



2024 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. 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 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

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>.

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. Revisions to the Source Water Assessment Plan were completed in August 2023. The Source Water Assessment Plan is available on the Providence Water website at <http://www.provwater.com/swap>.

Bristol County Water Authority System

The Bristol County Water Authority provides water to residents of Barrington, Bristol and Warren. The Scituate Reservoir, treated by Providence Water Supply Board (PWSB), is our sole source of supply and is distributed to all customers through the East Bay Pipeline into the BCWA Distribution System.

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. BCWA did not exceed any water quality regulations in 2024. BCWA received one reporting violation due to a laboratory error in 2024.

Lead in Home Plumbing

In 2024 Bristol County Water Authority, in compliance with state and federal regulations, completed our lead service line inventory. This inventory identifies water service material types throughout the system, and the entire inventory may be accessed online at bcwari.com/map-room.

If your homes service material is listed as “unknown” please complete the lead service line survey online or call customer service at 401-245-2022 to schedule an in person visit to assist with determining your service material type. The Lead Service Line Survey may be found at bcwari.com/lead-inventory-survey.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. BCWA is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family’s risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact customer service at 401-245-2022. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

PFAS in Drinking Water

The Rhode Island State Legislature passed the PFAS in Drinking Water, Groundwater, and Surface Waters Act in 2022. This law requires public water systems to sample for six PFAS contaminants. The six PFAS contaminants are perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluoro-hexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), and perfluoroheptanoic acid (PFHpA), and perfluorodecanoic acid (PFDA). The law established an interim state standard of 20 parts per trillion (ppt) total for these six PFAS. This is the maximum amount of PFAS allowed in drinking water by Rhode Island law. BCWA completed all required initial sampling prior to July 1, 2023. The results of that testing may be found here: health.ri.gov/data/data-pfas-drinking-water-rhode-island

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.” BCWA takes great pride in our continuing efforts to update our existing infrastructure and to increase resiliency in order to continue to provide safe and reliable drinking water to all of our customers.

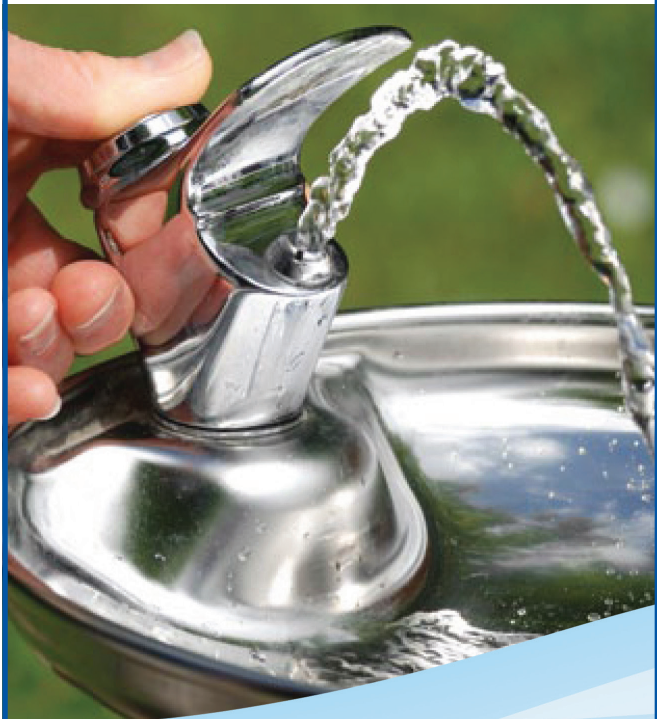
2024 Capital Projects Update

- Completed Kickemuit Reservoir Dam Removals
- Continued design of Pawtucket Pipeline Phase II
- Completed construction of the Hope Street Pump Station
- Construction of 2024 Water Main Improvement and Lead Service Renewal project
- High Service Area expansion and Hope Street Pump Station startup
- Design and procurement of 2025 Water Main Improvement project
- Development and completion of the Lead Service Line Inventory
- Developed public facing Lead Service inventory map found here: bcwari.com/map-room
- Developed Lead Service Line survey mailer postcards and online survey found here: bcwari.com/lead-inventory-survey


Scan the QR Code below to take the Lead Service Line Survey!



Bristol County Water Authority



2024 Water Quality Report



2024 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	PERIOD OF TESTING - YEAR 2024						
Substance (Unit of Measure)	SOURCE	MCL* (MRDL)	MCLG* (MRDLG)	HIGHEST AMOUNT DETECTED	RANGE LOW-HIGH	SDWA VIOLATION	TYPICAL SOURCE
Barium (ppm)	PWSB	2	2	0.007	NA	No	Erosion of natural deposits
Chlorine (ppm)	BCWA	MRDL=4.0	MRDLG=4.0	0.47	0.04-0.65	No	Water additive used to control microbes
Fluoride (ppm)	PWSB	4	4	0.79	0.57-0.59	No	Erosion of natural deposits; water additive which promotes strong teeth
Haloacetic Acids (HAA5) ^{1,9} (ppb)	BCWA	60	NA	19.1	5.3-23.9	No	By-product of drinking water disinfection
TTHMs (Total Trihalomethanes) ^{1,9} (ppb)	BCWA	80	NA	64.4	47.2-71.1	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	0%	NA	No	Naturally present in the environment
Total Organic Carbon ³ (TOC) (Removal ratio)	PWSB	TT*	NA	1.88	1.84-2.01	No	Naturally present in environment
Nitrate as N	PWSB	10	10	0.08	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Turbidity ⁴ (NTU)	PWSB	TT*=<1 NTU	NA	0.42	0.03-0.42	No	Soil runoff.
Substance (Unit of Measure)	SOURCE	Action Level	MCLG	Amount Detected 90th% TILE	Range Low-High	Violation	TYPICAL SOURCE
Copper ⁵ (ppm)	BCWA	1.3	1.3	0.018	ND-0.049	No	Corrosion of household plumbing systems; Erosion of natural deposits. 0 sites out of 30 were above the Action level of 1.3 ppm..
Lead ⁵ (ppb)	BCWA	15	0	2.40	ND-25.00	No	Corrosion of household plumbing systems; Erosion of natural deposits. 1 site out of 30 was above Action level of 15 ppb.
Copper ⁶ (ppm)	PWSB	1.3	1.3	0.21	<0.001-0.274	No	Corrosion of household plumbing systems; Erosion of natural deposits. 0 sites out of 301 were above the Action level of 1.3 ppm
Lead ⁶ (ppb)	PWSB	15	0	3	<1-38.5	No	Corrosion of household plumbing systems; Erosion of natural deposits. 2 sites out of 301 were above the Action level of 15 ppb.
Substance (Unit of Measure)	SOURCE	Interim Standard	MCLG	Amount Detected	Sites above Action Level	Violation	TYPICAL SOURCE
Rhode Island PFAS ⁷ (ppt)	BCWA	Sum of 6<20 ppt	0	ND	0	No	PFAS (per- and polyfluoroalkyl substances) are a large group of man made chemicals that repel oil and water.
UNREGULATED SUBSTANCES	SOURCE	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE			
Sodium (ppm)	PWSB	13.0	11.2-13.0	Runoff from road de-icing operations. Erosion of natural deposits. NO VIOLATION			
FIFTH UNREGULATED CONTAMINANT MONITORING RULE (UCMR 5) ⁸							
PFAS	BCWA	<MRL	NA	PFAS (per-and polyfluoroalkyl substances)- are a large group of manmade chemicals that repel oil and water			
Lithium	BCWA	<MRL	NA				
* See included list of definitions							
<div>1. Compliance is based upon the highest locational quarterly running annual average, and the range is based upon the lowest and highest individual measurements.</div> <div>2. For 2024, the Bristol County Water Authority collected 756 samples for Total Coliform Rule compliance monitoring; there were 0 positive samples for total coliform bacteria. None were positive for E.Coli.</div> <div>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.</div> <div>4. 0.42 NTU (Nephelometric Turbidity Unit) was the Highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 99.9 %. The average turbidity value for 2024 was < 0.10 NTU</div> <div>5. Data reflects sampling performed in 2024 within the BCWA Distribution System.</div> <div>6. Data reflects sampling performed in 2024 within the PWSB Distribution System.</div> <div>7. The Rhode Island State Legislature passed the PFAS in Drinking Water, Groundwater, and Surface Waters Act in 2022. This law requires public water systems to sample for six PFAS contaminants. The six PFAS contaminants are perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), and perfluoroheptanoic acid (PFHpA), and perfluorodecanoic acid (PFDA). The law established an interim state standard of 20 parts per trillion (ppt) total for these six PFAS.</div> <div>8. 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. UCMR5 monitors for 29 PFAS compounds and Lithium. Samples were taken at the entry point quarterly during 2023, and the result of all samples taken were below the minimum reporting level.</div> <div>9. BCWA received a reporting violation for the Disinfection By-Product monitoring period (7/1/2024 to 9/30/2024) as one of the eight samples collected and submitted by BCWA's outside contract laboratory had an incorrect sample label. BCWA corrected the administrative error and has returned to compliance. No water quality standards were violated.</div>							

A Message from the Executive Director

I am pleased to present our 2024 Water Quality Report, which provides a summary of the water quality data of the drinking water that is delivered to our customers. At BCWA, our mission is to provide all our customers with reliable, high-quality drinking water every minute of every day.

To meet that objective, we are always looking for ways to improve the system and service to our customers. We are responsible for maintaining over 230 miles of pipelines throughout the towns of Barrington, Warren, and Bristol. Approximately 1/3 of the pipelines are un-lined cast iron, and many of these pipes are over 100 years old. Pipelines of that age and type can cause reliability and water quality issues. To mitigate these issues, our Capital Improvement Program includes on-going water system rehabilitation to upgrade older parts of the system. Over the past 10 years, we have rehabilitated nearly 100,000 feet of water main and we continue to invest in making system improvements.

Over the past several years, there has been a lot of news on lead service lines. Please note that your drinking water that comes from the Scituate Reservoir does not contain lead. Rather, lead may be detected if the water is in contact with a lead service line, lead solder, or plumbing fixtures that may contain a small amount of lead. Fortunately, the BCWA water system has little to no lead service lines, and we have proactively removed service lines that were installed with lead “gooseneck” connectors. The presence of lead in drinking water is tested annually, and BCWA has never exceeded the regulatory limits.

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 a few years ago. To ensure water system redundancy, Phase I of our Pawtucket Pipeline Project was completed a few years ago. 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 an additional reliable source of high quality drinking water.

BCWA is committed to providing reliable safe drinking water to the communities we serve. 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, 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.