

BRISTOL WATER WORKS CORPORATION

WATER QUALITY REPORT 2021 PWS #3400784

The Bristol Water Works Corporation is proud to present our 2021 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.

[The Why behind This Report](#)

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, or (585) 204-6754. The New York State Department of Health information 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.

Straight from the Source

Bristol Harbour Water is 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 aide 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. **90th Percentile Value:** The values reported for lead and copper represent 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.
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

[What Contaminants Might Be In 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)

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general populations. Immunocompromised 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 (1-800-462-4791).

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 Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Regulated Substances

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>Substance</u> <u>(Units)</u>	<u>Violation</u>	<u>MCL</u>	<u>MCLG</u>	<u>Amount</u>	<u>Source</u>	<u>Date</u>
Nitrate (PPM)	NO	10	10	0.24	Runoff, Natural Deposits	11/23/21
Turbidity (1) (NTU)	NO	TT = ≤ 5.0	NA	0.09	Soil run-off	2021

Turbidity (1) (NTU)	NO	TT = 95% of sample ≤ 1.0	NA	100% of results ≤ 1.0	Soil run-off	2021
Barium	NO	2	2	.023 mg/l	Drilling waste Metal refineries Natural deposits	11/23/21
Chromium	NO	2.4	2.4	.002 mg/l	Electroplating Topsoil, rocks	11/23/21
Nickel	NO	10	10	.001 mg/l	Natural deposits, refining	11/23/21

(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 2021 occurred on 12/1/21 (NTU=0.24). 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 2021 the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

Stage 1

<u>Substance</u> <u>(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	51.97 Range (44-65)	Byproducts of drinking water disinfection chlorination	2021
HAA5's UG/L	NO	60	N/A	18.25 Range (11-25)		2021

Lead and Copper

Substance	Action Level	MCLG	Amount	Source	# Of Sites Above Action Level	Date
Lead mg/l	15	0	Range (0.0010-0.025)	Corrosion of household plumbing; erosion of natural deposits	0 out of 10	10/08/19
Copper mg/l	1.3	1.3	Range (0.10-0.87)	Corrosion of household plumbing; natural deposits leaching from wood preservatives.	0 out of 10	10/08/19

Water Meter Report

BWWC during the year of 2021 had 12,064,305 total gals for consumption. Throughout the year of 2022 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.

It All Adds Up

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.

- Water your lawn sparingly. (Early morning or late evening)
- Don't cut the lawn to short, longer grass saves water
- Use low flow shower heads and faucet
- Repair all leaky faucets
- Check all bathroom fittings/toilets
- Use a hose with a nozzle when washing your car