



## 2021 Water Quality Report

### Important Information About Your Drinking Water

#### Any Questions?

Want to know more about the Bristol County Water Authority? Please call or write to Stephen Coutu, P.E., Executive Director, with any questions, comments or concerns.

Our Administrative Office is located at 450 Child Street, Warren, RI 02885. We hold monthly Board meetings at our Administrative Office or remotely via Zoom. The date and time of our meetings are posted at the Town Halls of Barrington, Bristol, Warren, at the Secretary of State's website ([sos.ri.gov](http://sos.ri.gov)), and BCWA Bulletin Boards. Information can be found by contacting our office, at 401-245-2022, or by visiting our website at [www.bcwari.com](http://www.bcwari.com).

**Our Emergency phone number is 401-245-5071**

#### Portuguese

##### IMPORTANTE!

Portuguese IMPORTANTE! O relatório contém informações importantes sobre a qualidade da água da comunidade. Traduza-o ou peça ajuda de uma pessoa amiga para ajudá-lo a entender melhor ou um tradutor será fornecido (401) 245-2022.

**Bristol County Water Authority**  
**450 Child Street**  
**P.O. Box 447**  
**Warren, Rhode Island 02885**  
**401-245-2022**

#### Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap 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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

**Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Pesticides and Herbicides**, which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban storm water runoff, and septic systems.

**Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791

#### Bristol County Water Authority System

The Bristol County Water Authority provides water to residents of Barrington, Bristol and Warren. In June of 2011 the Child St. WTP was removed from service. **The Scituate Reservoir, treated by Providence Water Supply Board (PWSB), is now our sole source of supply and is distributed to all customers.**



#### Where does my drinking water come from?

Providence Water obtains its water supply from a series of surface water reservoirs located in the northwest portion of the State of Rhode Island. The main source of supply is the Scituate Reservoir, which when at full capacity, contains over 37 billion gallons of water and covers an area of 3,390 acres. In addition to the Scituate Reservoir, there are also five other tributary reservoirs; Regulating Reservoir, Moswansicut Reservoir, Ponaganset Reservoir, Barden Reservoir, and Westconnaug Reservoir. These five additional reservoirs combined add another 4 billion gallons of water for a total water storage capacity of 41 billion gallons. The entire reservoir system is contained within a watershed area which totals 92.8 sq. miles of primarily rural, forested land. Providence Water controls over 28% of the most critical areas of the watershed through outright ownership or through the purchase of the development rights.

In 2017, Providence Water formally assessed the threats to the Scituate Reservoir. The assessment considered land use, pollution sources, and overall reservoir condition. The assessment confirmed that the Scituate Reservoir system is at medium risk of contamination. Providence Water is continuing with protection efforts necessary to provide their customers with the highest level of water quality. The 2017 Source Water Assessment report is available on the Providence Water website at [www.provwater.com/swap](http://www.provwater.com/swap).

#### The Quality of Your Drinking Water

The Bristol County Water Authority (BCWA) is committed to providing its customers with high quality drinking water that meets or surpasses State and Federal standards for quality and safety. The BCWA did not exceed any water quality regulation and no violations have been issued.

To ensure delivery of a quality product, we have made significant investments in treatment facilities, water quality monitoring and the distribution system. We are pleased to report the results of our Year 2021 water testing to inform you about your drinking water.

#### Important Health Information

Some people may be more vulnerable to contaminants 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, and some elderly and infants can be particularly at risk from infections. If you are one of these people, you should seek advice from your health care provider. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

#### Lead in Home Plumbing

If present, elevated levels of 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 County Water Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. **When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for thirty (30) seconds to two (2) minutes before using water for drinking or cooking.**

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>

The BCWA has undertaken a major renovation of the water system infrastructure and operation processes. In 2017, the New England Water Works Association awarded the BCWA "Utility of the Year" for making significant improvements to water system infrastructure, customer service, staff training and operations.

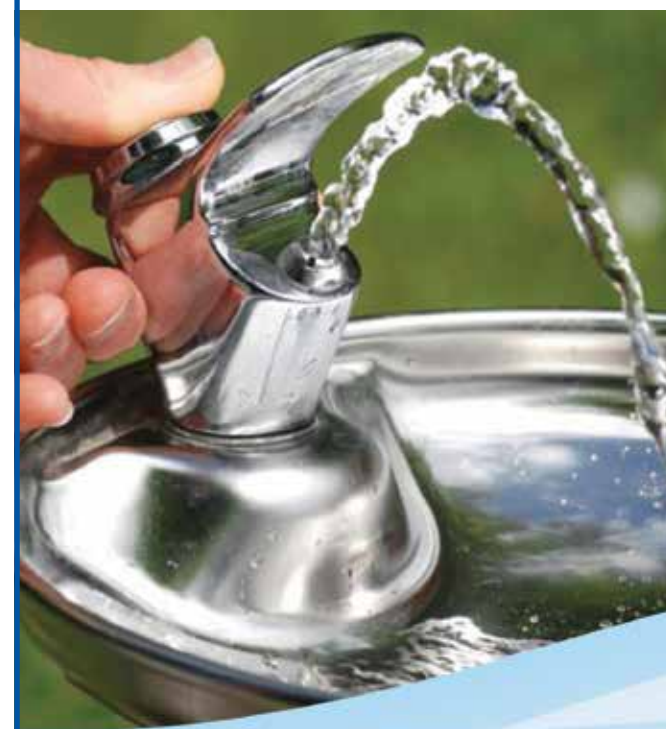
#### Major Projects Completed in 2021

- Distribution System Improvement Program
- Cleaning and Cement Mortar Lining Project
- Substantial completion of Meter Replacement Program
- Admin Building Lift Replacement
- BCWA Facility Renovations
- Continued deployment of Neptune Meter Infrastructure

#### Major Projects Begun in 2021

- Construction of Pawtucket Pipeline - Phase 1
- Construction of Hope Street Pump Station
- Construction of Expanded High Service Area
- Continued design of Kickemuit Reservoir Dam Removals
- Continued design of Child Street Treatment Plant Demo
- Design of Pawtucket Pipeline Phase II

## Bristol County Water Authority



2021  
Water Quality Report



**2021 BRISTOL COUNTY WATER AUTHORITY • WATER QUALITY DATA**

Bristol County receives all of its water from Providence Water through the East Bay Pipeline.

The table below represents the results of the testing performed by the Bristol County Water Authority (BCWA) and by the Providence Water Supply Board (PWSB).

REGULATED SUBSTANCES		PERIOD OF TESTING - YEAR 2021		HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	SDWA VIOLATION	TYPICAL SOURCE
Substance (Unit of Measure)	SOURCE	MCL* (MRDL)	MCLG* (MRDLG)				
Barium (ppm)	PWSB	2	2	0.009	NA	No	Erosion of natural deposits
Chlorine (ppm)	BCWA	MRDL=4.0	MRDLG=4.0	0.97	0.06-0.97	No	Water additive used to control microbes
Fluoride (ppm)	PWSB	4	4	0.88	0.56-0.88	No	Erosion of natural deposits; water additive which promotes strong teeth
Haloacetic Acids (HAA5) <sup>1</sup> (ppb)	BCWA	60	NA	27.3	17.4-32.1	No	By-product of drinking water disinfection
TTHMs (Total Trihalomethanes) <sup>1</sup> (ppb)	BCWA	80	NA	75.7	43.0-96.2	No	By-product of drinking water disinfection
Total Coliform Bacteria <sup>2</sup> (% Positive Samples per month)	BCWA	Presence of coliform bacteria in >5% monthly samples	0	0%	NA	No	Naturally present in the environment
Total Organic Carbon <sup>3</sup> (TOC) (Removal ratio)	PWSB	TT*	NA	1.62	1.47-1.81	No	Naturally present in environment
Turbidity <sup>4</sup> (NTU)	PWSB	TT*=<1 NTU	NA	1.00	0.03-1.00	No	Soil runoff.

Substance (Unit of Measure)	SOURCE	Action Level	MCLG	Amount Detected 90th% TILE	Sites above AL	Violation	TYPICAL SOURCE
Copper <sup>5</sup> (ppm)	BCWA	1.3	1.3	0.012	0	No	Corrosion of household plumbing systems; Erosion of natural deposits. 0 sites out of 30 were above 1.3 ppm..
Lead <sup>5</sup> (ppb)	BCWA	15	0	2.7	1	No	Corrosion of household plumbing systems; Erosion of natural deposits. 1 sites out of 30 was above 15 ppb.
Copper <sup>7</sup> (ppm)	PWSB	1.3	1.3	0.015	0	No	Corrosion of household plumbing systems; Erosion of natural deposits. 0 sites out of 309 were above 1.3 ppm
Lead <sup>7</sup> (ppb)	PWSB	15	0	11	15	No	Corrosion of household plumbing systems; Erosion of natural deposits. 15 sites out of 305 were above 15 ppb.

UNREGULATED SUBSTANCES		AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE			
Substance (Unit of Measure)	SOURCE						
Sodium (ppm)	PWSB	14.2 (Avg.)	NA	Runoff from road de-icing operations. Erosion of natural deposits. NO VIOLATION			
<i>Fourth Unregulated Contaminant Monitoring Rule (UCMR 4)<sup>6</sup></i>							
Manganese (ppm)	PWSB	0.0008	0.0005-0.001	Erosion of natural deposits.			2018 PWSB Data
Bromochloroacetic Acid (BCAA) (ppb)	PWSB	1.85	0.4-2.79	By-product of drinking water chlorination			2018 PWSB Data
Manganese (ppm)	BCWA	0.0007	0.00051-0.00089	By-product of drinking water chlorination			2020 BCWA Data
Bromochloroacetic Acid (BCAA) (ppb)	BCWA	1.61	1.1-2.2	By-product of drinking water chlorination			2020 BCWA Data

- 1. Compliance is based upon the highest locational quarterly running annual average, and the range is based upon the lowest and highest individual measurements.
- 2. For 2021, the Bristol County Water Authority collected 756 samples for Total Coliform Rule compliance monitoring; there were no positive sample for total coliform bacteria. None were positive for E.Coli.
- 3. In order to comply with the EPA's TOC standard, the removal ratio between the source and finished water must be greater than 1.0. The detected level is the lowest removal ratio per quarter. Range is the lowest and highest removal ratios per month.
- 4. 1.00 NTU (Nephelometric Turbidity Unit) was the Highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 99.7 %. The average turbidity value for 2021 was < 0.10 NTU
- 5. Data reflects sampling performed in 2021 within the BCWA Distribution System.
- 6. Unregulated contaminants are those that don't yet have a primary drinking water standard set by the USEPA. The purpose of monitoring for these contaminants is to help USEPA develop regulatory decisions for these contaminants.
- 7. Data reflects sampling performed in 2021 within the PWSB Distribution System

## A Message from the Executive Director

I am pleased to present our 2021 Water Quality Report, which provides a summary of the water quality data of the drinking water that is delivered to our customers. The Covid pandemic continued to place work-place challenges upon us, however, due to the dedication of BCWA employees, we continued to provide our customers with uninterrupted service and high-quality drinking water.

We implemented some minor work-place modifications to be able to perform our on-going general system maintenance, continue to provide for outstanding customer service, and perform all necessary water quality monitoring and testing to ensure that our customers receive drinking water that is safe and reliable.

Initially, the pandemic did delay the advancement of several of our capital improvement projects. However, by the end of 2021 we were able to rehabilitate 3,500 feet of old cast iron pipe through cleaning and lining. Rehabilitating older pipelines in this manner improves system reliability and water quality. We also installed over a mile of new pipeline and completed the design for a new pumping station, as part of our plan to improve system pressures. Additionally, our crews continued with replacement of older service lines, notably on the removal of galvanized iron services.

Our water comes from Providence Water which supplies high quality drinking water from the Scituate Reservoir. However, we remain focused on obtaining an alternate water supply particularly after experiencing a leak in the East Bay Pipeline two summers ago. To ensure water system redundancy, Phase I of our Pawtucket Pipeline Project was recently completed. This large capacity main will provide BCWA with a reliable emergency supply connection to the East Providence system. Phase II of the project is currently in design and will provide for a transmission main through East Providence to a connection to the Pawtucket Water Supply. This connection will provide BCWA with a redundant and reliable source of high quality drinking water.

BCWA is committed to providing reliable safe drinking water under all conditions. Most of our employees live in the community and we are all working to provide the highest quality water supply for our families, friends, and our customers.

For additional information on our projects and your water supply, please go to [bcwari.com](http://bcwari.com), or give us a call at 401-245-2022.

Stephen H. Coutu, P.E.  
Executive Director

## \*Definitions

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

**MCLG (Maximum Contaminant Level Goal):** 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.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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 disinfectants to control microbial contaminants.

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

**Removal ratio:** A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**NA:** Not applicable.

**ND:** None detected.