BRISTOL COUNTY WATER AUTHORITY

2019 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 Pamela M. Marchand, 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), 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.
Our Emergency phone number is 401-245-5071

Portuguese IMPORTANTE!

Portuguese IMPORTANTE! O relatorio contem informaçoes importantes sobre a qualidade da agua da comunidade. Traduza-o ou peca ajuda de uma pessoa amiga para ajuda-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

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.

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 2019 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

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 bottle 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

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.

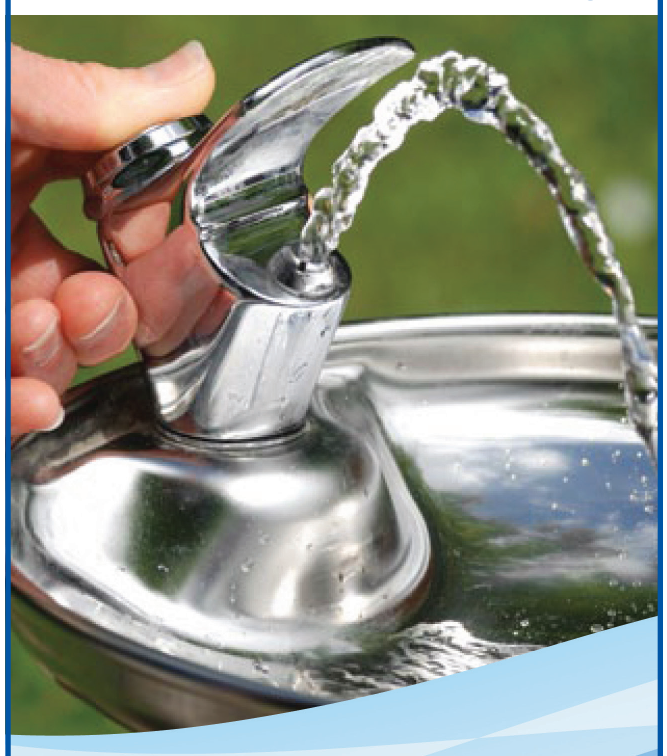
Major Projects Completed in 2019

- East Bay Pipeline Slip Lining Emergency Repair
- Water Distribution System Improvements Water Main Replacements.
- Substantial completion of Meter Replacement Program

Major Projects Begun in 2019

- Design of 2020 Distribution System Cleaning and Cement Mortar Lining Project
- Design of Pawtucket Pipeline - Phase 1
- Design of Hope Street Pump Station
- Design of East Bay Pipeline Inspection
- Property Purchase for Hope Street Pump Station
- Design of Kickemuit Reservoir Dam Removal

Bristol County Water Authority



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Water Quality Report

2019 Bristol County Water Authority • WATER QUALITY DATA

Bristol County receives all of its water from Providence Water though 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 Substance (Unit of Measure)	PERIOD OF TESTING - YEAR 2019 SOURCE	MCL* (MRDL)	MCLG* (MRDLG)	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	SDWA VIOLATION	TYPICAL SOURCE
Barium (ppm)	PWSB	2	2	0.009	NA	No	Erosion of natural deposits
Chlorine (ppm)	BCWA	(4)	(4)	0.59	0.04–1.37	No	Water additive used to control microbes
Fluoride (ppm)	PWSB	4	4	0.80	0.58-.80	No	Erosion of natural deposits; water additive which promotes strong teeth
Haloacetic Acids (HAA5)[1] (ppb)	BCWA	60	NA	24.5	15.0-29.7	No	By-product of drinking water disinfection
TTHMs (Total Trihalomethanes)[1] (ppb)	BCWA	80	NA	74.5	40.1-81.0	No	By-product of drinking water disinfection
Total Coliform Bacteria[2] (% Positive Samples per month)	BCWA	Presence of coliform bacteria in >5% monthly samples	0	1.52%	NA	No	Naturally present in the environment
Total Organic Carbon[3] (TOC) (Removal ratio)	PWSB	TT*	NA	1.77	1.62-1.87	No	Naturally present in environment
Turbidity[4] (NTU)	PWSB	TT*=<1 NTU	NA	0.88	0.02-0.88	No	Soil runoff.
Nitrate[6]	PWSB	10	10	0.06	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Substance (Unit of Measure)	SOURCE	Action Level	MCLG	Amount Detected 90th% TILE	Sites above AL/total sites	Violation	TYPICAL SOURCE
Copper[5] (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[5] (ppb)	BCWA	15	0	4.2	1	No	Corrosion of household plumbing systems; Erosion of natural deposits. 1 site out of 30 was above 15 ppb.
Copper[8] (ppm)	PWSB	1.3	1.3	0.02	0	No	Corrosion of household plumbing systems; Erosion of natural deposits. 0 sites out of 300 were above 1.3 ppm
Lead[8] (ppb)	PWSB	15	0	16.4	35	Yes	Corrosion of household plumbing systems; Erosion of natural deposits. 35 sites out of 301 were above 15 ppb.

UNREGULATED SUBSTANCES Substance (Unit of Measure)	SOURCE	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Sodium (ppm)	PWSB	15.0 (Avg.)	NA	Runoff from road de-icing operations. Erosion of natural deposits. NO VIOLATION
Fourth Unregulated Contaminant Monitoring Rule (UCMR 4)[7]				
Manganese (ppm)	PWSB	0.0008	0.0005-0.001	Erosion of natural deposits.
Bromochloracetic Acid (BCAA) (ppb)	PWSB	1.85	0.4-2.79	By-product of drinking water chlorination
Manganese (ppm)	BCWA	0.0005	NA	By-product of drinking water chlorination
Bromochloracetic Acid (BCAA) (ppb)	BCWA	1.98	1.7-2.7	By-product of drinking water chlorination

* See included list of definitions

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 2019, the Bristol County Water Authority collected 765 samples for Total Coliform Rule compliance monitoring; there were 2 positive sample for total coliform bacteria. One was 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. 0.88 NTU (Nephelometric Turbidity Unit) was the Highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 100.0 %. The average turbidity value for 2019 was < 0.10 NTU
5. Data reflects sampling performed in 2019.
6. Nitrate was detected in a single sample of source water.
7. 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.
8. Data reflects sampling performed in 2019 within the PWSB Distribution System

2020 Report of the Executive Director

Following the challenge of repairing the leak in the East Bay Pipeline last year, this year we are coping with the COVID-19 pandemic.

The BCWA took immediate actions to protect our staff so we could continue to provide high-quality water to our customers without disruption for the duration of the virus. We divided Customer Service and Operations staff into teams that report to 4 separate locations. The engineering department and some management personnel were able to work from home. Strict hygiene with PPE and distancing protocols were put in place. To protect staff and customers, our offices were closed to the public and our meter replacement program was suspended.

Nevertheless, during the months of March and April we completed our annual flushing program to ensure that water quality was maintained. Water quality monitoring, treatment, and general system maintenance continued and is on-going.

We are still focused on obtaining an alternate water supply. Unfortunately, the construction of the first phase of the Pawtucket Pipeline to the East Providence tank is delayed due to easement issues. We are now scheduled to bid in June, for construction to begin this fall.

Our cleaning and lining project was also delayed this year because of the virus; however, we are planning to begin June 1st and complete the project by the end of the year. The BCWA has been carefully planning the upcoming work with our contractor to ensure the project is completed in a safe efficient manner.

Additional water quality projects scheduled for this year include removal of lead goosenecks (connection between the water service line and the water main) present on some galvanized services, and the installation of additional water quality monitoring instrumentation. We are planning the completion of our meter replacement program with the addition of data collectors to provide more information for our customers. The construction of the Hope St. Pump Station to expand the higher-pressure zone will begin later this year.

The COVID-19 virus has disrupted all our lives, and some of our work plans. However, the BCWA is always 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 more information, please go to bcwari.com or call me at 401-245-2022.

Pamela M. Marchand, 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.

2019 Consumer Confidence Report Correction

Due to a proofreading error, there is an inaccuracy between the printed copies of the 2019 Consumer Confidence Report and the digital copy posted on our website. The digital copy located here, https://bcwari.com/ccr2019.pdf, has been updated to reflect a change in footnote two. In 2019, BCWA had two (2) samples that were positive for total coliform bacteria and one of those samples was positive for the presence of E. Coli. While the two total coliform samples were reported and included in the original published CCR, the data for E. Coli was inaccurate. To further clarify, even though there was a discrepancy in the published CCR, BCWA was not in violation of the Total Coliform Rule in 2019. The footnote has been modified to read as follows:
"For 2019, the Bristol County Water Authority collected 765 samples for Total Coliform Rule compliance monitoring; there were 2 positive sample for total coliform bacteria. One was positive for E. Coli."