BRIDGEWATER WATER DEPARTMENT ANNUAL WATER QUALITY REPORT

(JANUARY 2024 – DECEMBER 2024)

PWS ID Number: 4042000

The Bridgewater Water Department is committed to providing our customers with water that meets or exceeds all drinking water standards. To ensure that we continue to deliver this quality product, the Water Department has made significant investments over the years in new well sites, water quality monitoring, water source protection, water mains and water treatment.

We are extremely pleased to present our water quality report covering testing performed in 2024. This is indicative of our ability to consistently provide high quality water to our customers year after year. As regulations and drinking water standards change, our commitment to you will be to make appropriate changes in an economical manner. We will remain vigilant in meeting the challenges of source water protection, water conservation and community education while continuing to serve the needs of our water users. The Safe Drinking Water Act (SDWA) passed by Congress in 1974 requires water suppliers to report annually to their customers on the quality of their drinking water. This Annual "Water Quality Report" is designed to provide you with information you need to make educated decisions for yourself, your family, and your town.

This Report will be made available to you annually by July 1st. Included are details about your water source, what we are doing to protect it, what it contains, how it is treated and how it compares to standards set by regulatory agencies. Informed consumers are our best allies in maintaining safe drinking water. Please take the time to review this report and save it as a reference.

What Other Sources of Information Are Available?

MassDEP website: www.mass.gov/dep; **CCR Information:** https://www.epa.gov/ccr/ccrinformation-consumers **National Primary Drinking** Water Regulations: https://www.epa.gov/ground -water-and-drinkingwater/national-primarydrinking-water-regulations U. S. Environmental Protection Agency website: www.epa.gov/safewater; **EPA Drinking Water** Hotline: 1-800-426-4791.

Where Does Your Water Come From?

Our water supply comes from groundwater sources from 9 wells installed in three different aquifers in the Taunton River Basin. The first aquifer consists of four wells located on High Street near the Matfield River (Wells #3, #6, #8, and #9, MassDEP Source ID 4042000-02G, -05G, -09G, and -10G, respectively). The second aquifer supports five wells located in the vicinity of Carver's Pond (active wells include Wells #2, #4a, and #5a, MassDEP Source ID 4042000-04G, -14G, and -13G, respectively). The third aquifer includes two wells located on Plymouth Street (Wells #10A and #10B, MassDEP Source ID 4042000-11G and -12G, respectively). The wells range in depth from 40-60 feet and are constructed in the sand and gravel deposits that overlie bedrock. The water is delivered to customers through approximately 130 miles of water mains ranging in size from 2 inches to 16 inches. The service pipe into your house is connected into the water main in the street.

The new High Street Water Treatment Plant (WTP) treats Wells 3, 6, 8, and 9 while the Carvers Pond WTP treats Wells 2, 4a, and 5a. The instrumentation and controls at the Carver Pond WTP were upgraded in May 2021. The High Street WTP is newly constructed and went online in February 2023. Both WTPs serve to remove iron and manganese from the source water, and also provide pH adjustment and disinfection. Sodium hydroxide is added to all the wells to reduce the groundwater's natural acidity, to optimize disinfection effectiveness, and minimize the deterioration of household plumbing. Chlorine is added as a precaution against any bacteria that may be present. We carefully monitor the amount of chlorine in our water, only adding the minimum amount necessary to protect the safety of our water. The High Street WTP uses UV light in addition to chlorine for disinfection. UV light is not a requirement by MassDEP but provides additional protection against microbial contaminants.

2024 H₂O Facts

Total Water Pumped: 574 Million Gallons

Average Per Capita
Usage:
55 Gallons/Day

The Water Department owns over 50 acres at Carver's Pond and over 18 acres at High Street to protect our water sources. In addition, the Water Department has about 20 acres on Plymouth Street. The Water Department maintains two storage tanks with a total capacity of 4.7 million gallons. This storage capacity helps maintain systemwide pressure while at the same time providing water to meet times of high water usage and fire-fighting events.

Important Health Information

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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).

In order to ensure that tap water is safe to drink, the Massachusetts Department of Environmental Protection (MassDEP) and United States Environmental Protection Agency (EPA) prescribe regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the <u>Safe Drinking Water Hotline</u> (1-800-426-4791).

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. The Town of Bridgewater 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 <u>Bridgewater Water Department</u> at (508-697-0910). 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.

Explanation of Expected Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, brooks, 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 material and can pick up contaminants resulting from the presence of animals or human activity.



Contaminants that may be present in untreated source water include:

- Microbial contaminants, such as viruses and bacteria that may come from septic systems, wastewater treatment plants, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil or gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Water Quality Testing Results

Even though we tested for over 100 of the contaminants mentioned above, the included Water Quality Data Table shows only the substances that were detected in our treated drinking water. The presence of these contaminants in the water does not necessarily indicate that the water presents a health hazard. All other contaminants that we tested for were not detected. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent testing results are included along with the year in which the sample was taken. Except for PFAS6, all regulated contaminants were detected at levels well below the highest levels allowed in drinking water, which is shown in the Maximum Contaminant Level (MCL) column.

- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

Cross - Connection Control and You

Cross-connections that contaminate drinking water distribution lines are a major concern to us. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (back pressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (back siphonage). Refer to page 5 for more information.

Water Quality Data Tables of Detected Regulated Contaminants

Contaminant	Date Collected	90 th Percentile ¹	Action Level	MCLG		# Sites Above Action Level	Range	Possible Source(s) of Contamination
Lead (ppb)		8	15	0	60 and 60	3	ND – 37	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	2024	0.81	1.3	1.3	64 and 60	2	0.05 – 1.63	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Refer to the definition section on page 5 for an explanation of the 90^{th} *Percentile.*

² Lead and Copper samples are collected by volunteers in our community. We are required to collect 60 samples for Lead and Copper twice a year.

Regulated Contaminant	Date(s) Collected	Highest Result or Average Detected	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Inorganic Contamina	nts						
Fluoride ³ (ppm)	April, July, 2024	ND	ND	4 (SMCL=2)	4	N	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (ppm)	Jan., April, Aug., 2024	2.47	1.68 – 3.05	10	10	N	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Tetrachloroethylene (ppb)	Jan. 2024	0.51	ND – 0.6	5	0	N	Discharge from factories and dry cleaners; asbestos cement lined pipes
Perchlorate (ppb)	July 2024	0.11	0.10 - 0.13	2	NA	N	Rocket propellants, fireworks, munitions, flares, blasting agents
Barium (ppm)	April, July, 2024	0.025	ND – 0.031	2	2	N	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits
PFAS6 ⁴ (ppt)	Monthly in 2024	22.075	9.27 – 28.7	20	NA	Y	Discharge and emission from industrial and manufacturing sources associated with PFAS, such as moisture and oil resistant coatings, and fire-fighting foam; use and disposal of products containing PFAS
Radioactive Contami	nants						
Gross Alpha (pCi/L)	2021	0.9	0.26 - 2.00	15	0	N	Erosion of natural deposits
Radium 226 & 228 combined (pCi/L)	2021	1.22	0.98 – 1.45	5	0	N	Erosion of natural deposits
Disinfectants and Dis	sinfection By-	Products	,		,		
Free Chlorine (ppm)	25 times per month, 2024	0.63^{6}	0.43 - 0.84	4 (MRDL)	4 (MRDLG)	N	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	Quarterly in 2024	216	10.8 – 26.2	60	NA	N	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs) (ppb)	Quarterly in 2024	55 ⁶	29 – 72	80	NA	N	Byproduct of drinking water chlorination

- 3 Fluoride also has a secondary contaminant level (SMCL) of 2 ppm. Bridgewater does not add fluoride to the water system. The Massachusetts Department of Public Health strongly supports community Fluoridation as a safe, cost effective, and proven practice that promotes good oral health within our communities. The ideal fluoride concentration in drinking water to help prevent tooth decay and support dental health is a concentration of 0.7 parts per million (ppm) consistently. The optimal average monthly fluoridation concentration range is 0.6 0.8 ppm.
- 4 Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers. For additional information on PFAS6, refer to the Attached notices of noncompliance, also available at: Final-PFAS-Bridgewater-O3-PFAS-PN-092324

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https://www.bridgewaterma.org/DocumentCenter/View/5975/Q4-PFAS-Bridgewater-PFAS-PN -002?bidId=

- 5 Highest quarterly locational average is reported.
- 6 Highest quarterly locational running annual average is reported.

Water Quality Data Tables of Detected Unregulated and Secondary Contaminants

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

Unregulated and	Date(s)	Average	Range					
Secondary Contaminants	Collected	Detected	Detected	SMCL	ORSG	Possible Source(s) of Contamination		
Unregulated Contaminants					ī			
Acetone (ppm)	Jan., Mar., Apr., Jul., 2023	11.2	ND – 14.8	NA	6.3	Discharge from industrial production and use, in automobile exhaust, from landfills and natural sources		
Alkalinity (mg/L as CaCO ₃)	Feb. 2023	54	54	NA	NA	Naturally occurring; result of water treatment process		
Bromodichloromethane (ppb)	Jan., Apr., Jul., 2024	3.63	2.6 - 5.0	NA	NA	Byproduct of drinking water chlorination		
Calcium (ppm)	Feb. 2023	14.7	14.7	NA	NA	Naturally occurring as groundwater percolates through minerals containing calcium		
Chloroform (ppb)	Jan., Apr., Jul., 2024	3.2	2.2 - 3.7	NA	70	Byproduct of drinking water chlorination. In non- chlorinated sources, chloroform may be naturally occurring.		
Dibromochloromethane (ppb)	Jan., Apr., Jul., 2024	2.1	1.5 - 2.9	NA	NA	Byproduct of drinking water chlorination		
Hardness (mg/L as CaCO ₃)	Feb. 2023	80.5	80.5	NA	NA	Naturally occurring as groundwater percolates through minerals containing calcium or magnesium		
Magnesium (ppm)	Feb. 2023	5.77	5.77	NA	NA	Naturally occurring as groundwater percolates through minerals containing magnesium		
Sodium ¹ (ppm)	May 2022	82.9	82.9	NA	20	Discharge from the use and improper storage of sodium-containing de-icing compounds or in water-softening agents		
Potassium (ppm)	5/24/2021	4.71	4.71	NA	NA	Naturally occurring; runoff from fertilizer use		
Secondary Contaminants				•	•			
Aluminum (ppb)	Feb 2023	ND	ND	200	NA	Residue from water treatment process; erosion of natural deposits		
Chloride (ppm)	Feb 2023	116	116	250	NA	Runoff and leaching from natural deposits; seawater influence		
Iron (ppb)	2024	80	ND - 100	300	NA	Naturally occurring, corrosion of cast iron pipes		
Manganese ² (ppb)	2024	124	ND – 411 ³	50	3004	Natural sources as well as discharges from industrial uses		
Odor ⁵ (TON)	Feb 2023	8	8	3	NA	Erosion of natural deposits; leaching from wood preservatives		
рН	Feb 2023	7.3	7.3	6.5 - 8.5	NA	Runoff and leaching from natural deposits		
Sulfate (ppm)	Feb 2023	19.3	19.3	250	NA	Runoff and leaching from natural deposits; industrial wastes		
Total Dissolved Solids (ppm)	Feb 2023	257	257	500	NA	Erosion of natural deposits		
Zinc (ppm)	Feb 2023	0.005	0.005	5	NA	Naturally occurring; human activities such as melting metals, steel production, burning coal and certain wastes; zinc-coated metal pipes		

Some people who drink water containing sodium at high concentrations for many years could experience an increase in blood pressure.

² Drinking water may naturally have manganese and, when concentrations are greater than 50 ppb, the water may be discolored and taste bad. Over a lifetime, the EPA recommends that people drink water with manganese levels less than 300 ppb, and over the short term, EPA recommends that people limit their consumption of water with levels over 1000 ppb, primarily due to concerns about possible neurological effects. Children younger than one year old should not be given water with manganese concentration over 300 ppb, nor should formula for infants be made with that water for more than a total of ten days throughout the year.

³ Water sample collected at well 10B on 8/27/24 show confirmed manganese levels in excess of the Massachusetts Department of Environmental Protection (MassDEP) advisory level. We also collected and tested 3 samples from the distribution system in the area of that well on 9/12/24 and the average was .095 mg/l / 95 ppb. Refer to the attached notice of noncompliance.

⁴ US EPA and MassDEP have established public health advisory (HA) levels for manganese to protect against concerns of potential neurological effects and a one-day and 10-day HA of 1000 ppb for acute exposure.

⁵ May produce a "rotten egg", musty, or chemical smell.

Water Quality Table of Unregulated PFAS Contaminants

PFAS6 is a group of 6 different contaminants that are regulated as a group. Other PFAS chemicals are unregulated. Two of the 12 unregulated PFAS contaminants were detected.

Unregulated PFAS Contaminants	Date(s) Collected	Average Detected	Range Detected
Perfluorobutane sulfonic acid (PFBS) (ppt)	Monthly in 2024	4.6^{1}	2.3 - 5.8
Perfluorohexanoic acid (PFHxA) (ppt)	Monthly in 2024	7.7^{1}	2.7 - 8.6
1 Highest quarterly locational average is reported.			

Unregulated Contaminants Monitoring Rule - 5 (UCMR-5)

Unregulated contaminants are those substances for which the EPA has not established drinking water standards. The purpose of unregulated contaminants monitoring is to assist the EPA in determining their occurrence in drinking water and whether further regulation is warranted. The UCMR-5 data uses different analytical testing method than standard tests. There is no ORSG or other health value for these contaminants.

Unregulated PFAS Contaminants	Date(s) Collected	MCL or MRDL	Average Detected	Range Detected
Perfluorobutane sulfonic acid (PFBS) (ppt)	2023, 2024	NA	4.0	ND - 5.0
Perfluorohexanoic acid (PFHxA) (ppt)	2023, 2024	NA	4.9	3.0 - 8.0
Perfluorohexane sulfonate (PFHxS) (ppt)	2023, 2024	20	4.0	ND-4.0
Perfluoroheptanoic acid (PFHpA) (ppt)	2023, 2024	20	3.0	ND - 3.0
Perfluorooctanoic acid (PFOA) (ppt)	2023, 2024	20	7.3	5.0 - 9.0
Perfluorooctane sulfonic acid (PFOS) (ppt)	2023, 2024	20	6.3	5.0 - 7.0
Perfluoropentanoic acid (PFPeA) (ppt)	2023, 2024	NA	5.4	4.0 - 7.0

Abbreviations:	
90 th Percentile	Lead and copper compliance is based on the 90 th percentile value; out of every 10 homes sampled, 9 were at or below this level. This number is compared to the action level to determine lead and copper compliance. When the 90 th percentile value is above the action level (AL), a public water system must implement corrosion control treatment. See the education statement on lead in water quality report on page 2 for more information.
AL	Action Level. The concentration of contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
HAA	Haloacetic Acids.
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.
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.
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

Cross-Connection Control and You (continued)

contaminants.

Outside water taps and garden hoses tend to be the most common source of cross-connection contaminations at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-

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.
NA	Not Applicable.
ND	Not Detected.
ORSG	Office of Research and Standards Guideline.
pCi/L	Picocuries per liter. A unit of radiation.
PFAS	Per-and Polyfluoroalkyl Substance.
ppb	Parts per billion or micrograms per liter ($\mu g/L$). This corresponds to 1 penny in \$10,000,000.
ppm	Parts per million or milligrams per liter (mg/L). This corresponds to 1 penny in \$10,000.
ppt	Parts per trillion or nanograms per liter (ng/L). This corresponds to 1 penny in \$10,000,000,000.
SMCL	Secondary Maximum Contaminant Level. These are standards to protect the aesthetic quality of drinking water and are not health based.
TON	Threshold Odor Number.
TTHM	Total Trihalomethanes.
HA	Health Advisory

connections unless appropriate valves, known as backflow prevention devices, are installed, and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection. For more information on backflow prevention, contact the Safe Drinking Water Hotline

(1-800-426-4791).

SOURCE WATER PROTECTION

The Massachusetts Department of Environmental Protection has completed a Source Water Assessment and Protection (SWAP) Report for our system. The SWAP report assesses the susceptibility of public water supplies to potential contamination by microbiological pathogens and chemicals. A susceptibility ranking of high was assigned to our system using information collected during the assessment by MassDEP. A source's susceptibility to contamination does not imply poor water quality. Among the SWAP Report recommendations are public education; partnering with local businesses to ensure proper storage, handling, and disposal of hazardous wastes; monitoring progress on any remedial action at known contamination sites; and developing a wellhead protection plan. Source protectionis a key element in providing good quality water.

Protecting our precious water resources is everyone's responsibility. If you observe any activity that could contaminate our drinking water supply, please contact us immediately. The complete SWAP Report is available at the Water Department Office and at MassDEP's website:

 $\frac{https://www.mass.gov/service-details/the-source-water-assessment-protection-swap-program.}{}$

Water Conservation Tips

Here is how you can do your part to conserve water at home:

- 1. Fix leaking faucets, pipes, toilets, etc.
- 2. Install water-saving devices.
- 3. Wash only full loads of laundry.
- 4. Do not use the toilet for trash disposal.
- 5. Take shorter showers. Do not let the water run while shaving, washing, or brushing teeth.
- 6. Run the dishwasher only when full.
- 7. Water the lawn as little as possible.
- 8. Choose plants that do not need much water.
- 9. Obey water bans or regulations.

Homeowners are reminded that only handheld hoses can be used for outside watering and that underground irrigation systems cannot be connected to the Town's water system.

What If I Have Questions About My Water?

Please call the office at: <u>508-697-0910</u>

Contact Person: Jonas Kazlauskas, Water and Sewer Superintendent.



Water Department 90 Cottage Street Bridgewater, MA 02324

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Bridgewater Water Department has levels of PFAS6 above the Drinking Water Standard

This report contains important information about your drinking water.

Please translate it or speak with someone who understands it or ask the contact listed below for a translation.

What happened?

Our water system recently violated a drinking water standard and are taking the following corrective actions: We have contracted with an engineering firm to determine possible solutions including installing treatment to remove PFAS. In the interim, we have installed a self-service vending unit with PFAS removal treatment at 151 High Street, to provide residents drinking water with levels of PFAS6 below the drinking water standard. See information about filling station in the "What is being done?" section below.

What does this mean?

This is not an emergency. If it had been, you would have been notified within 24 hours. Although this is not an emergency, as our customer, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

On October 2, 2020, Massachusetts Department of Environmental Protection (MassDEP) promulgated a new drinking water regulation and maximum contaminant level (MCL) of 20 nanograms per liter (ng/L) for the sum of six per- and polyfluoroalkyl substances (called PFAS6). An MCL exceedance or violation occurs when the average of all monthly samples collected during the calendar quarter exceeds the MCL. See our latest PFAS6 results for wells entering the distribution system over the MCL in the tables below.

PFAS6 Results for Wells 10A and 10B							
Quarterly Compliance Period	Monitoring Period	Sample Collection Date	PFAS6 Result (ng/L)	Quarterly Average (ng/L)	PFAS6 MCL (ng/L)		
	Month 1	7/1/24	21.0		20		
Overstan 2, 2024	Month 1	7/18/24*	21.9	22			
Quarter 3, 2024	Month 2	8/27/24	19.2	22			
	Month 3	9/3/24	25.4				
	* An additional sample was collected in the month of July						

PFAS6 Results for Carvers Pond								
Quarterly Compliance Period	Monitoring Period	Quarterly Average (ng/L)	PFAS6 MCL (ng/L)					
	Month 1	7/1/24	17.0					
Quarter 3, 2024	Month 2	8/7/24	21.1	22	20			
	Month 3	9/3/24	28.1					

Our results are above the MCL for PFAS6. Even though we have been notifying you of our results since we began collecting samples, to comply with the drinking water regulation, we must provide you with this public notice. The Bridgewater Water Department has 3 entrance points that supply drinking water to our distribution system. The quarter 3 results from the other location, High Street Treatment Plant, has PFAS6 Levels below the MCL, ranging from 10.3 ng/L to 17.5 ng/L.

Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers. For more information on PFAS6 see the attached factsheet and weblinks listed below.

What is PFAS6?

PFAS6 includes perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorononanoic acid (PFNA), perfluorohexanesulfonic acid (PFHxS), perfluorodecanoic acid (PFDA) and perfluoroheptanoic acid (PFHpA). PFAS are man-made chemicals that have been used in the manufacturing of certain fire-fighting foams, moisture and stain resistant products, and other industrial processes. For more information see the factsheet and weblinks listed below.

What do I need to do?

- Consumers in a sensitive subgroup (pregnant or nursing women, infants and people diagnosed by their health care provider to have a compromised immune system), are advised not to consume, drink, or cook with water when the level of PFAS6 is above 20 ng/L.
- Consumers in sensitive subgroups are advised to use bottled water for drinking and cooking of foods that absorb water (like pasta).
- For infant formula, use bottled water or use formula that does not require adding water.
- For older children and adults not in a sensitive subgroup, the 20 ng/L value is applicable to a lifetime of consuming the water. For these groups, shorter duration exposures present less risk. However, if you are concerned about your exposure while steps are being taken to assess and lower the PFAS concentration in the drinking water, use of bottled water¹ will reduce your exposure.
- **Bottled water should only be used if it has been tested**. The Massachusetts Department of Public Health requires companies licensed to sell or distribute bottled water or carbonated non-alcoholic beverages to test for PFAS. See https://www.mass.gov/info-details/water-quality-standards-for-bottled-water-in-massachusetts#list-of-bottlers-
- Home water treatment systems that are certified to remove PFAS by an independent testing group such as NSF, UL, or Water Quality Association may be used to treat the water. These may include point of entry systems, which treat all the water entering a home, or point of use devices, which treat water where it is used, such as at a faucet. For information on selecting home treatment devices that are effective in treating the water for PFAS6, review the MassDEP factsheet for consumers referenced below.
- In most situations the water can be safely used for washing foods, brushing teeth, bathing, and showering.
- Boiling the water will not destroy PFAS6 and will somewhat increase its level due to evaporation of some of the water.
- If you have specific health concerns regarding exposure, you should see the Centers for Disease Control's link below and consult a health professional, such as your doctor.

For more information see the factsheet and weblinks listed below.

What is being done?

The Bridgewater Water Department has taken the following pro-active measures:

- The Bridgewater Water Department has installed a vending unit, located at 151 High Street, for residents to use free of charge. The vending unit has treatment that remove PFAS6 from the drinking water, recent results are non-detect for PFAS6 and Manganese. The vending unit is open for use 24/7 and residents are reminded to bring their own clean containers.
- We will continue to sample our water sources for PFAS to determine if it is possible to reliably blend sources below 20 ng/L.
- We are investigating treatment options for possible future use of Granular Activated Carbon (GAC).
- While we are working towards a long-term solution, we have made operational adjustments, blending, and mixing the sources with increased PFAS6 levels with other sources to possibly reduce the overall PFAS6 levels.
- We will provide updates and make information available on the town website: https://www.bridgewaterma.org/1481/PFAS-Information-Results

If you have questions about your water system's operation, water quality monitoring, or response to this issue, please contact the system operator directly. If you have questions about the drinking water regulations or health risks posed by this contaminant you can contact the MassDEP Drinking Water Program at: program.director-dwp@mass.gov or (617) 292-5770. If you have questions about specific symptoms, you can contact your doctor or other health care provider. If you have general questions about public health, you can contact the Massachusetts Department of Public Health at 1-617-624-5757.

For more information, please contact Jonas Kazlauskas at 508-697-0910 or at <u>Jkazlauskas@bridgewaterma.org</u> Bridgewater Water Department, 90 Cottage Street, Bridgewater, MA 02324.

- MassDEP Fact Sheet Questions and Answers for Consumers (https://www.mass.gov/media/1854351)
- <u>CDC ATSDR Information on PFAS for consumers and health professionals</u> (https://www.atsdr.cdc.gov/pfas/index.html)
- <u>Massachusetts Department of Public Health information about PFAS in Drinking Water</u> https://www.mass.gov/service-details/per-and-polyfluoroalkyl-substances-pfas-in-drinking-water

This notice is being sent to you by:

Bridgewater Water Department System ID#: 4042000 Date distributed: 09/2024

We will continue to provide public notice updates as required until the situation has been resolved.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.



Bridgewater Water Department has Very Important Information about Manganese in Your Drinking Water

-- Translate it or speak with someone who understands it --

What happened?

Water sample collected at well 10B on 8/27/24 show confirmed manganese levels of .357 milligrams per liter (mg/L) which is in excess of the Massachusetts Department of Environmental Protection (MassDEP) advisory level. We also collected and tested 3 samples from the distribution system in the area of that well on 9/12/24 and from the average was .095 mg/l.

While manganese is necessary for proper nutrition, an excess could adversely affect health.

What should I do?

- **Infant formula should be** prepared **with bottled water** or made with water from an alternate source with manganese levels below 0.3 mg/L.
- Use bottled water for infants less than 1 year of age or water from a source with a manganese level below 0.3 mg/L.
- **Bottled water should only be used if it has been tested.** The Massachusetts Department of Public Health requires companies licensed to sell or distribute bottled water or carbonated non-alcoholic beverages to test their water. See https://www.mass.gov/info-details/water-quality-standards-for-bottled-water-in-massachusetts#list-of-bottlers-
- The general population may continue to use the water since it is anticipated that this issue will be resolved before long-term exposures occur.
- If you have health related concerns about manganese, contact your health care provider.
- For more information on manganese see the MassDEP Manganese Consumer FAQ: https://www.mass.gov/doc/manganese-in-drinking-water-typical-questions-and-answers-for-consumers-0/download

What does this mean?

Drinking water may naturally have manganese, which is necessary for proper nutrition, but an excess could adversely affect health. MassDEP advises that people drink water with manganese levels less than 0.3 mg/L over a lifetime, and also advises that people limit their consumption of water with levels over 1 mg/L, primarily to decrease the possibility of adverse neurological effects. Infants up to 1 year of age should not be given water with manganese over 0.3 mg/L, nor should formula for infants be made with that water for more than a total of 10 days throughout the year. The general population water concentration exposure limits of 0.3 and 1 mg/L have been set based upon typical daily dietary manganese intake levels not known to be associated with adverse health effects. This does not imply that intakes above these levels will necessarily cause health problems. Individual requirements for, as well as adverse effects from manganese can be highly variable.

What is being done?

We will continue to monitor manganese, work to lower the manganese concentrations and work with the MassDEP to keep you informed of all current information on this issue. We have hired an engineering firm and they working on a solution to correct the quality of water that this well provides.

Reminder, there is a water vending machine (Bluedrop) located at 151 High St that is available to all Bridgewater residents free of charge and is open 24/7. This machine removes all sediment, minerals and is PFAS free quality water.

If you have questions for our Water Department, contact Water Dept. at 508-697-0910 or watersewer@bridgewaterma.org or mail us at 25 South St Bridgewater Ma. 02324

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses).

This advisory is being sent to you by Bridgewater Water Dept.

PWS ID# 4042000

Date distributed: 09/2024

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Bridgewater Water Department has levels of PFAS6 above the Drinking Water Standard

This report contains important information about your drinking water.

Please translate it or speak with someone who understands it or ask the contact listed below for a translation.

What happened?

Our water system recently violated a drinking water standard and are taking the following corrective actions: We have contracted with an engineering firm to determine possible solutions including installing treatment to remove PFAS. In the interim, we have installed a self-service vending unit with PFAS removal treatment at 151 High Street, to provide residents drinking water with levels of PFAS6 below the drinking water standard. See information about filling station in the "What is being done?" section below.

What does this mean?

This is not an emergency. If it had been, you would have been notified within 24 hours. Although this is not an emergency, as our customer, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

On October 2, 2020, Massachusetts Department of Environmental Protection (MassDEP) promulgated a new drinking water regulation and maximum contaminant level (MCL) of 20 nanograms per liter (ng/L) for the sum of six per- and polyfluoroalkyl substances (called PFAS6). An MCL exceedance or violation occurs when the average of all monthly samples collected during the calendar quarter exceeds the MCL. See our latest PFAS6 results for wells entering the distribution system over the MCL in the tables below.

PFAS6 Results for Carvers Pond Treatment Plant								
Quarterly Compliance Period	Monitoring Period	Sample Collection Date	PFAS6 Result (ng/L)	Quarterly Average (ng/L)	PFAS6 MCL (ng/L)			
	Month 1	10/1/24	17.6					
Quarter 4, 2024	Month 2	11/18/24	21.0	21	20			
	Month 3	12/9/24	24.8					

Our results are above the MCL for PFAS6. Even though we have been notifying you of our results since we began collecting samples, to comply with the drinking water regulation, we must provide you with this public notice. The Carvers Pond Treatment Plant is 1 of 3 locations that supply drinking water to our distribution system, the other 2 locations had PFAS6 Levels below the MCL during quarter 4.

Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers. For more information on PFAS6 see the attached factsheet and weblinks listed below.

What is PFAS6?

PFAS6 includes perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorononanoic acid (PFNA), perfluorohexanesulfonic acid (PFHxS), perfluorodecanoic acid (PFDA) and perfluoroheptanoic acid (PFHpA). PFAS are man-made chemicals that have been used in the manufacturing of certain fire-fighting foams, moisture and stain resistant products, and other industrial processes. For more information see the factsheet and weblinks listed below.

What do I need to do?

- Consumers in a sensitive subgroup (pregnant or nursing women, infants and people diagnosed by their health care provider to have a compromised immune system), are advised not to consume, drink, or cook with water when the level of PFAS6 is above 20 ng/L.
- Consumers in sensitive subgroups are advised to use bottled water for drinking and cooking of foods that absorb water (like pasta).
- For infant formula, use bottled water or use formula that does not require adding water.
- For older children and adults not in a sensitive subgroup, the 20 ng/L value is applicable to a lifetime of consuming the water. For these groups, shorter duration exposures present less risk. However, if you are concerned about your exposure while steps are being taken to assess and lower the PFAS concentration in the drinking water, use of bottled water¹ will reduce your exposure.

- **Bottled water should only be used if it has been tested**. The Massachusetts Department of Public Health requires companies licensed to sell or distribute bottled water or carbonated non-alcoholic beverages to test for PFAS. See https://www.mass.gov/info-details/water-quality-standards-for-bottled-water-in-massachusetts#list-of-bottlers-
- Home water treatment systems that are certified to remove PFAS by an independent testing group such as NSF, UL, or Water Quality Association may be used to treat the water. These may include point of entry systems, which treat all the water entering a home, or point of use devices, which treat water where it is used, such as at a faucet. For information on selecting home treatment devices that are effective in treating the water for PFAS6, review the MassDEP factsheet for consumers referenced below.
- In most situations the water can be safely used for washing foods, brushing teeth, bathing, and showering.
- Boiling the water will not destroy PFAS6 and will somewhat increase its level due to evaporation of some of the water.
- If you have specific health concerns regarding exposure, you should see the Centers for Disease Control's link below and consult a health professional, such as your doctor.

For more information see the factsheet and weblinks listed below.

What is being done?

The Bridgewater Water Department has taken the following pro-active measures:

- The Bridgewater Water Department has installed a vending unit, located at 151 High Street, for residents to use free of charge. The vending unit has treatment that remove PFAS6 from the drinking water, recent results are non-detect for PFAS6 and Manganese. The vending unit is open for use 24/7 and residents are reminded to bring their own clean containers.
- We will continue to sample our water sources for PFAS to determine if it is possible to reliably blend sources below 20 ng/L.
- We are investigating treatment options for possible future use of Granular Activated Carbon (GAC).
- While we are working towards a long-term solution, we have made operational adjustments, blending, and mixing the sources with increased PFAS6 levels with other sources to possibly reduce the overall PFAS6 levels.
- We will provide updates and make information available on the town website: https://www.bridgewaterma.org/1481/PFAS-Information-Results

Where can I get more information?

If you have questions about your water system's operation, water quality monitoring, or response to this issue, please contact the system operator directly. If you have questions about the drinking water regulations or health risks posed by this contaminant you can contact the MassDEP Drinking Water Program at: program.director-dwp@mass.gov or (617) 292-5770. If you have questions about specific symptoms, you can contact your doctor or other health care provider. If you have general questions about public health, you can contact the Massachusetts Department of Public Health at 1-617-624-5757.

For more information, please contact Jonas Kazlauskas at 508-697-0910 or at <u>Jkazlauskas@bridgewaterma.org</u> Bridgewater Water Department, 25 South Street, Bridgewater, MA 02324.

- MassDEP Fact Sheet Questions and Answers for Consumers (https://www.mass.gov/media/1854351)
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