

2021 Consumer Confidence Report

Lincoln Water Works

PWS ID# 1351010

Introduction

Like any responsible public water system, our mission is to deliver the best quality drinking water and reliable service at the lowest appropriate cost. Aging infrastructure presents challenges to drinking water safety, and continuous improvement is needed to maintain the quality of life we desire for today and for the future. In the coming year we intend to design and build another storage tank to help with the pressure and fire flow in that area.

These investments along with on-going operation and maintenance costs are supported by a matching grant and taxpayer dollars. When considering the high value we place on water, it is truly a bargain to have water service that protects public health, fights fires, supports businesses and the economy, and provides us with the high-quality of life we enjoy.

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 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 number 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 difference 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.

ble 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 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 factor was rated high, 2 were rated medium, and 8 were rated low.

Note: This information is over 19 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 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 NHDES 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 Town of Lincoln Water Dept. Monday-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 you may have

Violations and Other information: See violation list in table below. MCL Violation for haloacetic acids in first quarter of 2019. The limit is 60 mg/L, and we had 62 mg/L. Since that time, we have had no more issues and are in compliance as of this time.

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.

Level I Assessment: 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.

Level II Assessment: 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.

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.

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 following statement must be included.

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>

System Name: LINCOLN WATER WORKSPWS ID: 1351010

2021 Report (2020 data)

BULK WATER DELIVERIES

Bulk Water Source	Dates of Water Delivery	Gallons Delivered	Reason for Delivery

If a drinking water public notice, MCL, Monitoring/Reporting, or treatment technique violation has occurred, the following table should be used to explain the violation and health effects:

VIOLATIONS

VIOLATIONS	Date of violation	Explain violation	Length of violation	Action taken to resolve	Health Effects (Env-Dw 804-810)
Public notice					N/A
Monitoring and Reporting (M/R)					N/A
MCL					<i>Insert health effects language for contaminant from Env-Dw 804-810</i>
<i>E.coli</i> MCL					<i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We violated the standard for <i>E. coli</i> , indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct a detailed assessment to identify problems and to correct any problems that are found.
TT (Treatment Technique)					Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.
Filtration/disinfection Processes					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.

The Revised Total Coliform Rule requires an assessment or an investigation of the water system when certain conditions occur:

ASSESSMENTS

During the past year we were required to conduct Assessment(s)	Number of assessments required in the reporting year	Number of assessments completed in the reporting year	Number of corrective actions required	Number of corrective actions completed	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.
Level I 8-18-20	1	1	1	1	Located better repeat sample site.
Level II					

Level II					<i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We found <i>E. coli</i> bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.
We were required to complete a Level II assessment because we found <i>E. coli</i> in our water system.					

ASSESSMENTS NOT COMPLETED

During the past year we were required to conduct Assessment(s)	Number of assessments required in the reporting year	Number of assessments completed in the reporting year	Number of corrective actions required	Number of corrective actions completed	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution.
Level I	.				During the past year we failed to conduct all of the required assessment(s).
Level II					During the past year we failed to conduct all of the required assessment(s).
Level II Required because <i>E. coli</i> was found in our water system.					<i>E.coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We found <i>E.coli</i> bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct and problems that were found during these assessments.

SIGNIFICANT DEFICIENCY

*The value must be reported as whole number, see Env-Dw 811, Appendix B for conversions:

LEAD AND COPPER

Contaminant (Units)	Action Level	90 th percentile sample value *	Date	# of sites above AL	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Copper (ppm)	1.3	0.17	2018	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	6	2018	1	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.

*If applicable report average and range and date sampled if prior to the reporting year. Level detected must be reported as whole number, see Env-Dw 811, Appendix B for conversions:

DETECTED WATER QUALITY RESULTS

Contaminant (Units)	Level Detected*	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Microbiological Contaminants						
<i>E. coli</i> Bacteria	Identify total # of positive samples. 0	0	0	No	Human and animal fecal waste	<i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.
Total Organic Carbon (ppm)	RAA 2.04 Range 1.5 - 2.9 1 st Qrt. 1.77 2 nd Qrt. 2.13 3 rd Qrt. 1.96 4 th Qrt. 2.30	TT	N/A		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.
Turbidity (NTU)	Highest Month July 0.06 Highest Single Reading 0.22 July	TT	N/A		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.
Radioactive Contaminants						
Compliance Gross Alpha (pCi/L)	Cold Spring Wells 2.0+/- 1.0 Pemi 1.5+/- .8	15	0	No	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation know 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)	Cold Spring Wells 0.3	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)	Cold Spring Wells 0.3 - 0.4 Pemi - 0.4+/- 0.4	5	0		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						
Chlorine (ppm)	RAA 0.16 PPM Range 0.05-0.28	MRDL = 4	MRDLG = 4	No	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Fluoride (ppm)	Loon Pond 0.31 Cold Spring Wells 0.43 Pemi River 0.77	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.
Mercury (inorganic) (ppb)	ND ALL SOURCES	2	2	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

Nitrate (as Nitrogen) (ppm)	ND Pemi ND Cold Spring Wells ND Loon Pond	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	(5 ppm through 10ppm) Nitrate in drinking water at levels above 10 ppm 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. (Above 10 ppm) Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Nitrite (as Nitrogen) (ppm)	0.5	1	1	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill, and if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Synthetic Organic Contaminants including Pesticides and Herbicides						
Diquat (ppb)	ND River ND Loon Pond Dam ND Cold Spring Wells	20	20	No	Runoff from herbicide use	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
Glyphosate (ppb)	ND River Intake ND Loon Pond Dam ND Cold Spring Wells	700	700	No	Runoff from herbicide use	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
Haloacetic Acids (HAA) (ppb)	RAA 34	60	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) (Bromodichloro-methane Bromoform Dibromochloro-methane Chloroform) (ppb)	RAA 40 1.1 <0.5 <0.5 38.8	80	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.

*If applicable report average and range and date sampled if prior to the reporting year. Level detected must be reported as whole number, see Env-Dw 811, Appendix B for conversions:

SECONDARY CONTAMINANTS					
Secondary MCLs (SMCL)	Level Detected	Date	Treatment technique (if any)	AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
Chloride (ppm)	3.2	8/04/20	N/A	250	Wastewater, road salt, water softeners, corrosion
Iron (ppm)	ND		N/A	0.3	Geological
Manganese (ppm)	0.0073	8/04/20	N/A	0.05	Geological
PH (ppm)	6.37	8/04/20	N/A	6.5-8.5	Precipitation and geology
Sodium (ppm)	3.3	8/04/20	N/A	250	We are required to regularly sample for sodium
Sulfate (ppm)	2.2	8/04/20	N/A	250	Naturally occurring
Zinc (ppm)	ND	8/04/20	N/A	5	Galvanized pipes

ADDITIONAL TESTING

Additional Tests	Description of data requested	Date	Treatment technique (if any)	Results (with units)	Specific contaminant criteria and reason for monitoring
Perfluorooctanoic acid (PFOA) (ppt)	ALL SOURCES ND ND	Nov. 2019 Feb. 2020	N/A	70	Some people who drink water containing perfluorooctanoic acid (PFOA) in excess, of the AGQS over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a woman's chance of getting pregnant.
Perfluorooctane sulfonic acid (PFOS) (ppt)	ALL SOURCES ND ND	Nov.2019 Feb.2020	N/A	70	Some people who drink water containing perfluorooctane sulfonic acid (PFOS) in excess of the AGQS over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a women's chance of getting pregnant.
PFOA & PFOS Combined (ppt)	ALL SOURCES ND ND	Nov.2019 Feb.2020	N/A	70	Some people who drink water containing PFOA & PFOS combined in excess of the AGQS over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a women's chance of getting pregnant.
Perfluorohexane Sulfonic acid (PFHxS) (ppt)	ALL SOURCES ND ND	Nov.2019 Feb.2020	N/A	N/A	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems.
Perfluorononanoic acid (PFNA) (ppt)	ALL SOURCES ND ND	Nov.2019 Feb.2020	N/A	N/A	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems.
Cryptosporidium	ND	Nov.2019 Feb.2020			

