

Consumer Confidence Report

Lincoln Water Works

2013

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).

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 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, 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 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 protection for public health.

What is the source of my drinking water?

The Lincoln Water Treatment Plant is the source of our water. Water comes from several locations that run into the Treatment Plant:

Loon Pond #005, a pond located on White Mountain National Forest land, that feeds water to Little Loon Pond and then into a small reservoir. The water from this surface water source is classified as Class A water, which is treated at the Water Treatment Plant.

East Branch of the Pemigewasset River #006, a river located within the White Mountain National Forest, with many tributaries that drain the surrounding Lincoln Woods and provides sufficient water to the Town's intake facility. The water from this surface water source is classified as Class B water, which is also treated at the Water Treatment Plant.

Note: Class A water is a better quality raw water than Class B water because it contains less bacteria. Because water from both Loon Pond and the East Branch of the Pemigewasset River are treated through the Water Treatment Plant, all bacteria is removed from both sources. Therefore, the differences between Class A water and Class B water is not a matter of concern.

Cold Springs Well Group #004, A ground water source, located on Route 3, which is used mainly during the high demand periods. This water originates from the Main Branch of the Pemigewasset River. Water from

wells must be chlorinated to destroy any bacteria that may be present and pH levels are adjusted to protect against corrosion.

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

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 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 July 5, 2001 are noted below.

- Loon Pond Brook Reservoir, 0 susceptibility factors were rated high, 1 was rated medium, and 10 were rated low.
- Intake/East Branch of the Pemigewasset River, 1 susceptibility factors was rated high, 2 were rated medium, and 8 were rated low.

The complete Assessment Report is available for review at the Lincoln Town Hall, 148 Main Street, Lincoln, NH or online at www.lincolnnh.org. For

more information, call Lincoln Water Works, (603) 745-9306, 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 the Town of Lincoln Water Department, Monday through Friday, 7:00am-3:00pm at (603) 745-9306. Although we do not have specific dates for public participation events or meetings, feel free to contact us with any questions.

Violations and Other information:

Tropical Storm Irene created several challenges for the Lincoln Water Department in 2011. A broken water main in the East Branch Pemigewasset River prompted a precautionary boil order (8/28/11-9/2/11) for the Village of Loon, Clearbrook, Coolidge, and Pollard Brook neighborhoods.

One of the key processes of the Water Treatment Plant is the filtration of organic compounds, which is accomplished by passing treated water through filter media. A combination of heavy sedimentation from rain events during the summer and fall of 2011 in the East Branch Pemigewasset River, and aged filter media at the Water Treatment Plant allowed some organic compounds to pass through the filtration stage. These organic compounds are generally rendered harmless during secondary treatment by disinfection with chlorine. However, when organic compounds are combined with chlorine during disinfection, byproducts can be formed. One of these byproducts is known as Haloacetic Acid. The Environmental Protection Agency sets a maximum level for Haloacetic Acids of 60 parts per billion (ppb) in drinking water. In Autumn of 2011, the Town exceeded this limit, with a reading of 64ppb. In response to this violation, the Town installed new multimedia filter material at the Water Treatment Plant in December of 2011. This new filter media will allow better filtration of organic and non-organic compounds in the river water, and should help to reduce the production of byproducts such as Haloacetic Acids. The Town will continue to monitor the levels of Haloacetic Acids present in the finished

drinking water and take additional steps in the future, should they become necessary. It is likely that you will continue to see violation notices regarding Haloacetic Acids, as the testing program uses a rolling average of the past 4 quarters. This means that the high Haloacetic Acid reading from the 4th quarter of 2011 will not be removed from the rolling average until a new sample is taken in the 4th quarter of 2012.

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 disin-

fectants.

THE FOLLOWING APPLIES if these contaminants are present - see table for detected levels.

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 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.

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



2013 Consumer Confidence Report- Lincoln Water Works - EPA ID: 1351010

VIOLATIONS

Violations	Date of Violation	Violation Explanation	Length of Violation	Action taken to Resolve	Health Effects (Env-Dw 811.211)
Public Notice	3rd Quarter 2013	Exceeding Haa5 (Haloacetic Acids) Maximum Contaminant Level (MCL)- The average level of Haloacetic Acids over the last 12 months was 0.063 mg/L which exceeded the MCL.	1st Quarter 2013	Rebuild River Intake in June & July to screen out small particles that get into plant filters.	Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer
MCL	.060				
Monitoring & Reporting	n/a	Precautionary measure taken in response to broken water main in the East Branch Pemi River	8/28/11-9/2/11	Precautionary Boil Order for Loon Village & Loon Mountain post Tropical Storm Irene	Inadequately treated water may contain disease causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

This violation is not an emergency. If it had been you would have been notified immediately. However, some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

DETECTED WATER QUALITY RESULTS

Contaminant (Units)	Level Detected	MCL	MCLG	Violation	Likely Source of Contamination	Health Effects of Contaminant
Total Organic Carbon (ppm)	R.A.A. 1.28 Range 1.0-1.7	TT	N/A	No	Naturally present in the environment	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

<p>Turbidity (NTU)</p> <p><i>Identify the highest average monthly value:</i></p> <p><i>The highest single reading:</i></p> <p><i>The lowest monthly average</i></p>	<p>.07 in Nov. 2013 Highest average monthly</p> <p>.17 in Nov. 2013 Highest single</p>		N/A	No	Soil runoff	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
Chlorine (ppm)	R.A.A. .65 Range .63-.75	MRDL = 4	MRDLG = 4	No	Water additive use to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes & nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Fluoride (ppm)	.40 Site 004 Cold Spring Well .62 Site 006 Water Plant	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	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.
Haloacetic Acids (HAA)(ppb) 1 st Quarter 2 nd Quarter 3 rd Quarter 4 th Quarter	R.A.A. .063 .040 .078 .115 .021	.060	NA	No	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Total Trihalomethanes (TTHM) (Bromodichloromethane Bromoform Dibromomethane Chloroform)(ppb)	R.A.A. .075 1 st quarter .036 2 nd quarter .072 3 rd quarter .142 4 th quarter .049	0.100/.080	N/A	No	By-product of drinking water chlorination	Some people who drink water containing 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.