

Town of Brighton Water System

PO Box 377
Island Pond VT 05846
Phone Number: (802)-723-4405

Water Quality Report - 2014

As required by the USEPA and the VT Division of Drinking Water and Groundwater Protection, under the Safe Drinking Water Act, water utilities must inform all their customers about the quality of the water delivered into their homes. This report is a snapshot of the *quality* of water that we provided for January 1 through December 31, 2013. This report is designed to inform you about the quality water and services we deliver to you every day. Our goal is to provide you with a *safe and dependable* supply of drinking water. Included are details about where your water comes from, what it contains, and how it compares to U.S. Environmental Protection Agency (EPA) and state standards.

Water Source Information

Our water sources are:

Vermont Source Type: **Stream**

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

Source Name: **BROOK #1**

Location: Paradis Mountain

Vermont Source Type: **Stream**

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

Source Name: **BROOK #2**

Location: Bluff Mountain

Vermont Source Type: **Rock well**

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

Source Name: **WELL #1**

Location: South Reservoir

Vermont Source Type: **Rock well**

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

Source Name: **WELL #2**

Location: North Reservoir

The Water Commissioners are:

Roland (Butch) Barney-Chairman

Ralph Wilkins

Terry Blake

Source Protection Plan: We have a source protection plan available from our office that provides more information such as potential sources of contamination. The Water Supply Division approved our source protection plan on: 2/13/95. We update our Source Protection Plan every three years, with 2012 being the year we last updated the plan.

Due to The Brighton Water Department owning most of its watershed areas the systems' susceptibility to potential sources of **hazardous** contamination is: **Minimal**

Sources of Drinking Water and Contaminants

The sources of drinking water, (both tap 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 material. It can also pick up substances resulting from the presence of animals or from human activity. Some "contaminants" may be harmful, while others such as iron and sulfur are not. Public water systems treat water to remove contaminants, if any are present.

The Brighton Water system uses three remote mountain streams as its main sources for safe and reliable drinking water.

Owner / Operator and Public Participation Opportunities

If you have any questions about this report or concerning your water quality, please contact the person(s) listed below.

Brighton's Town Clerk – (802) 723-4405

Operator

Marshall Frizzell – (802) 723-4424

Operator

Kean Galunas - (802)-723-4424

Operator

Bruce Rolfe – (802) –723-4424

Regularly scheduled meetings are held the third

Tuesday of each month at 6:00 PM in the Brighton

Town Hall Conference Room. Please attend if you

would like to learn more about your utility.

In order to ensure that tap water is safe to drink, US EPA and the State of Vermont prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and state regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Unwanted contaminants that may be present in source water before we treat it include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, 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 and gas production, mining, or farming.

Synthetic Organic Chemicals, (pesticides and herbicides) may come from a variety of sources such as agriculture, urban stormwater runoff, residential uses, and careless disposal household chemicals.

Volatile Organic chemicals, (gasoline and solvents), may come from gas stations, urban stormwater runoff, septic systems, industrial processes 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.

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, (in fact, water gets its flavor from the minerals [contaminants] found in it.). More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline.

Some people who drink water with trihalomethanes 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.

WATER QUALITY DATA

The table below lists all the drinking water contaminants that we detected during the 2013 calendar year or during past testing cycles as noted.

The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1-December 31, 2013.

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:

Maximum Contamination Level Goal (MCLG): The "Goal" is the level of a contaminant in drinking water below, which there is no known or expected risk to human health. MCLG's allow for a margin of safety.

Maximum Contamination Level (MCL): The "Maximum Allowed" MCL is the highest 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 technology.

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.

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

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

Million Fibers per Liter: MF/ L

Treatment Technique (TT): A process aimed to reduce the level of a contaminant 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 (µg/l): (one penny in ten million dollars)

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

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.

Detected Contaminants:

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2013				

Chemical Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Fluoride	8/16/2011	0.1	0-.10	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
IRON	8/16/2011	0.12	0-0.12	ppm			
NITRATE	2/19/2013	0.39	0.24-0.39	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Monitoring Period	Running Annual Average	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2013	25	22.2-27.6	ppb	60	0	By-product of drinking water disinfection
TOTAL TRIHALOMETHANES (TTHM)	2013	43	38.9-50.6	ppb	80	0	By-product of drinking water chlorination

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
No detected results were found in the calendar year of 2009, the last test year of a nine-year cycle.							

Lead and Copper Detection and Action Levels

Lead and Copper	Date	90 th Percentile	95 th Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2013	0.12	0.14	0-0.17	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2013	3	4	0-4	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

Lead and Copper continued:

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. The BRIGHTON WATER SYSTEM 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>.

The Brighton Water System utilizes zinc-orthophosphate in minute amounts in the treatment for lead and copper. Both zinc and phosphate are essential elements.

If you should have concerns about lead or copper in your household, please call the Brighton Water System at 723-4424 or 723-4405.

Turbidity

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the quality of water and the effectiveness of our filtration system. The likely source of contamination is soil runoff.

State and federal regulations require ninety-five percent of our samples to be at or below .5 NTUs. We have met this goal. The Brighton Water System uses .15 NTU as its target goal. More than ninety –nine percent of samples for maximum daily turbidity are at or below this .15 level.

Violation(s) that occurred during the 2013

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 table below lists any drinking water violations we incurred during 2013. A failure to perform required monitoring means we cannot be sure of the quality of our water during that time.

No violations occurred in the Calendar Year 2013

System improvements in 2013: A fairly large leak was identified and stopped near the Maple Street crossing. New metal roofing was installed on both water plants.

A Sanitary Survey was performed by the State in 2013, which is done every three years. No major deficiencies were identified.

Public Request: *The events of September 11, 2001 changed the lives of every American. Public awareness is now a necessity. Please keep watch on our community and notify the authorities if you should see anything suspicious.*

Landlords and campowners, please share this information with your tenants and seasonal renters. Additional copies of this report can be obtained at the Brighton Town Clerk's Office.

Sincerely,

The Brighton Water Commission

June 2014

Water is a precious resource. Please use it wisely.