua** routinely monitors your drinking water for numerous contaminants. They test your drinking water for coliform bacteria, turbidity, inorganic contaminants, lead and copper, nitrate, volatile organic contaminants, total trihalomethanes, and synthetic organic contaminants. The table presented below 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. Therefore, some of the data, though representative of the water quality, is more than one year old. Test results were all negative except for those indicated on the following table. The **Canandaigua-Farmington Consolidated Water District** tested the water for coliform bacteria at least twelve (12) times a month. The **Village of Manchester** tested the water for coliform bacteria two times per month. The **Manchester Central Water District** tested the water for coliform bacteria once per month.

The table presented below depicts which compounds were detected in your drinking water.

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).

TEST RESULTS

Substance (Units)	Violation Y/N	Date of Sample	Level Detected	Range Low - High	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform & E. coli⁵ (ppm)	No	2021	N/A		0	TT = Two Or More Positive Samples	Naturally present in the environment
CFWD Town of Manchester Village of Manchester	No	9/13/2021	Positive				
Turbidity Combine Filter Effluent (NTU)²	No	2021	0.03 Max	0.03-0.25	N/A	TT=0.3	Soil runoff
Turbidity Combine Filter Effluent (NTU)²	No	2021	99% ≤ 0.3	N/A	N/A	TT=0.3	Soil runoff
Radiological Gross Alpha (pCi/l)	No	12/2013	ND	N/A	0	15	Erosion of natural deposits
Radium 226 (pCi/L)	No	02/2013	ND	N/A	0	5	Erosion of natural deposits
Radium 228 (pCi/L)	No	02/2013	0.4	0.4	0	5	Erosion of natural deposits

TEST RESULTS CONTINUED

Inorganic Contaminants							
Lead (ppb)	0 ⁴ -No	06/2020	1.8 ³	<1-10	N/A	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	No	06/2020	0.028	0.0027-0.030	N/A	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (ppm)¹	No	2021	0.79	0.61-1.50	N/A	2.2	Erosion of natural deposits; water additive; discharge from aluminum and fertilizer factories
Barium (ppm)	No	02/2021	0.024	N/A	2	2	Discharge of drilling wastes, metal refineries; erosion of natural deposits
Nickel (ppb)	No	02/2021	1.4	N/A	100	100	Erosion of natural deposits; discharge from stainless steel factories
Nitrate (ppm)	No	02/2021	0.33	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks; Erosion of natural deposits
Chromium (ppb)	No	02/2021	1.4	N/A	100	100	Erosion of natural deposits; discharge from stainless steel factories
Strontium (ppb)	No	2014	106	99.3-121	N/A	N/A	Naturally present in the environment
Alkalinity (ppm)	No	2021	112	100-119	N/A	N/A	Naturally present in the environment
Total Organic Carbon (ppm)	No	2021	2.15	1.8-2.4	N/A	N/A	Naturally present in the environment, measured at Entry Point
Dissolved Organic Carbon (ppm)	No	2021	2.13	1.8-2.4	N/A	N/A	Naturally present in the environment, measured at Raw Water Tap
UV254 (cm⁻¹)	No	2021	0.0263	0.0221-0.0325	N/A	N/A	
Specific Ultraviolet Absorbance (L/mg-m)	No	2021	1.24	0.98-1.6	2	N/A	

Substance (Units)	Violation Y/N	Date of Sample	Level Detected	Range Low - High	MCLG	MCL	Likely Source of Contamination
Volatile Organic Contaminants							
TTHM (ppb) [Total trihalomethanes]							By-product of drinking water chlorination
Stage 2 CFWD	Yes	11/2021	94.25 ⁶	44 – 162	N/A	80	
Town of Manchester	No	2021	62 ⁶	34.9 - 108	N/A	80	
Village of Manchester	No	2021	72 ⁶	58.0 – 98.3	N/A	80	
Total Haloacetic Acids (ppb)							By-product of drinking water Chlorination
Stage 2 CFWD	No	2021	27 ⁶	21 - 31	N/A	60	
Town of Manchester	No	2021	30 ⁶	24.1 - 43.6	N/A	60	
Village of Manchester	No	2020	24 ⁶	20.3 – 29.7	N/A	60	

Raw Water Microcystin (ppb, ug/L)	No	2021	<0.3	<0.3-0.97	N/A	N/A	Cyanobacteria
Perfluorooctanesulfonic acid (ppt, ng/L)	No	2020	<1.7	N/A	10	N/A	Firefighting foam, water repellent, industrial processes
Perfluorooctanoic acid (ppt, ng/L)	No	2020	<1.7	N/A	10	N/A	Firefighting foam, water repellent, industrial processes
1,4-Dioxane (ppb, ug/L)	No	2020	<0.04	N/A	1	N/A	

Definitions:

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

Maximum Amount Detected: This column represents an average of sample result data collected during the reporting year. In some cases, it may represent a single sample if only one sample was collected.

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 possible.

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.

N/A: Not applicable

ND: Not detectable at testing limits.

Nephelometric Turbidity Unit (NTU): Measure of the clarity, or turbidity, of water.

Parts per Million: One part of liquid in one million parts of liquid or milligram per liter (ppm or mg/L).

Parts per Billion: One part of liquid in one billion parts of liquid or microgram per liter (ppb or ug/L).

Parts per Trillion: One part of liquid in one trillion parts of liquid or nanogram per liter (ppt or ng/L).

Range (Low – High): This column represents a range of individual sample results, from lowest to highest, that were collected during the reporting year.

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

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

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 disinfectant to control microbial contamination.

¹ Fluoride is added to the water supply to help promote strong teeth. The Department of Public Health recommends an optimal fluoride concentration range of 0.7 ppm to 1.2 ppm. Measured on laboratory's finished water.

² Turbidity is a measure of the cloudiness of the water and is monitored as an indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of monthly samples be below 0.3 NTUs. Measured in lab.

³ The level presented represents 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.

⁴ Number of homes out of 30 that were above the action level.

⁵ Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

⁶ This level represents the highest locational running annual average calculated from data collected.

MCL's are set at very stringent levels. To understand the possible health effects described 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 described health effect.

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. Canandaigua-Farmington 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, 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>.

What Does This Information Mean?

The Village of Manchester is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2021 there were no missed samples however as shown in the table, the Village of Manchester had a sample test positive for total coliform on September 13, 2021. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful waterborne pathogens may be present. Three additional samples were subsequently collected on September 14, 2021 which all tested negative for total coliforms. With only the one sample testing positive for coliform, the system was not in violation of the coliform MCL. The public was notified in a newsletter.

The table shows that the Canandaigua-Farmington Water District triggered a Stage 2 Disinfection Byproducts violation for exceeding the Maximum Contaminant Level (MCL) for TTHM due to high levels found in 4th quarter samples. We immediately notified the City of Canandaigua and the NYS Department of Health of the test results and began flushing watermains to reduce the TTHM levels in the system. TTHMs are a byproduct of drinking water chlorination needed to kill harmful organisms and are formed when the source water contains organic matter. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Is Our Water System Meeting Others Rules That Govern Operations?

Canandaigua-Farmington Water District is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2021, we did not sample in the 2nd quarter for Trihalomethane (TTHM) and Haloacetic Acid (HAA) and therefore cannot be sure of the quality of your drinking water during that time. TTHM and HAA are a byproduct of drinking water chlorination needed to kill harmful organisms and are formed when the source water contains organic matter. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. There is nothing to do at this time. You may continue to drink the water. We have collected quarterly samples for TTHMs since 3rd quarter of 2021 and will continue to follow our required monitoring schedule.

The EPA requested information in 2020 and 2021 to audit our compliance with Safe Drinking Water Act (SDWA) requirements. Based on a review of the submitted documentation, the EPA identified violations that require public notification as follows:

1. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the months of April and May 2020, we did not complete all monitoring or testing for total coliforms, and therefore cannot be sure of the quality of your drinking water during that time. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful waterborne pathogens may be present. There is nothing you need to do at this time. You may continue to drink the water. We have continued collecting our monthly samples since June 2020 and will continue to follow our required monitoring schedule.
2. On March 3, 2022 we became aware that our system failed to collect the correct number of routine total coliform water samples as required based on the size of population served. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2021, we did not monitor and test the required number of monthly total coliform samples and therefore cannot be sure of the quality of your drinking water during that time. We collected 12 samples per month as previously required however in 2021, we were required to collect a minimum of 15 total coliform samples per month based on the population reflected on SDWIS (13,000 people). Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful waterborne pathogens may be present. There is nothing you need to do at this time. You may continue to drink the water. In March 2022, we began collecting 20 routine total coliform samples per month and will continue to follow this monitoring schedule.

3. During the 3rd and 4th quarters in 2019, the Operational Evaluation Level (OEL) for Trihalomethane (TTHM) was exceeded. If the OEL is exceeded, a system must conduct an operational evaluation and submit a written report of the evaluation to the state. We failed to provide a copy of the OEL report to the state as required for the 3rd and 4th quarters of 2019.
4. We failed to include the required language for the lead informational statement in the 2019 Annual Water Quality Report.

For more information, please contact the Farmington Water Department at (315)986-8100

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).

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 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, and then check the meter after 15 minutes. If it moved, you have a leak.

System Improvements

1. Continued installation of new water mains in the Auburn Meadows Subdivision and Hathaway Corners Project
2. Installed 980 linear feet of water main on Yerkes Road
3. Finished installing water at Beaver Creek Park
4. Replaced old water main at the corner of Route 96 and Mertensia Road
5. Replaced 6 old fire hydrants
6. Serviced all seven (7) Pressure Reducing Vaults (PRV) in the Canandaigua-Farmington Water District

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.

- Canandaigua-Farmington (585) 924-3158
- Town of Manchester (585) 289-3010
- Village of Manchester (585) 289-4340
- New York State Department of Health (315) 789-3030

This Report Covers Public Water Supply ID Numbers:

Canandaigua-Farmington Consolidated Water District: 3401151

Village of Manchester: 3401160

Town of Manchester: Central Manchester: 3430014, WD: 3430020, WD3: 3430021