Consumer Confidence Report 2016

Waterville Valley Water District E.P.A. #2441010

What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

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 material. Water may



also pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water 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 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 stormwater runoff, and residential uses.

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

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

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protections for public health.

What is the source of my drinking water?

The Town of Waterville Valley obtains its water from three wells: 2 gravel packed wells and 1 dug well. All 3 wells are located off West Branch Road. Well #1 is located on the east side of the West Branch River and yields 70 gallons per minute (gpm). Well #2 is located on the west side of the same river, across from the Sullivan property and yields 300 gpm. Well #3 is located on the lower end of the peninsula of where the West and East Branches of the Mad River converge and it yields 180 gpm.

The water is disinfected with a minimal dose of calcium hypochlorite. We also add potassium hydroxide for pipe corrosion control and pH adjustment.

Our drinking water is safe and meets all federal and state requirements. Monthly samples of our water, drawn from 3 sites approved by the State of N.H. Drinking Water and Groundwater Bureau are taken to Eastern Analytical, a certified lab in Concord, N.H. for bacteria testing. All 36 samples during the past year **tested absent** for total coliform and E.Coli.

We also tested for inorganic chemicals, nitrates, synthetic organic compounds and volatile organic compounds. We conducted 10 separate tests for lead and copper at private residences and condos. All of these tests met the federal and state requirements for safe drinking water.

Why are contaminants in my water? 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Do I need to take special precautions? Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Source Water Assessment Summary

DES prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each water source protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment, prepared on **6/22/2000** for the Town of Waterville Valley are noted below.

Well #1, 1 susceptibility factor was rated high, 4 were rated medium, and 7 were rated low.

Well #2, 1 susceptibility factor was rated high, 5 were rated medium, and 6 were rated low

Well #3, 1 susceptibility factor was rated high, 4 were rated medium, and 7 were rated low

Note: This information is over 10 years old and includes information that was current at the time the report was completed. Therefore, some of the ratings might be different if updated to reflect current information. At the present time, DES has no plans to update this data.

The complete Assessment Report is available for review at *Waterville ValleyWater System Office*. For more information, call *Bill Cheney @ 236-4730*, or visit the DES Drinking Water Source Assessment website at

http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm.

How can I get involved?

For more information about your drinking water, please call Bill Cheney @236-4730. Although we do not have specific dates for public participation events or meetings, feel free to contact us with any questions you may have.

Violations and Other information: N/A

Definitions

Ambient Groundwater Quality Standard or **AGQS**: The maximum concentration levels for contaminants in groundwater that are established under RSA 485-C, the Groundwater Protection Act.

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

Maximum Contaminant Level or **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 technology.

Maximum Contaminant Level Goal or **MCLG:** The 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.

Maximum Residual Disinfectant Level or **MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal or **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 the use of disinfectants to control microbial contaminants.

Treatment Technique or **TT:** A required process intended to reduce the level of a contaminant in drinking water.

Turbidity: A measure of the cloudiness of the water. It is monitored by surface water systems because it is a good indicator of water quality and thus helps measure

the effectiveness of the treatment process. High turbidity can hinder the effectiveness of disinfectants.

Other Abbreviations

BDL: Below Detection Limit mg/L: milligrams per Liter

NA: Not Applicable ND: Not Detectable at testing limits

NTU: Nephelometric Turbidity Unit pCi/L: picoCurie per Liter ppb: parts per billion ppm: parts per million

RAA: Running Annual Average TTHM: Total Trihalomethanes

UCMR: Unregulated Contaminant Monitoring Rule

ug/L: micrograms per Liter

The Town of Waterville Valley tests for many different potential contaminants throughout the year. During 2012 there were no contaminants which tested above the Maximum Contaminant Level (MCL) in the Waterville Valley Water System. The following is a chart of several of the key contaminants that we tested for in 2012 and detected some level of the material. A complete list of all materials we tested for is available on the Town website (www.watervillevalley.org) or at the Town Offices.

Drinking Water Potential Contaminants:

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. This water system is responsible for high quality drinking water, but can not control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking and cooking. If you are concerned about lead in your 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://water.epa.gov/drink/info/lead/index.cfm

Radon: Radon is a radioactive gas that you can't see, taste or smell. It can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. It is a known human carcinogen. Breathing radon can lead to lung cancer. Drinking water containing radon may cause an increased risk of stomach cancer.

NOTE: If a drinking water public notice, MCL, Monitoring/Reporting, or treatment technique violation occurred during the past year, the following table must be used to explain the violation, potential health effects and remediation steps taken on each specific violation.

VIOLATIONS

Specific Violation	Date of Violation	Explanation of Violation	Length of Violation	Actions Taken to Resolve Violations	Health Effects (Env-Dw 811.21)
Monitoring and Reporting (M/R)	NONE				

DETECTED WATER QUALITY RESULTS - 2016

Microbiological Contaminants

Contaminant (Units)	Level Detected	MCL	MCLG	Violation (Yes/No)	Likely Source of Contamination	Health Effects of Contamination
Total Coliform Bacteria	NONE	<40 Samples >1 is Positive	0	NO	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this is a warning of potential problems

Inorganic Contaminants

Contaminant (Units)	Level Detected	MCL	MCLG	Violation (Yes/No)	Likely Source of Contamination	Health Effects of Contamination
Barium (ppm)	Well#1 – 0.011ppm Well#2 – 0004ppm Well #3 – 0005ppm	2	2	NO	Discharge of drilling wastes and natural de- posits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Copper (ppm)	Well #1 0.031 ppm Well#2 0.004ppm Well #3 0.074ppm	AL = 1.3	1.3	NO	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short period could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Radium 226	Well#1 1.2 pci/L Well#2 <0.8 pci/l Well#3 <0.8 pci/l	5 pCi/L	no	NO	Rocks, soil & air	Low levels are normal. Not harmful in low levels. High levels can cause cancer, anemia, blood problems, teeth problems and cataracts.

Contaminant (Units)	Level Detected	MCL	MCLG	Violation (Yes/No)	Likely Source of Contamination	Health Effects of Contamination
Fluoride (ppm)	Well#1 -1.1 mg/l Well#2 -1.3 mg/l Well #3 - 0.39 mg/l	4	4	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizers	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Lead (ppb)	0.010 ppm	AL = 15	0	NO	Corrosion of household plumbing sys- tems, erosion of natural deposits	(15 ppb in more than 5%) Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791) (Above 15 ppb) Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
Nitrate (as Nitrogen) (ppm)	Well #1 0.9 ppm Well#2 <0.5 ppm Well# 3 <0.5 ppm	10	10	NO	Runoff from fer- tilizer use; leach- ing from septic tanks, sewage; erosion of natu- ral deposits	(5ppm through 10ppm) Nitrate in drinking water at levels above 10ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "Blue Baby Syndrome". Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.
Radium 228	Well #1 1.2 pci/L Well #2 <0.8 pci/l Well#3 <0.8 pci/l	5 pCi/L	no	NO	Rocks, soil & air	Low levels are normal. Not harmful in low levels. High levels can cause cancer, anemia, blood problems, teeth problems and cataracts.

On-Going Projects/Improvements – The Town is completing the final part of a multi-year water and sewer improvement project. During this final phase we will connect the new water well #4 to the system and construct a common treatment tank and control system which will be capable of treating all drinking water before it is moved through the distribution mains. If you have any questions about the materials covered in this newsletter or about our on-going water system work, please call the Town Offices at ph. 603-236-4730 for additional information.