



Town of Bennington, Vermont Water Quality Report 2025

Our goal is to provide you with a safe, dependable supply of drinking water. This report is a snapshot of the quality of water we provided to you from January 1 through December 31, 2024. Included are the details of where your water comes from, what it contains, and how it compares to the Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It also includes the date and results of any regulated contaminants that have been detected within the past five years tested less than once a year. Any contaminants detected within the past five years are listed along with the date of detection and concentration as it compares with the current Environmental Protection Agency (EPA) and State of Vermont Standards. This report is designed to inform you about the quality of water and services we deliver to you every day.

Public Water System Name: Bennington Water Department

WSID #: 5016

Town: Bennington

Water Source Information

Vermont Source Type: **Stream**

EPA Source Type: **Surface, non-purchased**

Source Name: **BOLLES BROOK**

Location: **Woodford, Vermont**

The Bennington Water Systems relies on two sources of water to supply its customers. The first source is referred to as the Bolles Brook Source. This source consists of an intake in Bolles Brook (located in the Town of Woodford). Water is fed by gravity from the Bolles Brook intake to a 3.0 million gallon per day water filtration plant located approximately 1 mile southwest of the Bolles Brook intake. The water is treated (filtered and chlorinated) at the filtration plant and then supplied to the users by gravity flow into the distribution system.

Vermont Source Type: **Spring**

EPA Source Type: **Groundwater, non-purchased**

Source Name: **MORGAN SPRING**

Location: **Bennington, Vermont**

The Second water source used by the Bennington Water System is referred to as the Morgan Spring Source. This source is located in downtown Bennington. It consists of a spring box which serves to collect the naturally occurring flow from the spring, and a “constant pressure” water booster station which pumps the water from the spring into the Bennington distribution system at differing flow rates in order to maintain constant pressure in the system. The Morgan Spring is estimated to have a reliable yield of about 1500 gpm.

The State of Vermont Water Supply rule requires Public Community Water Systems to develop a Source Protection Plan. This plan delineates a source protection area for our system and identifies potential and actual sources of contamination. Bennington's latest source protection plan was submitted to the Vermont Agency of Natural Resources/Water Supply Division in **November 2021** for approval. A copy of this plan is available for public review at the Bennington Town Offices located at 205 South Street, Bennington, Vermont. Please contact us if you are interested in reviewing it.

As stated in the plan, the most probable source of contamination to the Bolles Brook Water Supply is natural, human and animal waste. This is because a majority of the Bolles Brook water sources come from non-developed National Forest Lands. This supply receives full treatment and disinfection at our Filtration Plant on Route 9 in the Town of Woodford.

The Morgan Spring Water Supply being in a Downtown area, faces more potential hazards from existing or pre-existing chemical waste sites and underground fuel storage facilities. However, previous studies indicate that this type of groundwater source may be unusual for Vermont. A report entitled "Bennington Water Study, Morgan Spring 1986 Long-Term Test" prepared by Wagner, Heindel, and Noyes, concludes that the Morgan Spring Source is likely to be of "karst" or cavernous limestone origin and may have a lateral extent of 3 to 5 square miles. It is also concluded in this report that the actual time of travel within the recharge area may be as much as 33 years and that the spring is hydro-geographically isolated from nearby surface waters and sources of contamination within the shallow sand and gravel underlying the Morgan Springs area.

Owner/Operator and Public Participation Opportunities

If you have any questions about this report or concerning your water quality utility, please contact the person(s) listed below. We want our customers to be informed about their water quality. The Bennington Select Board acts as the governing body for our water system. If you want to learn more, please feel free to attend any of the regularly scheduled meetings or view the meetings on Channel 17 of the local cable access.

Town of Bennington
205 South Street
Bennington, VT 05201
Phone Number (802) 442-1037
info@benningtonvt.org

Town Manager
Director Public Works
Asst. Director Public Works
Working Foreman
Operator
Operator
Operator

Stuart A. Hurd
RJ Joly
Larry Gates, Jr.
Jason Metcalfe
Barry Brogue
Dan Stall
Ethan Myers

To learn more, please attend any of our regularly scheduled meetings, which are held on:

Date: Second and Fourth Monday of each Month

Time: 6:00 p.m.

Location: Bennington: Village Fire House, River Street

If you are unable to attend these meetings you may contact Larry Gates, Jr., Assistant DPW Director at (802) 442-1037 or via-email at lgates@benningtonvt.org with any questions you may have.

Sources of Drinking Water and Contaminants

The general sources of drinking water (both tap water and bottled water) include surface water (streams, lakes) and ground water (springs and wells). As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals. It also picks up substances resulting from human activity and from animals. Some “contaminants” may be harmful. Others, such as iron and sulfur, are not harmful. **Public water systems treat water to remove contaminants, if any are present.**

In order to ensure that tap water is safe to drink, we **test it regularly** according to regulations established by the U.S. Environmental Protection Agency and the State of Vermont. These regulations limit the amount of various contaminants:

1 Microbial contaminants (such as viruses and bacteria) that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife

1 Inorganic contaminants (salts and metals), which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

1 Pesticides and herbicides may come from a variety of sources such as storm water runoff, agriculture, and residential uses as well as careless disposal of household chemicals.

1 Radioactive contaminants, which can be naturally occurring or the result of mining activity.

1 Organic 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 stormwater runoff, septic systems, as well as careless disposal of household chemicals.

WATER QUALITY DATA

The table below lists all the drinking water contaminants that we detected during the last calendar year. It also includes the date and results of any contaminants that we detected within the past five years for those required to be tested less than once a year. The presence of these contaminants in the water does not necessarily show that the water poses a health risk.

Terms and abbreviations - In this table you may find terms you might not be familiar with. To help you better understand these terms we have provided the following definitions.

- **Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.
- **Contaminant:** Any physical, chemical, biological, or radiological substance or matter in water.
- **Corrosion Control Efforts:** Treatment (including pH adjustments, alkalinity adjustment, or corrosion inhibitor addition) or other efforts contributing to the control of the corrosivity of water, i.e. monitoring to assess the corrosivity of water.
- **Herbicide:** Any chemical(s) used to control undesirable vegetation.
- **Level 1 Assessment:** A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment:** A Level 2 Assessment is 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 have been found in our water system on multiple occasions.
- **Locational Running Annual Average (LRAA):** The average sample analytical results for samples taken at a particular monitoring location during four consecutive calendar quarters.
- **Maximum Contamination Level (MCL):** The “Maximum Allowed” MCL is the highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum Contamination Level Goal (MCLG):** The “Goal” is the level of contamination in drinking water below, which there is no known or expected risk to human health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. Addition of a disinfectant may help control microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below, which there is no known or expected risk to health. MRDLG’s do not reflect the benefits of disinfectants in controlling microbial contaminants.
- **Method Reporting Limit:** The lowest concentration of a chemical in a sample that a laboratory can reliably detect.
- **Nephelometric Turbidity Unit (NTU):** NTU is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Parts per million (ppm) or Milligrams per liter (mg/l):** (one penny in ten thousand dollars)
- **Parts per billion (ppb) or Micrograms per liter (ug/l):** (one penny in ten million dollars)
- **Parts per trillion (ppt) or Nanograms per liter (ng/l):** (one penny in ten billion dollars)
- **Pesticide:** Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.
- **Picocuries per liter (pCi/L):** a measure of radioactivity in water
- **Running Annual Average (RAA):** The average of (4) consecutive quarters (when on quarterly monitoring); values in table represent the highest RAA for the year.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

- **90th Percentile:** Ninety percent of the samples are below the action level. (Nine of ten sites sampled were at or below this level).
- **N/A:** Not applicable
- **Per- and Polyfluoroalkyl Substances (PFAS):** a group of over 4,000 human-made chemicals (they do not occur naturally) that have been used in industry and consumer products worldwide and includes:
 - (PFNA): Perfluorononanoic Acid
 - (PFOA): Perfluorooctanoic Acid
 - (PFOS): Perfluorooctane Sulfonic Acid
 - (PFHpA): Perfluoroheptanoic Acid
 - (PFHxS): Perfluorohexane Sulfonic Acid
 - (11Cl-PF3OUdS): 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid
 - (9Cl-PF3ONS): 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic Acid
 - (DONA): 4,8-Dioxa-3H-perfluorononanoic Acid
 - (HFPO-DA): Hexafluoropropylene Oxide Dimer Acid
 - (NEtFOSAA): N-ethyl perfluorooctanesulfonamidoacetic Acid
 - (NMeFOSAA): N-methyl perfluorooctanesulfonamidoacetic Acid
 - (PFBS): Perfluorobutane Sulfonic Acid
 - (PFDA): Perfluorodecanoic Acid
 - (PFDoA): Perfluorododecanoic Acid
 - (PFHxA): Perfluorohexanoic Acid
 - (PFTA): Perfluorotetradecanoic Acid
 - (PFTrDA): Perfluorotridecanoic Acid
 - (PFUnA): Perfluoroundecanoic Acid

Disinfection Residual

| <i>Disinfection Residual</i> | <i>RAA</i> | <i>Range</i> | <i>MRDL</i> | <i>MRDLG</i> | <i>Typical Source</i> |
|------------------------------|------------|-----------------------|-------------|--------------|------------------------------------|
| <i>Chlorine</i> | 0.664 | 0.260 - 1.590 mg/l | 4.0 mg/l | 4.0 mg/l | Water additive to control microbes |
| | | | | | |

Level of Detected Contaminants - **Testing required only every (3) Years OR MORE

| Contaminant Detected | Highest Level Detected | MCL | MCLG | Range of Detection | Collection Date | Violation | Typical Source of Contaminant |
|-----------------------------|-------------------------------|------------|-------------|---------------------------|------------------------|------------------|---|
| Barium | < 0.024 ppm | 2.0 | 2.0 | 0.000 – 0.024 | 05/08/23 | No | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Fluoride | < 0.10 ppm | 4.0 | 4.0 | 0.10 – 0.10 ppm | 05/06/24 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Iron | 0.026 ppm | NA | NA | 0.000 – 0.026 | 05/08/23 | No | Erosion of natural deposits |
| Total Nitrate | 0.27 ppm | 10.0 ppm | 10.0 ppm | 0.12 – 0.27 ppm | 02/05/24 | No | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

Radionuclides

| Contaminant Detected | Highest Level Detected | MCL | MCLG | Range of Detection | Collection Date | Violation | Typical Source of Contaminant |
|--------------------------------|------------------------|-----|------|--------------------|-----------------|-----------|-------------------------------|
| Combined Radium (-226 & -228) | 0.6 pCi/L | 5.0 | 0.0 | 0.6 – 0.6 | 05/08/23 | No | Erosion of natural deposits |
| Gross Alpha Particle Activity* | 4.2 pCi/L | N/A | 0.0 | 4.2 – 4.2 | 05/08/23 | No | Erosion of natural deposits |
| Radium-226 | 0.6 pCi/L | 5.0 | 0.0 | 0.6 – 0.6 | 05/08/23 | No | Erosion of natural deposits |

*Gross Alpha Particle Activity results are unadjusted for other radionuclide contribution, in particular Uranium. The Adjusted Gross Alpha (AGA) result is then compared to the MCL of 15 pCi/L.

| Disinfection By-Products | Monitoring Period | Sample Location | LRAA | Range | Unit | MCL | MCLG | Typical Source of Contaminant |
|------------------------------|-------------------|------------------------------------|------|-------------|------|-----|------|--|
| Total Trihalomethanes (TTHM) | 2024 | SM6 - 100 Veteran's Memorial Drive | 54.0 | 38.0 – 78.0 | ppb | 80 | 0 | By-product of drinking water chlorination |
| Total Haloacetic Acid (HAA5) | 2024 | SM8 - 581 Burgess Road | 62.0 | 35.0 – 77.0 | ppb | 80 | 0 | By-product of drinking water disinfection. |
| Total Haloacetic Acid (HAA5) | 2024 | SM4 – 1399 Gore Road | 56.0 | 39.0 – 78.0 | ppb | 80 | 0 | By-product of drinking water disinfection. |
| Total Haloacetic Acid (HAA5) | 2024 | ST2 – 1707 West Road | 51.0 | 38.0 – 48.0 | ppb | 80 | 0 | By-product of drinking water disinfection. |
| Total Haloacetic Acid (HAA5) | 2024 | SM6 – 100 Veteran's Memorial Drive | 41.0 | 16.0 – 60.0 | ppb | 60 | 0 | By-product of drinking water disinfection. |
| Total Haloacetic Acid (HAA5) | 2024 | SM8 – 581 Burgess Road | 48.0 | 22.0 – 53.0 | ppb | 60 | 0 | By-product of drinking water disinfection. |
| Total Haloacetic Acid (HAA5) | 2024 | SM4 – 1399 Gore Road | 57.0 | 54.0 – 57.0 | ppb | 60 | 0 | By-product of drinking water disinfection. |
| Total Haloacetic Acid (HAA5) | 2024 | ST2 – 1707 West Road | 52.0 | 27.0 – 45.0 | ppb | 60 | 0 | By-product of drinking water disinfection. |

Lead and Copper Action Levels – Next Required Sampling Scheduled June 2026

| Lead & Copper | Date | 90 th Percentile | Range | Unit | AL | Sites Over AL | Typical Source |
|---------------|---------------------|-----------------------------|------------|------|-----|---------------|--|
| Copper | 07/07/23 – 08/07/23 | 0.037 | 0.00 – 0.1 | ppm | 1.3 | 0 | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| Lead | 07/07/23 – 08/07/23 | 13.2 | 0.0 – 41.4 | ppb | 15 | 2 | Corrosion of household plumbing systems; Erosion of natural deposits |

** The Lead & Copper AL (Action Level) exceedance is based on the 90th Percentile concentration, not the highest detected result.

**Complete lead tap sampling data (i.e. each individual sample result) are available for review. Please contact us if you would like to receive this data.

As required by the Lead and Copper Rule Revision, we have prepared a service line inventory. The purpose of the inventory was to determine if any of the service lines in Bennington contain lead, galvanized pipe requiring removal, or unknown materials. Please contact us if you would like access to this inventory.

Level 1 Assessment(s)

During the past year we were required to conduct one “Level 1 Assessment(s)”. One Level 1 Assessment was completed. In addition, were required to take **(1)** corrective action and we completed **(1)** of these actions.

Lead in Drinking Water Information

If present, elevated levels of lead can cause serious health problems, especially for pregnant woman and young children. **Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.** The Bennington Water System is responsible for providing high quality drinking water and removing lead SERVICE LINES but **cannot control the variety of materials used in plumbing components.** **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. **When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.** If you are concerned about lead in your drinking 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>.

PFOA Testing & Results

During our *2016 Unregulated Contaminant Monitoring* the Town of Bennington tested for a number of potential contaminants. Included was a scan for PFOA’s (perfluorooctanoic acid) in Bennington’s drinking water supplies (Bolles Brook and Morgan Spring) as well as the distribution system. **The results showed no detectable levels of the PFOA Contaminant.**

Our last PFOA test results taken in October 2023 and continues to show **No PFOA Contamination** in either of municipal water sources. Because of several years of consistent consecutive negative results, we are no longer required to test every year. However, Bennington, along with other larger water systems throughout New England will continue to test for these and other Unregulated Contaminants as required by the Federal EPA Region 1. We will continue to be diligent with our testing as new contaminants (regulated or non-regulated) are identified as potential hazards to our water supply.

PFAS Contaminants

| <i>Collection Date</i> | <i>PFHpA</i> | <i>PFNA</i> | <i>PFHxS</i> | <i>PFOA</i> | <i>PFOS</i> | <i>Sum of 5 Regulated PFAS compounds</i> |
|-------------------------------|---------------------|--------------------|---------------------|--------------------|--------------------|---|
| 10/16/2023 | ND | ND | ND | ND | ND | ND |
| 10/08/2020 | ND | ND | ND | ND | ND | ND |
| 10/16/2019 | ND | ND | ND | ND | ND | ND |

**** Additional PFAS, not regulated by the Vermont Water Supply Rule, may also have been detected in the past five years. Please contact us if you would like more information on other unregulated PFAS that may be in your drinking water**

| PFAS Contaminants | |
|-------------------|--|
| Typical Source | A large group of human-made chemicals used widely in manufacturing and consumer products |
| MCL | 20 (individual or the sum of the 5 regulated PFAS compounds) |
| Units | All units in Parts Per Trillion (ppt) |
| ND | This means the contaminant was not detected at the laboratory Method Reporting Limit |

What are PFAS (including PFOA)?

PFAS are a group of over 4,000 human-made chemicals (they do not occur naturally) that have been used in industry and consumer products worldwide since at least the 1950s. These chemicals are used to make household and commercial products that resist heat and chemical reactions and repel oil, stains, grease, and water. Some common products that may contain PFAS include non-stick cookware, water-resistant clothing and materials, cleaning products, cosmetics, food packaging materials, and some personal care products. Due to their resilient chemical nature, they don't readily degrade once they are released into the environment. In addition, the common use of these chemicals in industry and consumer products has led to their widespread impact on the environment. The impact of these chemicals on your drinking water continues to be studied.

Where can I learn more about PFAS in drinking water?

For information about the health effects of PFAS, please visit www.healthvermont.gov/water/pfas or call the Vermont Department of Health at 1-800-439-8550. If you have specific health concerns, contact your health care provider.

Health Information Regarding Drinking Water

Some people *may* be more vulnerable to contaminants in drinking water than the general population.

Immune-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 microbiological contaminants are available from the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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 Safe Drinking Water Hotline (listed above) or visiting the website at <https://www.epa.gov/safewater/lead>.

Possible Health Effects for High TTHM and HAA5's:

Some people who drink water-containing trihalomethanes (TTHM) in excess of the MCL over many years *may* experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. In animal studies, **some** total trihalomethanes have been associated with reproductive or developmental effects.

Some people who drink water containing haloacetic acids (HAA5) in excess of the MCL over many years *may* have an increased risk of getting cancer.

Public Notice – Operating Permit Issued

The Water System is required to notify all users of the following compliance schedule contained in the Permit to Operate issued by the State of Vermont Agency of Natural Resources:

1. **On or before September 01, 2022:** the Permittee (Town of Bennington Water System) shall submit a detailed plan and schedule for the completion of the remaining upgrades required to provide adequate pressure to all pints in the distribution system under all conditions of flow, which is to be completed no later than September 01, 2025. Additionally, on or before September 01, 2023, and no later than September 01 of each subsequent year, the Permittee shall submit to the Division, an Annual Report detailing the progress towards completion of the work described in the plan and schedule.

Interim measures completed or progress to date for the compliance schedule listed above:

**** Next phase is being designed – construction is expected to begin in 2025.**

Public Notice - Uncorrected Significant Deficiencies: The system is required to inform the public of any significant deficiencies identified during a sanitary survey conducted by the Drinking Water and Groundwater Protection Division that have not yet been corrected. For more information, please refer to the schedule for compliance in the system’s Operating Permit.

| <i>Date Identified</i> | <i>Significant Deficiencies</i> | <i>Facility</i> |
|------------------------|--|---------------------------------|
| 09/24/2020 | Inadequate Water Pressure – South End (Under Normal, Peak, or Maximum Flow Conditions) | DISTRIBUTION SYSTEM (South End) |

**** This deficiency will be corrected under a multi-phased project known as the South End Upgrade Project: Phase V – Dewey Street was completed in August 2021; Phase VI is now developed after additional changes to the scope were required by the State of Vermont. This will be released for Construction Bids later this year.**

PUBLIC NOTICE IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Availability of Monitoring Data for samples collected under the fifth Unregulated Contaminants Monitoring Rule (UCMR 5) for the Bennington Water Department

Our Water System has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don’t yet have a drinking water standard set by the E.P.A. There may be Vermont - specific standards for some of these contaminants. The purpose of monitoring these contaminants is to help the E.P.A. decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available. We had no reported detections for samples collected under UCMR 5. If you are interested in examining the results, please contact Linda Bermudez at (802) 442-1037 or lbermudez@benningtonvt.org

This notice is being sent to you by the Bennington Water Department
State Water System ID#: VT0005016

Distribution Information:

Please share this information with all 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). The Town of Bennington now distributes a postcard notification to alert all property owners serviced by the Bennington Water System the availability of this report. These **property owners are responsible for providing this information to their tenants**. If a tenant has not received this information from their landlord, they may request to pick up a copy from the Town Offices in Bennington Monday through Friday between 8:00am and 5:00pm. The report may also be viewed at one of the following publicly posted locations: Bennington Free Library, Town Office, and the Bennington Website (Benningtonvt.org).