

LEWISTON WATER DIVISION

2014 Annual Water Quality Report

IS MY WATER SAFE?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act. This report is a snapshot of last year's water quality and is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

WHERE DOES MY WATER COME FROM?

Your drinking water comes from Lake Auburn. The source of Lewiston and Auburn's public drinking water since 1875, Lake Auburn is fed by a mostly forested watershed extending from Buckfield to Turner to Hebron and Minot to East Auburn. Due to the high quality of Lake Auburn's water the EPA has exempted the Auburn Water District and Lewiston Water Division from the requirement to filter the water prior to disinfection. This exemption reduces treatment costs while providing excellent, safe water to our consumers. To assure long-term protection of the water source, in 1993 the two Districts formed the Lake Auburn Watershed Protection Commission; empowered to protect the lake and surrounding watershed. The most effective, safest, and least expensive method for keeping Lake Auburn clean is to assure that water entering the lake is from a protected, well managed watershed. For more information about watershed protection and how you can do your part; visit www.lakeauburnwater.org or call 207-784-6469.

Recently a study of the watershed was completed, indicating potential sources of contaminants to the lake. A copy of the report, called The Lake Auburn Diagnostic Study, is available at www.lakeauburnwater.org.

SOURCE WATER ASSESSMENT:

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 about the SWAP, please contact the DWP at telephone 287-2070.

ARE THERE CONTAMINANTS IN MY DRINKING WATER?

The sources of drinking water (tap 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 can pick up substances resulting from the presence of animals or from human activity. Water can carry:

MICROBIAL CONTAMINANTS, such as viruses and bacteria, that 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 stormwater 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, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and

RADIOACTIVE CONTAMINANTS, which can be naturally occurring or be the result of oil and gas production and mining activities.



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.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Environmental Protection Agency's (EPA) **Safe Drinking Water Hotline (800-426-4791)**.

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

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

DESCRIPTION OF WATER TREATMENT PROCESS

Water from the intake pipes is screened prior to the addition of measured doses of chloramine. Chloramine is a disinfectant that kills harmful bacteria, viruses, and microbes. Additional disinfection is achieved with ultraviolet treatment. Fluoride is added for dental health benefits. Because some of our customers' homes contain lead and/or copper plumbing, we add a blended phosphate to the water to stop lead corrosion. Finally, we adjust the water with sodium hydroxide to prevent copper corrosion.

WE AIM TO DELIVER SAFE DRINKING WATER TO YOUR TAP; ALWAYS. State Licensed operators run your water system. The drinking water is tested 24 hours a day, 7 days a week. We conduct thousands of water tests each year to monitor water quality. In addition, we closely monitor the lake and contributing waters. Technology enables safety systems to ensure that treatment continues to operate correctly.

ADDITIONAL INFORMATION FOR LEAD

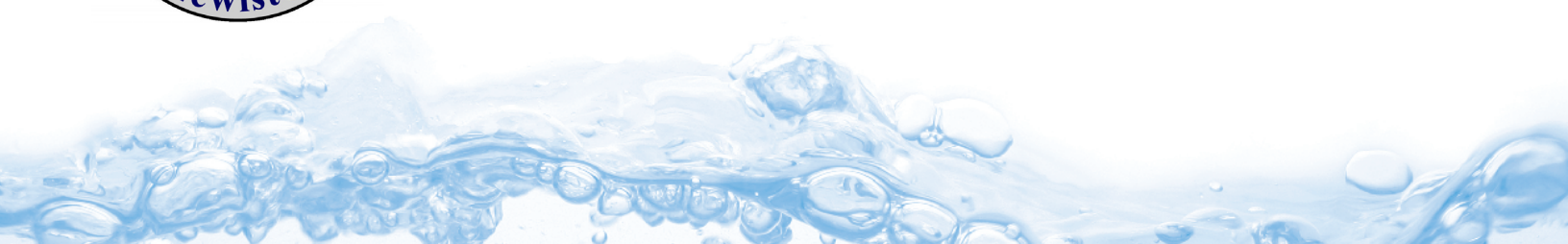
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Auburn Water District is responsible for providing high quality drinking 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 Hotline or at <http://www.epa.gov/safewater/lead>.



LEWISTON PUBLIC WORKS WATER DIVISION

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PROTECTING YOUR DRINKING WATER:

Since the 1800's Lewiston and Auburn residents, businesses, and visitors have depended on Lake Auburn's water for health, recreation, and quality of life. To assure that supply, private citizens and elected officials have worked hard to ensure that the lake remains in pristine condition. Our predecessors sacrificed short-term gain in favor of a clean water future for generations to come.

As beneficiaries of those past practices, we now hold a responsibility to 'pay it forward' to future generations- they too deserve a safe supply of clean water. Like past policy makers, we must protect and preserve the legacy of the lake.



Natural landscapes and forests surrounding the lake protect it from pollution; from septic systems, asphalt roads and driveways, salts, manure, chemical lawn care, and other inputs to the watershed from everyday human activities. Compromising those natural protections would negatively impact clean water by increasing pollution into our waterways leading to the lake. Not only would the amount of pollution increase but the types of contaminants would change as well.

Some suggest that it is now time to reduce land conservation, even if it means putting the lake at risk; that we could solve future pollution problems with a filtration plant. We disagree. First, filtration does not guarantee 100% removal of contaminants 100% of the time, and second, even the most efficient filtration plants necessitate, for both the short term and the long-term, more treatment, more staff, more buildings, more operations, and more maintenance- all at much greater and certainly ever increasing costs. Further, the best practices for filtration operations require keeping a clean watershed, in other words, doing exactly what we currently do.

The Lewiston Water professionals believe our current waiver to filtration saves our customers a significant amount of money without compromising the protection of their health. We are committed to source protection as a means of maintaining the waiver but would continue source protection efforts even if the waiver were revoked since a filtration plant is not an absolute barrier. The only absolute barrier to waterborne pathogens is to prevent them from ever being introduced to your source of supply.

For more than 100 years, water quality experts have developed and put into practice solid, science-based methods to protect your drinking water at a reasonable cost to you. Those experts understand and agree that lake protection is the best method to ensure the future of clean, safe water. There is no benefit to putting the lake at risk in the hopes that an expensive filtration system will solve problems that don't exist today.

DEFINITIONS

Maximum Contaminant Level Goal (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 Contaminant Level (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.

Running Annual Average (RAA): The Average of all monthly or quarterly samples for the last year at all sample locations

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

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

Variations and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Maximum Residual Disinfection Level Goal (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.

Maximum Residual Disinfectant Level (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.

Monitored Not Regulated (MNR)

State Assigned Maximum Permissible Level (MPL)

Not Applicable (NA)

Not Detected (ND)

Monitoring not required, but recommended (MR)

Units:

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

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

ppb = parts per billion or micrograms per liter ($\mu\text{g/L}$)

pos = positive samples.

WHAT'S IN YOUR WATER? This table provides Lewiston Water Division's 2014 Water Quality sampling results for the public water supply

Substance	Units of Measure	Violation	Highest Level Allowed (MCL)	Maximum Contaminant Level Goal (MCLG)	Lewiston Water Highest Detected Level	Result Sample Date	Range of Detections	How it gets in the water	
Total Coliform	Per 100 milliliters	NO	5%	0 positive	2 pos.	July		Naturally found in environment	
Chloramine	Parts per million	NO	MRDL= 4	MRDLG= 4	2.8	Aug	1.9-2.8	Water additive for disinfection	
Turbidity	NTU	NO	5	NA	1.49	Nov	0.54 -1.49	Soil pollution	
Copper	Parts per million	NO	AL= 1.3	1.3	0.251	Jan-Dec	.023-.770	Corrosion of household plumbing	
Fluoride	Parts per million	NO	4	4	0.7	Jan-Dec	0.6-0.7	Water additive promoting strong teeth	
Lead	Parts per billion	NO	AL= 15	0	14	Jan-Dec	0-120	Corrosion of household plumbing	
Radium-228	Pico curies per liter	NO	5	0	0.485	10/17/2011		Erosion of natural deposits	
Haloacetic acids	Parts per billion	NO	60	0	39	Jan-Dec	12-39	By-product of chlorination	
Total Trihalomethanes	Parts per billion	NO	80	0	40	Jan-Dec	18-40	By-product of chlorination	
Arsenic	Parts per billion	NO	10	0	0.59	4/16/2014		Erosion of natural deposits. Runoff from orchards, glass and electronics production wastes.	
Barium	Parts per million	NO	2	2	0.00084	4/16/2014		Erosion of natural deposits. Discharge of drilling wastes. Discharge from metal refineries.	
OTHER INFORMATION								<p>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) 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. 3) Lead/Copper: Action levels (AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level. 4) 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. 5) 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. 6) 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. 7) 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.</p>	
Chloride	Parts per million	NO	250	NA	12	4/16/2014			
Iron	Parts per million	NO	0.3	NA	<0.05	4/16/2014			
Magnesium	Parts per million	NO	NA	NA	0.93	4/16/2014			
Manganese	Parts per million	NO	0.05	NA	0.0065	4/16/2014			
Sodium	Parts per million	NO	NA	NA	13	4/16/2014			
Sulfate	Parts per million	NO	250	NA	3	4/16/2014			
Zinc	Parts per million	NO	5	NA	<0.002	4/16/2014			
Nitates	Parts per million	NO	10	NA	0.06	4/16/2014			Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Calcium	Parts per million	NO	NA	NA	5.5	4/16/2014			
Total Hardness	Parts per million	NO	NA	NA	17.6	4/16/2014			

THERE WERE NO VIOLATIONS IN 2014
THERE WERE NO WAIVERS FROM TESTING GRANTED IN 2014