

# Annual Consumer Confidence Report (CCR)

Year 2019

Lincoln Water District

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## **Introduction:**

We at the Lincoln Water District are once again proud to present our annual water quality report and to inform you that the drinking water that the Lincoln Water District delivered to your home or business met or exceeded all state and federal drinking water standards and requirements. This report includes all testing of your drinking water completed from January through December 2019. You need to know that the federal government requires us to use very specific language in this report that can often be confusing or even alarming to some people. We at the Lincoln Water District continue to be your source of safe drinking water for you and your family.

## **Where Your Water Comes From:**

Your drinking water supply comes from a ground water aquifer that currently supplies all of the municipal water needs of the towns of Lincoln and Howland. The location of the gravel esker aquifer is in the most southerly part of the town of Lincoln and is part of a major glacial stream deposit that extends in a north-south direction. The District operates and maintains 4 gravel packed wells in the aquifer. This water source has been in use since the fall of 1961, and feeds 27 miles of water transmission and distribution mains in Lincoln, supplying 132 public fire hydrants, 30 private fire services and 1400 water service connections (customers). The District average daily pumping rate is 300,000 gallons per day (gpd). In the event of a power failure, water pressure and flow would be maintained from two 500,000-gallon standpipes (above ground tanks) located at the top of Pinkham Street and one 500,000-gallon underground concrete tank located off the Transalpine Road on Fish Hill. The water source from the gravel packed wells is pumped directly into the distribution system. The quality of the water is such that disinfection of the source water at the wells is not a requirement, with the exception of Sodium Hypochlorite to protect against bacteriological contaminants during summer and winter months and high construction activities. The District owns and maintains a healthy forestland that acts as a natural filter to the watershed to ensure the highest quality of water collects in the aquifer. The District continues to manage the forest land and gravel esker caring for almost 600 acres of unspoiled forest land. We limit the amount of recreational use of the watershed for the protection of our drinking water supply. We do what has to be done to protect this irreplaceable resource from threats by managing a number of protection programs to keep the forest and aquifer healthy and safe.

## Health Information:

To ensure that Lincoln's water is safe to drink, the EPA regulates and limits the number of certain contaminants in water that is provided by the Lincoln Water District system. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. The source of drinking water (both tap and bottled water) can 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 human activity.

Substances 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 in 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 byproducts 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune compromised persons such as persons with cancer undergoing chemotherapy, people 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.

The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Assessment Program (SWAP). The assessments included geology, hydrology, land uses, water testing information, and the extent of land ownership or protection by local ordinance to see how likely our drinking water source is to being contaminated by human activities in the future. Assessment results are available at town offices, public water suppliers, and the DWP. For more information on SWAP, please contact the DWP.

EPA/CDC has guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants. These guidelines are available from the Safe Drinking Water Hot Line (1-800-426-4791) or at the following link:

<https://www.epa.gov/ccr/forms/contact-us-about-consmer-confidence-reports>

You may also call the Maine Drinking Water Program (DWP) at 1-207-287-2070.

### **Customer Alert:**

**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.**

**The Lincoln Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in 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 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 Hot Line or at <http://www.epa.gov/safewater/lead>.**

In 2017, our system was granted a “Synthetic Organics Waiver” for the monitoring period 1/1/17-12/31/19. This is a three-year exemption from the testing/monitoring requirements for the following industrial chemical(s):

TOXAPHENE/CHLORDANE/PCB, HERBICIDES, CARBAMATE PESTICIDES, SEMIVOLATILE ORGANICS. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source.

### **Violations**

As a community public water system, we are required to provide a consumer confidence report to our customers on an annual basis. The consumer confidence report provides customers with information regarding the source and quality of the drinking water supplied to them as well as information on any violations that occurred during that time period. In 2018, we distributed notices and posted the report on Lincoln Water District website, however, we neglected to make it available on the website with a direct URL, which is mandated by the Drinking Water Program. A direct URL was set up, however, not before the deadline.

## **Security Protection:**

The Lincoln Water District has increased security throughout the water system. The District has a quality staff of water professionals that includes both certified operators and office staff. The Lincoln Water District employees recognize their important responsibility to you and use their professional experience and training to work together to ensure the ongoing quality of the drinking water that is delivered every day to your homes and business.

If you have concerns or see any activity in the South Lincoln wellhead protection area, or anywhere in the distribution system, please contact the district office or law enforcement (police) immediately. For example, if you see a fire hydrant running, chances are we are flushing the mains, but give us a call day or night if you aren't sure.

If you have any questions or concerns about this report, or this water utility, please contact Jeffrey W. Day, Superintendent, at 1-207-794-2921.

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Trustee meetings that are held on the second Tuesday of each month at the District office, 3 Taylor Street, at 7:00 pm.

We at the Lincoln Water District, Jeffrey W. Day, Superintendent, Burton Weed, Chairman, Frank Nicasastro, Treasurer, Andrew Stevens, Clerk, Nancy Osborn, Assistant Superintendent, Leigh Page, Maintenance Foreman, Dustin Sawtelle and Cole Russell, operations, and Sue Cimon, Collections Clerk, work around the clock to provide you with top quality water. We ask that all our customers help us protect our water sources, which is the heart of our Community, our way of life and our children's future.

Thank you for allowing us to continue providing your family with clean quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments.

The Lincoln Water District received a wellhead protection grant from the State Drinking Water Program and has updated the Aquifer Land Use Ordinance around the pumping wells.

Please call our office if you have questions, at 207-794-2921 or email us at [www.lincolnwaterdistrict.org](http://www.lincolnwaterdistrict.org).

## Water Test Results

The Lincoln Water District routinely monitors for contaminants in your drinking water according to federal and state laws. The following water tests are the results of our monitoring:

**PWSID ME0090860**  
**LINCOLN WATER DISTRICT**  
**2019 Consumer Confidence Report**  
**Water Test Results**

<b>Contaminant</b>	<b>Date</b>	<b>Results</b>	<b>MCL</b>	<b>MCLG</b>	<b>Source</b>
<b>Microbiological</b>					
TOTAL COLIFORM (1)	7/30/2019	<b>0 pos</b>	1 pos/month or 5%	0 pos	Naturally present in the environment.
<b>Inorganics</b>					
ARSENIC (2)	3/29/2017	<b>2.9 ppb</b>	10 ppb	0 ppb	Erosion of natural deposits. Runoff from orchards, glass and electronics production wastes.
BARIUM	3/29/2017	<b>0.0032 ppm</b>	2 ppm	2 ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
CHROMIUM	3/29/2017	<b>1.2 ppb</b>	100 ppb	100 ppb	Discharge from steel & pulp mills Erosion of natural deposits.
COPPER 90TH % VALUE (4)	4/3/2017	<b>0.012 ppm</b>	AL=1.3 ppm	1.3 ppm	Corrosion of household plumbing systems
FLOURIDE (3)	3/29/2017	<b>0.1 ppm</b>	4 ppm	4 ppm	Erosion of natural deposits. Water additive which promotes strong teeth.
LEAD 90TH % VALUE (3)	4/3/2017	<b>1.2 ppb</b>	AL=15 ppb	0 ppb	Corrosion of household plumbing systems.
NITRATE NITROGEN	5/1/2019	<b>0.48 ppm</b>	10 ppm	10ppm	Runoff from fertilizer use, sewage. Erosion of natural deposits.
DISINFECTION BY-PRODUCTS	8/08/2018	<b>6 ppb</b>			Chlorination
<b>Radionuclides</b>					
COMBINED RADIUM (-226 & -228)	12/18/2018	<b>0.607 pCi/l</b>	5 pCi/l	0 pCi/l	Erosion of natural deposits.
RADIUM -226	12/18/2018	<b>0.261 pCi/l</b>	5 pCi/l	0 pCi/l	Erosion of natural deposits.
RADIUM -228	12/18/2018	<b>0.346 pCi/l</b>	5 pCi/l	0 pCi/l	Erosion of natural deposits.

# Chlorine Residual

CHLORINE RESIDUAL

Range (0.20 – 0.32)

MRDL=4 ppm MRDLG= By-product of drinking water  
4 ppm

## Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

Running Annual Average (RAA): The Average of all monthly or quarterly samples for the last year at all sample locations. Calculation of the RAA may contain data from the previous year.

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

## Units:

ppm = parts per million or milligrams per liter (mg/L).

pos = positive samples.

ppb = parts per billion or micrograms per liter (µg/L).

ntu = nephelometric turbidity units.

pCi/L = picocuries per liter (a measure of radioactivity).

## Notes:

1) Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take less than 40 samples per month. 2) E. Coli: E. coli 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. 3) Fluoride: For those systems that fluoridate, fluoride levels must be maintained between 0.5 to 1.2 ppm. The optimum level is 0.7 ppm. 4) Lead/Copper: Action levels (AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level. 5) Nitrate: 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 advice from your health provider. 6) Arsenic: While your drinking water may meet EPA's standard for Arsenic, if it contains between 5 to 10 ppb you should know that the standard balances the current understanding of arsenic's possible health effects against the costs of removing it 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. Quarterly compliance is based on running annual average. 7) Gross Alpha: Action level over 5 pCi/L requires testing for Radium 226 and 228. Action level over 15 pCi/L requires testing for Uranium. Compliance is based on Gross Alpha results minus Uranium results = Net Gross Alpha. 8) Radon: The State of Maine adopted a Maximum Exposure Guideline (MEG) for Radon in drinking water at 4000 pCi/L, effective 1/1/07. If Radon exceeds the MEG in water, treatment is recommended. It is also advisable to test indoor air for Radon. 9) TTHM/HAA5: Total Trihalomethanes and Haloacetic Acids (TTHM and HAA5) are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water. Compliance is based on running annual average.

**All other regulated drinking water contaminants were below detection levels.**

## Secondary Contaminants:

Iron	0.12 ppm	3/29/2017
Magnesium	4.8 ppm	3/29/2017
Sodium	7.0 ppm	3/29/2017
Sulfate	8 ppm	3/29/2017
Chloride	8 ppm	3/29/2017

The Lincoln Water District's schedule of rates is as follows:

Cubic Ft. Per Quarter	Rate Per C – 2011/2012	Billing Amount
First 1200	5.44	65.21
Next 7800	2.74	213.70
For 9000		278.91
Next 9000	1.68	
For 18000		
Excess of 18000	0.83	
	Minimum Charges	
Size Meter Inches	Water Allowance Cu.Ft.	Minimum Charge
5/8	1200	65.21
3/4	1500	73.37
1	3000	114.43
1 1/2	6000	196.42
2	9000	278.76
3	18000	429.18
4	30000	529.23
6	60000	778.78

**\*\* COST OF WATER AT SELECTED USAGES\*\***

To Convert Cubic Feet to Gallons, Multiply Cubic Feet by 7.48052 = Gallons