

A WATER QUALITY REPORT – 2020

Issued By: Bennington College
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For Calendar Year 2019

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The U.S. Environmental Protection Agency has directed that beginning in October 1999, every public water system in the nation must present to each of its water customers a report on water quality. This report includes some mandated language and information as dictated by EPA, which may not be totally applicable to our system. Included, however, are details about where your water comes from, what it contains, and how it compares to Federal and State standards.

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).

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.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animal or human activity. Some contaminants can be harmful, like bacteria. Other contaminants are not, for example, calcium and iron.

Water Source Information:

Vermont Source Type:	Purchased
EPA Source Type:	Surface, purchased
Source Name:	North Bennington Water Department
Location:	Basin Brook, Our Water Source, is a 1.2 Square Mile Watershed

There are five gravel screen wells. Basin Brook is a surface stream. The five wells are under the influence of surface water from Basin Brook water shed. All source water is stored in two reservoirs (6.5 million gallon capacity). All water is filtered by the North Bennington filtration plant prior to distribution. All necessary treatment is provided after filtration. Treatment includes chlorination, PH adjustment and corrosion control. **NO** fluoride is added to the water. The water is then fed by pressure to a storage tank/pump station, providing the Bennington College community with safe drinking water and adequate fire protection.

In order to ensure that tap water is safe to drink, EPA and the State of Vermont prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

Contaminants that may be present in source water before it's treated:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock, and wildlife.

Inorganic contaminants, such as salts and metals, which 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, which may come from a variety of sources, such as agriculture, urban storm-water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff, septic systems, and careless disposal of household chemicals.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

The North Bennington Water Department has had a source protection plan in place since April 12, 1995, which better describes potential sources of contamination, and measures taken to avoid contaminations.

Water Quality Data Terms and abbreviations: The definitions below are provided to help you better understand the tables that follow.

- o **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.
- o **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.
- o **Maximum Contamination Level Goal (MCLG):** This 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.
- o **Maximum Contamination Level (MCL):** 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.
- o **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.
- o **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. Addition a disinfectant may help control microbial contaminants.
- o **Action Level:** The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements that a water system must follow.
- o **Treatment Technique (TT):** A required process intended to reduce to level of a contaminant in drinking water.
- o **90th Percentile:** When all test results are listed numerically from high to low, the top 9% are discounted. The next number (90th percentile) is used as the triggering number to determine if an MCL has been exceeded.
- o **Picocuries per liter (Pci/L):** a measure of radioactivity in water
- o **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.

- o **Locational Running Annual Average: (LRAA):** The average of sample analytical results for samples Taken at a particular monitoring location during four consecutive calendar quarters.
- o **Running Annual Average (RAA):** The average of 4 consecutive quarters (when on quarterly monitoring); values in table represent the highest RAA for the year.
- o **N/A:** Not Applicable
- o **Parts per million (ppm) or milligrams per liter (mg/L):** (one penny in ten thousand dollars).
- o **Parts per billion (ppb) or Micrograms per liter (ug/L):** (one penny in ten million dollars).
- o **Total Coliform:** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

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-PF3OOuS):	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid
(9Cl-PF3ONS):	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic Acid
(DONA):	4,8 - Dioxo-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
(PFTTrDA):	Perfluorotridecanoic Acid
(PFUnA):	Perfluoroundecanoic Acid

LEVEL OF DETECTED CONTAMINANTS

The tables below list all the drinking water contaminants that we detected during the 2019 calendar year or before. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

Detected Contaminants: BENNINGTON COLLEGE

Microbiological	Result	MCL*	MCLG	Typical Source
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No detected Results were found in the Calendar Year of 2019. *As of April 1, 2016, there is no MCL for total coliform. Instead more than 1 positive monthly sample requires a treatment technique.

Disinfection Residual	RRA	Range	Unit	MRDL	MRDLG	Typical Source
Chlorine	0.133	0.100-0.400	mg/l	4.0	4.0	Water additive to control microbes

Disinfection By Products	Monitoring Period	LRAA	Range	Unit	MCL	MCLG	Typical Source
Total Haloacetic Acids (HAA5)	2019	44	9 - 74	ppb	60	0	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2019	44	24 - 57	ppb	80	0	By-product of drinking water disinfection

LEAD & COPPER ACTION LEVELS

Lead & Copper	Date	90 th Percentile	Range	Unit	AL*	Sites Over AL	Typical Source
Copper,	2019	0.23	0.022-0.37	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2019	5.7	0 - 11.3	ppb	15.0	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. BENNINGTON COLLEGE 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 2019. A failure to perform required monitoring means we cannot be sure of the quality of our water during that time.

Type	Category	Analyte	Compliance Period

No violations occurred in the calendar year 2019

Revised Total Coliform Rule (RTCR) TT Violation(s)

No RTCR TT Violations

Level 1 Assessment(s)

No Level 1 Assessment was required.

Level 2 Assessment(s)

No Level 2 Assessment was required.

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.

Date Identified	Deficiency	Facility
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No Significant Deficiencies

Additional Information:

These reports, now a national requirement, will come to you annually. We hope you find them informative. If you wish to learn more about your drinking water or review a source protection plan, regular meetings are held monthly on the second Tuesday after the first Wednesday at 7:00pm. Meetings are at the Railroad Station in North Bennington, VT.

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 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 on your drinking water continues to be studied.

Why are PFAS being tested in my drinking water?

In May 2019, Act 2 (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:

(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

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.