Westford Fire District #1 ~ Consumer Confidence Report Water Quality Report - 2022

Westford Fire District #1 (WFD #1) is classified and permitted as a groundwater, nonpurchased public water system, operating under the Vermont State Water System Identification Number of:

WSID #5450

Our goal is to provide you with a safe and dependable supply of drinking water.

This report is a snapshot of the quality of water that we provided for 2022, and is also available on our website www.wfd1.org or using the following direct link: http://www.wfd1.org/uploads/1/9/7/8/19787215/ccr_2022.pdf

This report also includes the date and results of any contaminants that we detected within the past five years, of those that require testing less than once a year. Any contaminants detected within the past five years are listed along with the date of detection and concentration. This report is designed to inform you about the quality water and services we deliver to you every day.

Water Source Information:

The source(s) of our drinking water are 3 state-approved ground water wells. The well designations are: Well #1, Well #2 & Well #3.

Source Protection Plan:

Our source protection plan is available to you at any time and provides specific information about our water system, including potential sources of contamination. For more information about contaminants and potential heath effects, please contact the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

An overview of drinking water sources and the contaminants they may contain:

Possible 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 land's surface or through the ground, it dissolves naturally occurring minerals. It also picks up substances resulting from human activity and the presence of animals. Some of these "contaminants" may be harmful. Others, such as iron and sulfur, are not.

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 'IOC' (salts and metals) can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, or farming.
- **Synthetic Organic chemicals 'SOC'** (pesticides and herbicides) may come from agriculture, urban storm water runoff, residential uses, and careless disposal of household chemicals.
- **Volatile Organic chemicals 'VOC'** (gasoline and solvents) may come from gas stations, urban storm water runoff, septic systems, industrial process, and careless disposal of household chemicals.
- Naturally occurring radioactivity

WATER QUALITY DATA

Terms and Abbreviations:

In the following tables you may find terms you might not be familiar with. To help you better understand these terms we have provided the following definitions:

<u>Maximum Contamination Level Goal (MCLG)</u>: 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.

<u>Maximum Contamination Level (MCL):</u> 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG):</u> 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.

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

<u>Action Level:</u> The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

<u>Level 1 Assessment:</u> 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.

<u>Level 2 Assessment:</u> 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.

<u>90th Percentile:</u> 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 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

<u>Nephelometric Turbidity Unit (NTU):</u> NTU is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to an average person.

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

Running Annual Average (RAA): Annual Level of Disinfection By-products (i.e. chlorination)

N/A: Not applicable

The table below lists any Water Rule violations incurred by WFD#1 in 2022.

Violation(s) that occurred during Calendar Year 2022

Туре	Category	Analyte	Compliance Period
CCR Report	Failure to report	Consumer Confidence Rule	07/01/2022-08/28/2022

Each year, all public water systems are required to submit to the state and distribute to the community, their previous year's Consumer Confidence Report by July 1. WFD#1 neglected to submit & distribute our 2021 CCR by 07/01/22. It was instead submitted & distributed on 08/28/22.

The table on the following page lists all the drinking water contaminants that were detected during the 2022 calendar year. It also includes the date and results of any contaminants that we detected within the past five years, of those which require testing less than once a year. The presence of these contaminants in the water does not necessarily show that our water poses a health risk.

WATER QUALITY DATA

Level of Detected Contaminants

<u>Microbiological</u>	Result	MCL	MCLG	Typical Source			
No Detected Results During Calendar Year 2022							

Chemical Contaminant	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Likely source of detected contaminant
Nitrate	03/31/2022	.098	.098- .098	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Barium	09/29/2020	.045	.045- .045	Ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Likely source of detected contaminant
Combined Radium	03/25/2014	0.809	0.809-0.809	pCi/L	5	0	Erosion of natural deposits
Gross Alpha	03/29/2017	0.986	0.986-0.986	pCi/L	15	0	Erosion of natural deposits
Radium - 226	03/25/2014	0.322	0.322-0.322	pCi/L	5	0	Erosion of natural deposits
Radium - 228	03/25/2014	0.487	0.487-0.487	pCi/L	5	0	Erosion of natural deposits

<u>Disinfection</u> <u>Residual</u>	Monitoring Period	RAA	Range	Unit	MRDL	MRDLG	Typical Source
Chlorine	2022	0.344	0.210-0.560	mg/l	4.0	4.0	Water additive to control microbes

Disinfection By-Products	Collection Year	Highest LRAA	RAA	Range	Unit	MCL	MCLG	Likely source of detected contaminant
Total Trihalomethanes	2021	2.0	N/A	2.0-2.0	ppb	80	0	By-product of drinking water chlorination

Lead & Copper	Collection Year	90 th Percentile	Range	Unit	Action Level	No. of Sites Exceeding Action Level	Likely source of detected contaminant
Copper	2022	0.084	0.042- 0.09	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2022	6.3	0-10.9	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

Health Information Regarding Lead:

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. Westford Fire District #1 is responsible for providing high quality drinking water but cannot control the variety of materials used in household 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead

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.

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.

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. We want you to be informed about your water quality, if you want to learn more, please visit our website at www.wfd1.org or attend any of our regularly scheduled meetings, which are held at board member's homes. Please contact R.J. Moore for meeting locations and times.

R.J. Moore, Chairman, Westford Fire District #1
PO Box 103, Westford VT 05494
802.355.9308
rjm@wfd1.org

Randy L. Devine, Water System Operator PO Box 402, Fairfax VT 05454-0402 Phone: 802.849.6304 or 802.849.6033