ANNUAL DRINKING WATER QUALITY REPORT FOR 2021
BRISTOL-CANANDAIGUA WATER DISTRICTS
PWS ID Numbers NY 3430008 and NY3430041

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 Towns of Bristol and Canandaigua 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:

Town of Bristol:	**James Fletcher, Water Superintendent**	**(585) 394-3300**
Town of Canandaigua:	**James Fletcher, Water Superintendent**	**(585) 394-3300**
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 Bristol:	**The second Monday of each month at 7:30 p.m. at the Bristol Town Hall located at 6740 County Road 32, Canandaigua, New York.**
Town of Canandaigua:	**The third Monday of each month at 6:00 p.m. at the Canandaigua Town Hall located at 5440 Route 5 & 20 West, Canandaigua, New York.**

Where Does Our Water Come From?

Our water source is surface water source, Canandaigua Lake. The Canandaigua Town Consolidated Water Districts 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 liquid 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 Town of Canandaigua Water Districts through meter pits located at the City of Canandaigua municipal line or at the connection point with the City of Canandaigua's transmission main. The Town of Canandaigua Consolidated Water District supplies treated water from the City of Canandaigua to the Town of East Bloomfield through a meter pit located at the Canandaigua-East Bloomfield town line. Also, the Town of Canandaigua Consolidated Water District supplies treated water from the City of Canandaigua to the Bristol Water District Extension #1 through a pump station located on Goodale Road in the Hamlet of Cheshire. The Town of Canandaigua also provides water to the Towns of Farmington, Hopewell, and Gorham.

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 number 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 **Town of Canandaigua Water District** purchases its water separately from the City of Canandaigua and serves approximately 7,280 residents through 2,734 service connections. The total water purchased in 2021 was 249,000,000 gallons. The daily average to the Distribution System was 640,000 gallons per day. The single highest day was 841,000 gallons. The amount of water sold to customers was 233,503,000 gallons. Approximately 2,200,000 gallons of water was used to fill two new water storage tanks that each hold 1.1 million gallons of water. installing of new water main, 14,000,000 gallons of water was used to flush watermains, fire hydrants, fight fires, sale of bulk water etc. In 2021, water customers were charged a minimum quarterly bill of $26.10 for a ¾ inch water meter, for the first 6,000 gallons of water usage. Any usage in addition to that was $ 4.35 per thousand gallons of water used.

The **Town of Bristol Water District** purchases its water from the Town of Canandaigua and serves approximately 203 people through 63 service connections. The total water purchased in 2021 was 4,953,000 gallons. The daily average to the Distribution System was 13,567 gallons per day. The single highest day was 44,000 gallons. The amount of water sold to customers was 4,867,000 gallons. Approximately 86,000 was used to flush water mains due to stage two disinfection byproducts levels that exceeded the limits of the EPA, flush fire hydrants, and fight fires. In 2021, water customers were charged a minimum quarterly bill of $28.56 for the first 6,000 gallons of water for a ¾ inch water meter. Any usage in addition to that was $ 4.76 per thousand gallons of water used.

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 Consolidated and Bristol water systems. 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 0.8 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 daily. During 2021 monitoring showed fluoride levels in your water were in the optimal range 100% of the time. 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?

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.

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 Consolidated Water District** tested the water for coliform bacteria seven samples once per month, and **the Bristol Water District Extension Number 1** tested the water for coliform bacteria one sample per month in each district.

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 Bacteria **Town of Bristol No** **Cdga Consolidated no**	No	Each Month	LT 1	N/A	0	>5% positive	Naturally present in the environment
Turbidity (NTU) Individual**	No	2021	0.17	0.01 - 0.25	N/A	TT=<0.3	Soil runoff
Turbidity (NTU) Combined**	No	2021	0.03	0.01 - 0.50	N/A	TT=<0.3	Soil runoff
Radiological Gross Alpha (pCi/1)	No	12/2013	0.0	N/A	0	15	Erosion of natural deposits
Radium 226 and 228 (pCi/L)	No	02/2013	0.04	0.4	0	5	Erosion of natural deposits
Inorganic Contaminants							
Lead (ppb) **Cdga Consolidated** **4**	No	06/2020	1.8	ND to 6.1	N/A	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Copper (ppm) **Cdga Consolidated**	No	06/2020	0.028	0.0011-0.44	N/A	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (ppm)	No	2021	0.79	0.7-1.2ppm	N/A	2.2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Barium (ppm)	No	02/2021	0.024	N/A	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from Crop land

Nickel (ppb)	No	02/2021	1.4	N/A	100	100	Erosion of natural deposits; discharge from steel factories additive, fertilizer factories
Nitrate (ppm)	No	02/2021	0.33	N/A	10	10	Runoff from fertilizer use, septic tank effluent, erosion of natural deposits
Chromium (ppb)	No	02/2021	1.4	N/A	100	100	Erosion of natural deposits, stainless steel manufacturing

Volatile Organic Contaminants							
TTHM (ppb) [Total trihalomethanes]							By-product of drinking water chlorination
Stage 2: Canandaigua Consolidated							
Cooley site	NO	2021	58 AVG.	41-85		80	
Onanda Site	No	2021	71 AVG.	41-85		80	
Town of Bristol	Yes	2021	82	41-85		80	

Total Halo acetic Acids (ppb)							Discharge from metals, plastic or fertilizer plant
Stage 2:							
Canandaigua Consolidated Cooley Site	No	2021	22.0 avg.	25-50	N/A	60	
Onanda Site	No	2021	29.75 avg.	25-50	N/A	60	
Town of Bristol	No	2021	34.5 avg	25-50	N/A	60	

Notes:

** Turbidity is a measure of the cloudiness of the water. Canandaigua City monitors it because it is a good indicator of the effectiveness of our filtration system.

> 0 site(s) out of 30 above the Action Level for Copper.

> 0 site(s) out of 30 above the Action Level for Lead.

Definitions:

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

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

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

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Picocuries per liter (pCi/l) - A measure of radioactivity in water.

Locational Running Annual Average (LRAA) – average of samples at a location for year on a rolling basis

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.

What Does This Information Mean?

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

Microbiological Contaminants:

(1) **Total Coliform** - Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other; potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

(3) **Turbidity** - Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Inorganic Contaminants:

(17) **Lead** - As you can see by the table, our system had no violations.

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 tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

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

Replaced 50-year-old fire hydrants. Put two 1.1-million-gallon water tanks in service.

Monitoring Violations:

The Town of Bristol water district had two violations for 2021. The two violations were for exceeding the MCL of stage two disinfection by product. The Town of Canandaigua Water Superintendent informed the Town of Bristol water district residents by a letter both times and informed the Town Supervisor.

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.

> Town of Canandaigua, Water Superintendent Jim Fletcher (585) 394-3300
> Town of Bristol, Water Superintendent Jim Fletcher (585) 394-3300
> New York State Department of Health (315) 789-3030

This Report Covers Public Water Supply ID Numbers:

Town of Bristol:	Bristol Water District Extension Number 1:	3430041
Town of Canandaigua:	Canandaigua Consolidated Water District:	3430008