

**2024 Consumer Confidence Report (CCR)**  
**Annual Water Quality Report**

**Bow Municipal**  
**BOW, NH**  
**PWS #0261010**

We are pleased to present to you our Annual Drinking Water Quality Report, also known as the Consumer Confidence Report. This report, a requirement of the 1996 amendments to the Safe Drinking Water Act, is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

**Water Source**

The Town of Bow Municipal Water System (BMWS) is a Community water system located in Bow, NH. The BMWS consists of two gravel packed wells. Each well contains a submersible turbine pump that pumps through a Lowrey Aeration System DB64 into a 61,000-gallon clear well. Phosphate is added to sequester iron and manganese prior to aeration. The aeration system removes radon and raises the pH of the water by removing carbon dioxide. Prior to entering the clear well, the water is disinfected with sodium hypochlorite. The system also has the ability to add potassium hydroxide to assist with the pH adjustment and further enhance the corrosion control process. Water is then transferred from the clear well to a 1.0 million gallon storage tank through submersible transfer pumps. Water is gravity fed from the tank to the water distribution system, which delivers drinking water to your home or business.

White Water, Inc. provides Bow Municipal with contract operation services. The contract operation includes the services of a state certified operator who monitors the water system for compliance with all state and federal drinking water regulations. The operating contract also includes services such as making emergency repairs when needed, making recommendations for improving water quality and increasing system reliability.

Any matters that concern your drinking water supply or issues you would like to see addressed can be presented at the regularly scheduled meeting of the Bow Drinking Water Protection Committee, which meets the second Wednesday of every month at 5:30pm in the Bow Town Hall. Or feel free to contact our current Certified Operator, WhiteWater, Inc., at 888-377-7678.

**Source Water Assessment**

The NH DES prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. Since the Town of Bow water system is newer than that, it was not assessed at that time. When a source assessment on your system is made it will be published on the NH DES website:

<http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm>.

Additional source water assessment information can be found at the Environmental Protection Agency's website: <https://www.epa.gov/sourcewaterprotection/source-water-assessments>.

### **Source Water Protection**

Source water is untreated water from streams, rivers, lakes, or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source makes good public health, economic, and environmental sense. You can be aware of the challenges of keeping drinking water safe and take an active role in protecting drinking water. There are lots of ways that you can get involved in drinking water protection activities to prevent the contamination of the ground water source: dispose properly of household chemicals, help clean up the watershed that is the source of your community's water, attend public meetings to ensure that the community's need for safe drinking water is considered in making decisions about land use, etc. Contact our office for more information on source water protection or contact the Environmental Protection Agency (EPA) at 1.800.426.4791. You may also find information on EPA's website at <https://www.epa.gov/sourcewaterprotection>.

### **Water Quality**

Bow Municipal routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows any detection resulting from our monitoring for the period of January 1 to December 31, 2024. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

The sources of drinking water include rivers, lakes, ponds, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. All sources of drinking water are subject to potential contamination by substances that are naturally occurring, or manmade. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides** 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, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants** can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the number of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The table below lists all the drinking water contaminants that were detected throughout water quality monitoring and testing. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

<b>Test Results</b>						
<i>Unless otherwise noted, testing was done in 2024.</i>						
<i>Unless otherwise noted, the highest concentration of each contaminant that was collected has been reported.</i>						
<b>Contaminant</b>	<b>Violation (Y/N)</b>	<b>Level Detected</b>	<b>Unit Measurement</b>	<b>MCLG</b>	<b>MCL</b>	<b>Likely Source of Contamination</b>
<b>Microbiological Contaminants</b>						
Total Coliform Bacteria	N	0	highest number of positive samples (monthly)	Absent	0 positive	Naturally present in the environment.
<b>Inorganic Contaminants</b>						
Arsenic (7/9/2024)	N	ND	mg/L	-	10	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Barium (7/9/2024)	N	0.040	mg/L	2	2	Erosion of natural deposits.
Chromium (7/9/2024)	N	ND	mg/L	0.1	0.1	Discharge from steel and pulp mills; Erosion of natural deposits.
Nickel (7/9/2024)	N	0.001	mg/L		0.1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium (7/9/2024)	Y	270	mg/L	28		Erosion of natural deposits, urban storm runoff.
Sulfate (7/9/2024)	N	12.9	mg/L	250		Erosion of natural deposits; urban storm runoff.
Chloride (7/9/2024)	N	106	mg/L	250	250	Erosion of natural deposits; storm water runoff containing road salt.
<b>Contaminants including Pesticides &amp; Herbicides</b>						
Synthetic Organic Compounds (SOCs) (7/9/2024)	N	ND	ug/L			Herbicides, pesticides, and other chemicals that come from agriculture, urban storm water runoff, or industrial, including

Organic Chemicals (VOCs) (7/9/2024)	N	See results listed below; all others not listed resulted non-detect.	ug/L			synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
Bromochloromethane (7/9/2024)	N	0.5	ug/L			Parameter included in Organic Chemicals (VOCs).
Bromoform (7/9/2024)	N	0.8	ug/L			Parameter included in Organic Chemicals (VOCs).
Dibromochloromethane (7/9/2024)	N	1.0	ug/L			Parameter included in Organic Chemicals (VOCs).
<b>Radioactive Contaminants</b>						
Radium 226 & 228 (combined) (7/9/2024)	N	2.7 ± 0.4	pci/L		5	Erosion of natural deposits.
Gross Alpha (7/9/2024)	N	4.7	pci/L	0	15	Erosion of natural deposits.
<b>Disinfection Byproducts</b>						
Total Haloacetic Acids (HAA5) (7/9/2024)	N	1.3-4.0	ug/L	0	60	A byproduct of drinking water chlorination.
Total Trihalomethanes (TTHMs) (7/9/2024)	N	5.1-16.0	ug/L	0	80	A byproduct of drinking water chlorination.

<b>Per- and Polyfluoroalkyl Substances (PFAS) 1/10/2024</b>						
PFAS are a large, complex group of synthetic chemicals used in various consumer products. We are required to track the following four.						
Contaminant	Violation (Y/N)	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
PFHxS – Perfluorohexane Sulfonic Acid	N	ND	ppt	-	18	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil-resistant coatings on
PFNA – Perfluorononanoic Acid	N	ND	ppt	-	11	

PFOS – Perfluorooctane Sulfonic Acid	N	5.29	ppt	-	15	fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams. corrosion of household plumbing systems.
PFOA – Perfluorooctanoic Acid	N	3.94	ppt	-	12	
Health Effects for PFAS: 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.						

Lead & Copper 2024						
Contaminant	Violation (Y/N)	Level Detected	Unit Measurement	MCLG	AL	Likely Source of Contamination
Lead – 90 <sup>th</sup> Percentile	N	2	ppb	0	15	Corrosion of household plumbing systems.
Copper – 90 <sup>th</sup> Percentile	N	0.082	mg/L	1.3	1.3	Corrosion of household plumbing systems.
Range of <b>lead</b> samples collected: ND-9 Number of sites exceeding <b>lead</b> action level: 0 Range of <b>copper</b> samples collected: 0.017-0.159 Number of sites exceeding <b>copper</b> action level: 0						

*\*Note: the state allows us to monitor for some contaminants less than once a year because the concentrations of these contaminants do not change frequently. Not all contaminants are tested for every year due to monitoring waivers and therefore we use the most recent round of sampling. Some of the data presented is more than one year old, however, is limited to no older than five years.*

**Units of Measurement:**

<b>Parts per million (ppm) or Milligrams per liter (mg/L)</b>	A measurement that corresponds to one minute in two years, or a single penny in \$10,000.
<b>Parts per billion (ppb) or Micrograms per liter (µg/L)</b>	A measurement that corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
<b>Picocuries per liter (pCi/L) or Micrograms per liter (µg/L)</b>	Measurements of radioactivity in water.
<b>Millirems per year (mrem/year)</b>	A measurement of radiation absorbed by the water.
<b>Nephelometric Turbidity Unit (NTU)</b>	A measurement of the clarity of water; turbidity more than 5 NTU is just noticeable to the average person.
<b>Million fibers per liter (MFL)</b>	A measurement of the presence of asbestos fibers that are longer than 10 micrometers.

**Definitions:**

<b>Action Level (AL)</b>	the concentration of contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
<b>Treatment Technique (TT)</b>	a required process intended to reduce the level of a contaminant in drinking water.
<b>Maximum Contaminant Level (MCL)</b>	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.
<b>Maximum Contaminant Level Goal (MCLG)</b>	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.
<b>Drinking Water Equivalent Level (DWEL)</b>	a lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all the exposure to a contaminant is from a drinking water source.
<b>Maximum Residual Disinfectant Level (MRDL)</b>	the highest level of a disinfectant allowed in drinking water; there is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.
<b>Maximum Residual Disinfectant Level Goal (MRDLG)</b>	the level of 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.
<b>Running Annual Average (RAA)</b>	the average of all monthly or quarterly samples for the last year at all sample locations.
<b>Non-Detect (ND)</b>	the specified contaminant was not detected.
<b>Level 1 Assessment</b>	a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria has been found in the water system.
<b>Level 2 Assessment</b>	a very detailed study of the water system to identify potential problems and determine (if possible) why an E. Coli MCL violation has occurred and/or why total coliform bacteria has been found in the water system on multiple occasions.

### **IMPORTANT INFORMATION**

**Lead & Copper:** Samples are generally collected, and action levels measured at the consumer's tap. 90% of the tests for a given system must be equal to or below the action level; therefore, a section of the results above has been calculated and are listed as the 90<sup>th</sup> percentile.

**Lead:** **Major sources in drinking water:** corrosion of household plumbing systems; erosion of natural deposits.

**Health effects statement:** Infants and children who drink water containing lead more than the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink water containing lead more than the action level over many years could develop kidney problems or high blood pressure.

**Copper:** **Major sources in drinking water:** corrosion of household plumbing systems; erosion of natural deposits.

**Health effects statement:** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short

amount of time could experience gastrointestinal distress. Some people who drink water containing copper more than the action level over many years could, suffer liver or kidney damage. People with Wilson's Disease should consult their doctor.

<b>Arsenic:</b>	The United States Environmental Protection Agency (US EPA) adopted the new MCL standard of 10ppb in October 2001. Water systems were required to meet this new standard by January 1 2006.
<b>Total Coliform:</b>	Reported as the highest monthly number of positive samples for water systems that take less than 40 samples per month. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria, may be present.
<b>Turbidity:</b>	Turbidity has no health effects, however, can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms, that can include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

As you can see by the table, our system had no violations. We are proud that your drinking water meets all Federal and State requirements. The EPA has determined that your water IS SAFE at these levels.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1 (800) 426-4791.

For most people, the health benefits of drinking plenty of water outweigh any possible health risk from these contaminants. However, 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/Center of Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 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 Bow 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 WhiteWater at 888-377-7678. 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>.



**LEAD SERVICE LINE INVENTORY (SLI)**

In 2024 a Lead Service Line Inventory of your system was created. The purpose is to identify any remaining service lines which include material that is Lead, Galvanized Requiring Replacement (GRR), or unknown materials which may increase your risk of exposure to lead in drinking water. All service lines identified as lead or galvanized requiring replacement are required to be replaced on a schedule approved by NHDES. For more information on all service lines in our water system, contact WhiteWater at 888-377-7678.

We, at Bow Municipal Water System work hard to provide top quality water to every tap. Water is a limited resource, so it is vital that we all work together to maintain it and use it wisely. We ask that all our customers help us protect and preserve our drinking water resources, which are the heart of our community, our way of life, and our children's future. Please contact us with any questions. Thank you for working together for safe drinking water.