

Village of North Bennington 2023 Water Quality Report



(802) 442-3883

WSID #5017

The North Bennington Water Department is committed to providing a safe and reliable supply of high quality drinking water to its customers.

Our Goal

Our goal is to provide you with a safe and dependable supply of drinking water. This report is a snapshot of the quality of the water that we provided in 2023. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. This report is designed to inform you about the quality water and services we deliver to you every day.

If you have any questions about this report or concerning your water quality, please contact the person(s) listed below. We want our customers to be informed about their water quality. If you want to learn more, please attend any of our regularly scheduled meetings. Regular meetings are held monthly, on the first Wednesday at 7 pm. Meetings are held at the Railroad Station.

Board of Water Commissioners		Operators
Steven Goodrich- Chairman	Arla Sampsell	Theodore Fela
Edward Myers Jr.	Joseph Herrmann	Zachary Bull
P.O. Box 343 North Bennington, Vermont 05257		James Ostrander
		802-442-3883

Water Source Information

Your Water Comes From

Source Name	Source Water Type	Source Name	Source Water Type
WELL #1	Ground Water under the Influence of Surface Water	WELL #4	Ground Water under the Influence of Surface Water
WELL #2	Ground Water under the Influence of Surface Water	WELL #5	Ground Water under the Influence of Surface Water
WELL # 3	Ground Water under the Influence of Surface Water	Basin Brook	Surface Water

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. Please contact us if you are interested in reviewing the plan. Our Source Protection Plan was approved on 4/12/95 (Updated March 2022).

The Water Department does have emergency plans included in our O & M manual. In planning for any emergency situation, it is recommended that each customer have a 2 - 3 day supply of bottled water for drinking on hand in their home.

Health information regarding drinking water

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 microbiological contaminants are available from EPA's Safe Drinking Water Hotline (1-800-426-4791). or at <http://www.epa.gov/safewater/lead>

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 Safe Drinking Water Hotline.

Security

Many additional security checks of areas related to the water supply are made daily and have been since 9/11/01. Please report any suspicious activities related to the water system to water department personnel at (802)442-3883.

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). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Water Efficiency

Currently a new EPA Program to encourage water efficiency use has been started. Information on this can be referenced at www.epa.gov/watersense/

No. Bennington, VT 05257
PO Box 343



Sources of Drinking Water and Contaminants

The sources of drinking water (both tap water and bottled water) include surface water (streams, lakes) and ground water (wells, springs). 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 your 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:

- **Microbial organisms** (viruses and bacteria) may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic chemicals** (salts and metals) can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, or farming.
- **Pesticides and herbicides**, may come from a variety of sources such as storm water run-off, agriculture, and residential users.
- **Radioactive contaminants** which can be naturally occurring or the result of mining activity.
- **Organic contaminants**, including synthetic and volatile organic chemicals, which are by products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off and septic systems.

Terms and Abbreviations

In the table on the facing page, you may find terms you might not be familiar with. To help you better understand these terms we have provided the following definitions:

- **Maximum Contamination Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.
- **Maximum Contamination Level (MCL):**The high-est level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG’s as feasible using the best available treatment.
- **Corrosion Control Efforts:** Treatment (including pH adjustment, alkalinity adjustment, or corrosion inhibitor addition) or other efforts contributing to the control of the corrosivity of water, e.g, monitoring to assess the corrosivity of the water.

- **Action Level: (AL)** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

- **Level 1 Assessment:** The level 1 Assessment is a very detailed 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:** The 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.

- **90th Percentile:** Ninety percent of the samples are below the action level. (Nine of ten sites sampled were at or below this level).

- **Treatment Technique (TT):** A process aimed to reduce the level of a contaminate in drinking water.

- **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)

- **Picocuries per liter (pCi/L):** a measure of radioactivity in water.

- **Maximum Residual Disinfectant Level Goal (MRDLG):** 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 disinfectants in controlling microbial contaminants.

- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. Addition of a disinfectant may help control microbial contaminants.

- **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.

- **Locational Running Annual Average (LRAA):** The average of sample analytical results for samples taken at a particular monitoring location during four consecutive calendar quarters.

- **Running Annual Average (RAA):** The average of 4 consecutive quarters (when on quarterly monitoring); values in table represent the highest RAA for the year.

By conducting all testing for contaminants in both source water and finished water and operating our filtration plant in accordance with state regulations, the North Bennington Water Dept. has not detected anything that poses a health risk to our customers. **We had no violations during the year.**

Interesting Facts

- The average water use per adult is 10,000 gals. every 6 months.
- Your water meter is in your cellar and has a leak detector on the top. If all faucets in your house are closed and the short red dial is turning you have a leak in your house.
- Toilets are usually the source of most leaks and can be repaired easily.
- Even small leaks add up. There are 1440 minutes in a day. A leak of 1/10 of a gallon per minute for 6 months will be 25,920 gals.

Detected Contaminants NORTH BENNINGTON WATER DEPARTMENT

Disinfection Residual	RAA	Range	Unit	MRDL	MRDLG	Typical Source	
Chlorine	0.724	0.260 - 1.210	mg/l	4.0	4.0	Water additive to control microbes	

Chemical Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
NITRATE (AS N)	4/3/2023	0.22	0.22 - 0.22	PPM	10	10	Runoff from fertilizer use; Leaching from Septic Tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Collection Year	Highest LRAA	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2023	40	21-50	ppb	60	0	By-product of drinking water disinfection
TOTAL TRIHALOMETHANES (TTHM)	2023	49	33-65	ppb	80	0	By-product of drinking water disinfection

Lead and Copper	Collection Date	90th Percentile	Range	Unit	AL*	Sites Over AL	Typical Source
COPPER	8/29/2021-9/20/21	0.15	0-0.17	PPM	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	8/29/2021-9/20/21	1.3	0-1.4	PPB	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

* The lead and copper AL (Action Level) exceedance is based on the 90th percentile concentration, not the highest detected result.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. NORTH BENNINGTON WATER DEPT. is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 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>.

Violation(s) that occurred during the year

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. The below table lists any drinking water violations we incurred during 2023. A failure to perform required monitoring means we cannot be sure of the quality of our water during that time.

PFAS Contaminants	
Typical Source	A large group of human-made chemicals used widely in manufacturing and consumer products
MCL	20 (Individual or sum of the 5 regulated PFAS compounds)
Units	All units in parts per trillion (ppt)

PFAS Contaminants	PFHpA	PFHNA	PFHxS	PFOA	PFOS	Sum of 5 Regulated PFAS compounds
10/11/2023	-	-	-	-	-	-
10/08/2020	-	-	-	-	-	-
10/16/2019	-	-	-	-	-	-

*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.

Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2023			

Level 1 Assessment(s) No Level 1 Assessment was required.

Level 2 Assessment(s) No Level 2 Assessment was required.

Additional Information

Ground water sources under the direct influence of surface water may contain disease causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. All ground water sources for North Bennington are treated at our filtration plant the same as surface water.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have increased risk of getting cancer.

Per- and Polyfluoroalkyl Substances (PFAS) are contaminants you may see reported in your Consumer Confidence Report (CCR) for the first time.

What are PFAS?

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 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.

Why are PFAS being tested in my drinking water?

In May 2019, Act 21 (S.49), an act relating to the regulation of per- and polyfluoroalkyl substances (PFAS) in drinking and surface waters, was signed by Governor Scott. This Act provides a comprehensive framework to identify PFAS contamination and to issue new rules to regulate PFAS levels in drinking water.

What if PFAS have been detected in my drinking water?

Act 21 set an interim standard for the detected concentration of five PFAS in drinking water, or the combined concentration of any of the 5 PFAS, which should not exceed 20 parts per trillion (ppt). The interim standard is based on the Health Advisory established by the Vermont Department of Health. The five PFAS are:

- (PFNA):** Perfluorononanoic Acid
- (PFOA):** Perfluorooctanoic Acid
- (PFOS):** Perfluorooctane Sulfonic Acid
- (PFHpA):** Perfluoroheptanoic Acid
- (PFHxS):** Perfluorohexane Sulfonic Acid

If your water has been tested and the **sum any of the five PFAS listed above is confirmed to exceed 20 ppt**, a Do Not Drink notice will be issued informing you not to use your water for drinking or cooking, brushing teeth, making ice cubes, making baby formula, washing fruits and vegetables or any other consumptive use. You will be advised to use another source of water for consumption which may include bottled water.

An additional 13 PFAS were required to be tested for, per Act 21. These additional 13 PFAS, listed below, currently do not have an established health-based standard and are not counted toward the combined standard of 20 ppt:

- (ICI-PF3OUdS):** 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid
- (9CI-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

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.

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