

Consumer Confidence Report

2023

(2022 results)



Brake Hill
PWS ID# 0882050

Introduction

As a responsible public water system (PWS), Lakes Region Water Company's mission is to provide safe and reliable water to all customers.

Aging infrastructure presents challenges for maintaining safe quality drinking water and continuous improvements are necessary. In the past year, we have detected, located, and repaired one water leak in your system. In the coming year we intend to continue our best efforts to maintain the least amount of interruptions as possible.

What is a Consumer Confidence Report?

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

NOW IT COMES WITH A LIST OF INGREDIENTS.



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, and can pick up substances resulting from the presence of animals or from 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 per- and polyfluoroalkyl substances, 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, and septic systems.
- **Radioactive contaminants**, which 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 prescribe 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 protection for public health.

What is the source of my drinking water?

Lakes Region Water Company (LRWC) owns & operates two active bedrock wells. Bedrock well #1 is approximately 355 feet deep, yields 18 gallons per minute (GPM) and is located 150 feet west of the pumphouse, across the brook. Bedrock well #2 yields 25 gallons per minute (GPM), is approximately 225 feet deep and is located 5 feet south of the pumphouse.

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. 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 microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Source Water Assessment Summary

NHDES 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 source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment, prepared on 8/08/2000 are noted below.

SOURCE ASSESSMENT INFORMATION (PREPARED BY THE NHDES)				
Brake Hill Acres		Summary of Susceptibility Factors		
Source Name	Date	Low	Medium	High
Bedrock Well #1	8/8/00	7	1	4
Bedrock Well #2	8/8/00	7	1	4

Note: Due to the time when the assessments were completed, some of the ratings might be different if updated to reflect current information.

The complete Source Assessment Report is available for review at LRWC's office in Moultonborough, NH. For more information call Justin at 603-476-2348 or visit NHDES' website at: <https://www.des.nh.gov/resource-ceter/publications?keys=swpassessments&purpose=Reports&subcategory=Drinking+water>.

How can I get involved?

For more information about your drinking water, please call the owner, Thomas Mason at (603) 476-2348 or the primary operator, Justin Benes, at (603) 476-2348. Although Lakes Region does not hold public participation meetings, you are welcome to contact us with questions and concerns. For more info concerning public participation opportunities in your community, contact your Homeowner's Association President for dates & times of Association meetings.

Violations and Other information: There were no violations in Brake Hill in 2022. Arsenic treatment was installed in 2022.

Definitions

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.

Abbreviations

mg/L: milligrams per Liter

NA: Not Applicable

ND: Not Detectable at testing limits

pCi/L: picoCurie per Liter

ppb: parts per billion

ppm: parts per million

ug/L: micrograms per Liter

Drinking Water 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 cannot 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 at 1-800-426-4791 or at [US EPA Basic Information about Lead in Drinking Water](#)

LEAD AND COPPER							
Contaminant (Units)	Action Level (AL)	90 th percentile sample	Date	# of sites above AL	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Copper (ppm)	1.3	0.049	09/22/2021	0	NO	Corrosion of household plumbing systems; 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 amount of time 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.
Lead (ppb)	15	0	09/22/2021	0	NO	Corrosion of household plumbing systems, 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.

DETECTED WATER QUALITY RESULTS

Radioactive Contaminants

Contaminant (Units)	Level Detected*	Date	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Compliance Gross Alpha (pCi/L)	1.1	03/09/2020	15	0	NO	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Uranium (ug/L)	1.1	03/09/2020	30	0	NO	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
Combined Radium 226 + 228 (pCi/L)	0.5	03/09/2020	5	0	NO	Erosion of natural deposits	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Inorganic Contaminants

Contaminant (Units)	Level Detected*	Date	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Arsenic (ppb)	0.55	10/04/2022	5	0	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	(2.5 ppb through 5 ppb) While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. (Above 5 ppb) Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer.
Barium (ppm)	0.0050 0.0096	01/21/2021	2	2	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Chromium (ppb)	0.0015	01/21/2021	100	100	NO	Discharge from steel and pulp mills; erosion of natural deposits	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

SECONDARY CONTAMINANTS

Secondary MCLs (SMCL)	Level Detected	Date	Treatment technique (if any)	SMCL	50 % AGQS (Ambient groundwater quality standard)	AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
Chloride (ppm)	1	02/13/2018	N/A	250	N/A	N/A	Wastewater, road salt, water softeners, corrosion
Fluoride (ppm)	0.39-0.68	01/21/2021	N/A	2	2	4	SEE BELOW
Iron (ppm)	0.087	01/21/2021	N/A	0.3	N/A	N/A	Geological
Manganese (ppm)	0.042	01/21/2021	N/A	0.05	0.15	0.3	Geological
Nickel (ppm)	0.002	02/13/2018	N/A	Not established; reporting is required for detections	0.05	0.1	Geological; electroplating, battery production, ceramics
PH (ppm)	7.81-8.14	01/21/2021	N/A	6.5-8.5 (Normal Range)	N/A	N/A	Precipitation and geology
Sodium (ppm)	8.2-8.9	01/21/2021	N/A	100-250	N/A	N/A	We are required to regularly sample for sodium
Sulfate (ppm)	4.7-5.2	01/21/2021	N/A	250	250	500	Naturally occurring

Zinc (ppm)	0.019	02/13/2018	N/A	5	N/A	N/A	Galvanized pipes
<p>This is an alert about your drinking water and a cosmetic dental problem that might affect children under 9 years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2.0 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). Fluoride contamination is rarely due to human activity, since it occurs naturally in some areas and is found in elevated concentrations in the aquifer in our source water. This is NOT an emergency. If it had been, you would have been notified immediately. However, dental fluorosis, in its moderate or severe forms may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about the proper use by young children of fluoride-containing products. Older children and adults may safely drink the water. Drinking water containing more than 4.0 mg/L of fluoride (the US Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4.0 mg/L of fluoride, but we are required to notify you when we discover that the fluoride levels in your drinking water exceed 2.0 mg/L because of this cosmetic dental problem. You may want to consult your dentist or doctor and show him/her this notice to determine if an alternative source of water low in fluoride should be used, about whether to avoid dental products containing fluoride. General health related questions may be directed to Dave Gordon of the DES Environmental Health Program at (603) 271-4608. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.</p>							