

ANNUAL DRINKING WATER QUALITY REPORT FOR 2019 CANANDAIGUA-FARMINGTON WATER DISTRICT MANCHESTER VILLAGE AND TOWN WATER DISTRICTS

Introduction

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. The purpose of this report is to provide information about the quality of water that we provide to you. Our constant goal is to provide you with 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 protect our water resources. Last year, in the Canandaigua-Farmington Water District, the Town of Manchester and the Village of Manchester your tap water met all State drinking water health standards. We are committed to ensuring the quality of your water. If you have any questions about this report or concerning your water utility, please contact either:

Canandaigua-Farmington:	Robin MacDonald, Water Superintendent	(585) 924-3158
Town of Manchester:	William Murphy, 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 12,000 people through 4,559 service connections. The total water purchased for the year in 2019 was 653.365 million gallons. The daily average of water treated and pumped into the distribution system was 1.791 million gallons per day. Our highest day was 2.464 million gallons for the year. The amount of water delivered to customers was 574.906 million gallons for the year. 673,300 gallons were distributed through fire hydrant meter rentals. This leaves unaccountable water total of 77.786 million gallons for the year. Approximately 20% of our unaccountable water was used to flush watermains and hydrants, and for fighting fires and fire protection. Approximately 10% of our unaccountable total water was due to water main leakage. This leaves an unaccountable total of 54.450 million gallons, which is 8.33% of the total water purchased for 2019. In 2019, water customers were charged \$4.05 per 1,000 gallons for 0 to 6,000 gallons of water used and additional usage over 6,000 gallons is \$4.55 per 1,000 gallons or a minimum quarterly bill of \$24.30.

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 501 service connections. The total water purchased in 2019 was 41.609 million gallons. The daily average to the distribution system was 113,997 gallons per day. The single highest day was 232,000 gallons. The amount of water sold to customers was 38.974 million gallons. Approximately 250,000 gallons of water was used to flush watermains and hydrants, fighting fires, etc. Water loss due to water main breaks 375,000. There was one water main break in 2019, on Pratt Road. This leaves an unaccounted total of 2.011 million gallons, which is 4.0% of the total purchased. In 2019, water customers were charged \$26.00 for 0 to 5,000 gallons of water used as the minimum quarterly bill. Any additional usage over 5,000 gallons is \$4.50 per thousand. \$4.00 water meter rent per quarter.

Manchester Village 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 2019 we tested 2 times per month for Coliform Bacteria. There were no missed samples and none tested positive.

- The **Town of Manchester Water Districts** services a population of 1470 through 574 service connections. The total water purchased in 2019 was 64,081,900 million gallons. The daily average to the distribution system was 198,726 gallons per day. The single highest day was 376,000 gallons in April 2019. The amount of water sold to customers was 48,382,833 gallons. Zero gallons were lost due to water main breaks. Approximately 490,000 gallons of water was used to flush water mains, hydrants and fight fires. In 2019 water customers were charged \$42.00 from 0 to 5,000 gallons of water used as the minimum quarterly bill. Any additional usage over 5,000 gallons is \$4.52 per 1,000 thousand.

Note: Coliform bacteria are tested for once a month. There was a positive test for Coliform on 10/17/2019 at 3416 Outlet Road.

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 ten (10) 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. coli ⁵ (ppm) CFWD Town of Manchester Village of Manchester	No	2019	N/A	0	0	>5% positive	Naturally present in the environment
Turbidity Combine Filter Effluent (NTU)2	No	2019	0.19 Max	0.03-0.19	N/A	TT=0.3	Soil runoff
Turbidity Combine Filter Effluent (NTU)2	No	2019	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
Inorganic Contaminants							
Lead (ppb)	0 ⁴ -No	06/2017	1.0 ³	<1-1.6	N/A	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	No	06/2017	0.020	0.0025-0.075	N/A	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (ppm) ¹	No	2019	0.93	0.65-1.25	N/A	2.2	Erosion of natural deposits; water additive; discharge from aluminum and fertilizer factories
Barium (ppm)	No	02/2019	0.023	N/A	2	2	Discharge of drilling wastes, metal refineries; erosion of natural deposits
Nickel (ppb)	No	02/2019	0.94	N/A	100	100	Erosion of natural deposits; discharge from stainless steel factories
Nitrate (ppm)	No	02/2019	0.33	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks; Erosion of natural deposits
Chromium (ppb)	No	02/2019	1.1	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	2019	113	93-118	N/A	N/A	Naturally present in the environment
Total Organic Carbon (ppm)	No	2019	2.3	1.9-3.0	N/A	N/A	Naturally present in the environment, measured at Entry Point
Dissolved Organic Carbon (ppm)	No	2019	2.15	1.7-2.4	N/A	N/A	Naturally present in the environment, measured at Raw Water Tap
UV254 (cm ⁻¹)	No	2019	0.0245	0.0203-0.0315	N/A	N/A	
Specific Ultraviolet Absorbance (L/mg-m)	No	2019	1.14	0.88-1.40	2	N/A	

TEST RESULTS CONTINUED

Volatile Organic Contaminants

TTHM (ppb) [Total trihalomethanes]							By-product of drinking water chlorination
Stage 2							
CFWD	No	2019	70 ³	58.5 – 80.25	N/A	80	
Town of Manchester	No	2019	72 ⁴	43.7-98	N/A	80	
Village of Manchester	No	2019	73 ⁹	45.7-102	N/A	80	
Total Haloacetic Acids (ppb)							By-product of drinking water Chlorination
Stage 2							
CFWD	No	2019	27 ⁴	24.25 – 31.75	N/A	60	
Town of Manchester	No	2019	38 ¹	27.2-50.2	N/A	60	
Village of Manchester	No	2019	27 ⁵	22.1-32.8	N/A	60	

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).

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

Ranger (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.

¹Fluoride 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.

²Turbidity 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.

³The 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.

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

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

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

Lead. Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using your tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

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.

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. Work began in February 2019 on the Beaver Creek Phase 2 project. 2,375 liner feet of 12" DR-14 waterline running east from State Route 332 crossing County Road 41 at the intersection of Beaver Creek Road then

- proceeding in a northward direction to south of the Beaver Creek bridge was completed in April 2019.
2. In May 2019 work was completed and approved by the Department of Health for Hickory Rise Section 4. 1,708 linear feet of 8" DR-14 PVC watermain and associated appurtenances were installed.
 3. Several projects were completed at the end of June. To connect two dead ends and to provide additional ingress and egress 700 linear feet of 12" DIP water main between Ivory Drive and Carmen Way was installed to close the loop for the Farmington Pointe intersection. 970 linear feet of 8" DIP water main and two fire hydrants were completed on Jasper Drive. 120 linear feet of DIP water main was finished on Ackerman Way.
 4. Mid-July seen another project completed; installation of approximately 1,970LF of 8" PVC water main, four fire hydrants, and associated appurtenances to serve Auburn Meadows Section 9.
 5. August 7th through August 10th we experienced seven water main breaks. As a result we experienced four days of higher than normal water consumption.
 6. This summer the Canandaigua-Farmington Water District replaced 30 old 1972 & 1977 Kennedy K-11 three Bib fire hydrants in Kings Village, Doe Haven and Farmbrook Subdivisions, and on Canandaigua Farmington Town Line Road. Four 1962 K-8 two-bib hydrants were also replaced; two on Hook Road and two on Pannell Road.
 7. In October the Plans for Public Water Supply Improvement for Redfield Grove Phase 2 were approved by the DOH (Department of Health). 950 LF of 8" PVC water main with two hydrants will be installed.
 8. With regards to improving water pressures within the Canandaigua-Farmington Water District, we are continuing the planning and designing a new elevated water tank to replace the aging water tank located at Brickyard Road in the Town of Canandaigua. The district is also looking to install a new 16-inch water transmission line running from the new water tank to the Canandaigua-Farmington Town Line which will connect to new 12-inch water mains.

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