

***Annual Drinking Water Quality Report for 2022  
Bristol Water Works Corporation  
31 Spyglass Hill South Bristol NY, 14424  
Public Water Supply ID# NY3400784***

The Bristol Water Works Corporation is proud to present our 2022 Water Quality Report. In compliance with recent Federal legislation, we have developed this report to provide you with valuable information about your drinking water. We hope to give you a better understanding of how, what, and why we strive to provide you with safe, quality drinking water.

**INTRODUCTION**

To comply with State regulations, Bristol Water Works Corporation 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 drinking water sources. This report was brought about in 1996 when Congress passed amendments that required drinking water systems to give consumers information about their water. This publication conforms to the new Federal regulation, under the Safe Drinking Water Act (SDWA), requiring water utilities to provide detailed water quality information to each of their Customers annually. Bristol Water Works Corporation is committed to providing our residents with this information about your water supply.

Customers who are well informed are our best allies in supporting improvements necessary to maintain the highest possible drinking water standards. For more information about this report or for any questions relating to your drinking water, please feel free to contact Devin Gage, at [dgage@bristolharbour.com](mailto:dgage@bristolharbour.com), or (585) 204-6754. The New York State Department of Health contact is as follows: 315-789-3030

**Source Water Assessment**

The State has completed the Source Water Assessment for Canandaigua Lake and 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.

## **WHERE DOES OUR WATER COME FROM?**

Bristol Water Works Corporation gets its water from Canandaigua Lake. Canandaigua Lake is 15.5 miles long and over one mile wide. The lakes maximum depth is 276' and averages 129' deep. Canandaigua Lake capacity is approximately 429 billion gallons of water. Lake water is drawn to the plant through an intake pipe which is submerged 75 feet below the surface of the lake. The intake pipe is located 300 feet from the shoreline to lessen the effects of storm water run-off. When Zebra Mussels are present chlorine is added at the intake to prevent Zebra Mussels from colonizing the interior of the pipe and also to control the growth of bacteria and algae. Our pump house is located down by the beach. The pump house has 3 vertical turbine pumps designed for 240 GPM (gallons per minute). All 3 of these pumps and flights during the end of the 2019 year were replaced with brand new identical replacements along with new controls. The pumps then pump the lake water to our water plant where we use two Diatomaceous (earth) filtration systems to remove particulates and turbidity (a measure of cloudiness of water and removes microorganisms). After filtration, your water is then chlorinated for disinfection, before entering our storage tanks. The first storage tank is located next to our water plant and has a 240,000-gallon capacity. The second tank is located on the golf course with a capacity of 120,000 gallons and is filled from the main tank at the Treatment Plant with the aid of two vertical turbine pumps. Gravity then takes over through our distribution system to deliver the water to you. DAILY samples are collected from raw water, filtered water, and random taps around our distribution system, in order to ensure our water quality. Monthly samples and quarterly samples are also taken and sent to ALS Environmental Labs for further analysis.

### **Definitions**

1. **Maximum Contaminant Level (MCL):** This is the highest level of contaminant that is allowed in drinking water.
2. **Maximum Contaminant Level Goal (MCLG):** This is the level of a contaminant in drinking water below which there is no known or expected risk of health MCGL'S allowed for margin of safety.

3. **Nephelometric Turbidity Units (NTU):** Measuring the clarity of the water by the amount of light that is reflected by the particles in the water. Turbidity in excess of 5 NTU, is just noticeable to the average person.
4. **Action Level (AL):** The concentration of a contaminant which if exceeded, triggers treatment, or other requirements which a water system follows.
5. **Milligrams per Liter (MG/L):** Corresponds to one part of liquid in one million parts of liquid. (parts per million)
6. **Micrograms per Liter (UG/L):** Corresponds to one part of liquid in one billion parts of liquid. (parts per billion)
7. **90<sup>th</sup> Percentile Value:** The values reported for lead and copper represent the 90<sup>th</sup> 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 90<sup>th</sup> percentile is equal to or greater than 90% of the lead and copper values detected at your water system.
8. **Maximum Residual Disinfection 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.
9. **Maximum Residual Disinfection Level Goal (MRDLG):** The level of a drinking water disinfection below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfection to control microbial contamination
10. **ND:** Not Detected
11. **N/A:** Not Applicable

## **ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

Drinking water, including bottled water, may reasonably be 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 (1-800-426-4791)

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 materials, 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 number of certain contaminants in water provided by public water systems. The State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **Table of Detected Contaminants**

According to State regulations, Bristol Water Works Corp routinely monitors your drinking water for various contaminants. Your water is tested for inorganic contaminants, nitrate, lead and copper, volatile organic contaminants, synthetic organic contaminants. Additionally, your water is tested for Coliform bacteria each month. The contaminants detected in your drinking water are included in the Table of Detected Contaminants.

<u><b>Substance (Units)</b></u>	<u><b>Violation</b></u>	<u><b>MCL</b></u>	<u><b>MCLG</b></u>	<u><b>Amount</b></u>	<u><b>Source</b></u>	<u><b>Date</b></u>
Nitrate (PPM)	NO	10	10	0.312	Runoff, Natural Deposits	9/22/22
Turbidity (1) (NTU)	NO	TT = ≤ 5.0	NA	0.13	Soil run-off	2022
Turbidity (1) (NTU)	NO	TT = 95% of sample ≤ 1.0	NA	100% of results ≤ 1.0	Soil run-off	2022
Barium	NO	2	2	.025 mg/l	Drilling waste Metal refineries Natural deposits	9/22/22
Chromium	NO	2.4	2.4	.002 mg/l	Electroplating Topsoil, rocks	9/22/22
Nickel	NO	10	10	.001 mg/l	Natural deposits, refining	9/22/22

(1) Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year of 2022 occurred on 12/13/22 (NTU=0.43). State regulations require that turbidity must always be less than 1.0 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 5.0 NTU. During 2022 the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

### THM and HAA5's

<u>Substance (Units)</u>	<u>Violation</u>	<u>MCL</u>	<u>MCLG</u>	<u>Amount</u>	<u>Source</u>	<u>Date</u>
THM UG/L	NO	80	N/A	50.25 Range (40-60)	Byproducts of drinking water disinfection chlorination	2022
HAA5's UG/L	NO	60	N/A	18.22 Range (10.3-21.8)		2022

### Lead and Copper

<u>Substance</u>	<u>Action Level</u>	<u>MCLG</u>	<u>Amount</u>	<u>Source</u>	<u># Of Sites Above Action Level</u>	<u>Date</u>
Lead mg/l	15	0	Range (0.0010- 0.0059)	Corrosion of household plumbing; erosion of natural deposits	0 out of 10	9/22
Copper mg/l	1.3	1.3	Range (0.0323- 1.15)	Corrosion of household plumbing; natural deposits leaching from wood preservatives.	0 out of 10	9/22

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. Bristol Water Works Corp 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 and wish to have your water tested, contact Devin Gage at Bristol Water Works Corp (585) 204-6754. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

### **Water Meter Report**

BWWC during the year of 2022 had 6,694,932 total gals for consumption. Throughout the year of 2023 Bristol Water Works Corp. will be planning a schedule to replace the radio read meter endpoints with brand new cellular endpoints! These new cellular reader endpoints detect leaks, backflow, excessive water usage and they also report back daily for monitoring. In the future we plan to have all of the metered customers switched to a cellular endpoint.

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

During our routine Lead and Copper sampling for the year of 2022, 1 out of the 10 samples collected was reported to the DOH 4 days late due to that specific sample jug not being returned to BWWC in time. In result of this occasion we are required by the DOH to perform a public notification that must include the following language. "We were 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 June1 - September 2022 we did not fully monitor or test for lead and copper and, therefore, cannot be sure of the quality of your drinking water during that time."

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?**

Bristol Water Works Corp. encourages water conservation. Canandaigua Lake is source of good quality water, it must not be wasted. A few simple steps will preserve the resource for future generations. 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
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions

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.

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded.
- ◆ 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. 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 anytime with questions at (585) 204-6754.

