

2006 Water Quality Report



Only Tap Water DeliversSM

Auburn Water District / Lewiston Water Division

Dear Customer,

The Auburn Water District (AWD) and the Lewiston Public Services Water Division (LPSWD) are pleased to send you this annual report on your drinking water quality. This report provides you with important information about the quality of the public drinking water supply. Please take time to read this brochure. If you have any questions, please feel free to contact us.

WHERE DOES OUR WATER COME FROM?

Your water comes from Lake Auburn, located in Auburn. This lake has been the sole source of public water since 1887. When full, Lake Auburn holds approximately 26 billion gallons of water and covers an area of 2290 acres. The watershed (the land area that drains into the lake) encompasses 17.89 square miles and extends into Turner, Hebron, Minot, Buckfield, as well as Auburn.

Lake Auburn has exceptional water quality. It has been protected as a public drinking water source for over 100 years. The water utilities take many steps to protect Lake Auburn. If we didn't, the two communities would have no alternative source of public drinking water. Protection of Lake Auburn is the primary responsibility of the Lake Auburn Watershed Protection Commission (LAWPC), formed in 1993 in a joint effort from the two water suppliers to protect Lake Auburn. The Commission owns about 80 percent of the shore line and several upland parcels in the watershed. The Commission's By-Laws and local zoning ordinances provide strong protection to the watershed, the shore and the lake. In addition, AWD and LPSWD have staff responsible for managing and patrolling, monitoring and investigating conditions that could affect lake quality.

Approximately 75 percent of the watershed is forested. Urban grasses, pastures and croplands cover about 23 percent of the watershed. There are threats to Lake Auburn. Both point and non-point sources of potential contamination are present in the watershed. Some point sources for potential pollution include the urban uses which are concentrated along Route 4 and south of the lake. Land uses include limited commercial businesses, a technical college, a mobile home park and gravel mining. Other threats in the watershed include petroleum storage, sand storage, a closed landfill, gravel mining, equipment and construction contractor facilities. Non-point sources include urban storm runoff, drainage and erosion from roadways located adjacent to the lake and upstream along major tributaries. The water supply intake is located in the southeast portion of the lake where the lake and shore land are highly restricted. Recent testing shows the source meets applicable state and federal drinking water standards. Lake Auburn's susceptibility to pollution received a source water assessment ranking of low to moderate, based on good water quality, extensive land ownership and restrictions for the intake area and shoreland, but also the high potential for development and pressure on the Lake. Ranking methods were developed by the Citizens and Technical Advisory Committee, and approved by EPA under the federal Safe Drinking Water Act. The Lake Auburn Watershed Protection Commission, AWD, LPSWD, and local communities are working to educate the public about maintaining and protecting the water source. The protection efforts need to continue and grow in order to ensure we have safe drinking water well into the future. You may

obtain a copy of our Source Water Assessment by contacting our office, the Lewiston or Auburn city office, or the Drinking Water Program at telephone 287-2070.

The Auburn Water District and the Lewiston Public Services Water Division serve over 46,000 people from the Lake Auburn water supply. Please consider this when you visit the watershed. Your actions can have an impact on the water quality of Lake Auburn. Funds used to protect our water, are received from our customers and State and Federal grant programs.

HOW IS OUR WATER TREATED?

Lake Auburn has exceptional water quality which minimizes the amount of treatment that is required. Since the lake is of superior quality, AWD and LPSWD were granted and continue to maintain a waiver from the filtration requirement of the Surface Water Treatment Rule. Lake Auburn is one of 11 surface water sources in Maine that is not required to filter the water. This allows us to further protect the watershed by dedicating resources to land acquisition, forestry management, education, and upgrading storage and piping systems while keeping the cost of your water as low as possible. The average cost for 1000 gallons of drinking water is \$2.29 in Auburn and \$2.55 in Lewiston.

AWD and LPSWD licensed operators treat water to ensure its safety. The first treatment step is the disinfection of Lake Auburn water. The operators carefully add measured doses of chlorine to the water to kill any pathogens (organisms that might cause disease) that may be present in the water. Fluoride is added to provide protection against tooth decay. A blended phosphate is added to minimize lead corrosion in residential plumbing. The acidity of the water is also adjusted using sodium hydroxide to minimize corrosion of copper plumbing. The process goes one step further by adding chloramines before the first customer which protects the water while it is in the water pipes leading to our homes and businesses. Chloramines are made by combining chlorine and ammonia in water. Chloramination began as a result of stricter EPA standards reducing the amount of disinfection by-products allowed in drinking water. Disinfection by-products form when chlorine reacts with organics in the water. As a result, both systems are able to reduce the amount of chlorine added to the water.

The drinking water is tested 24 hours a day, 7 days a week, 365 days a year for most of our treatment systems. The water is tested before and after each process. We have systems in place to automatically notify operators and shut off pumps if necessary in the event of a failure of our critical systems. You may even see us routinely testing various locations within the Auburn and Lewiston distribution areas. You would be notified if a problem with your water occurred. Depending upon the severity and urgency of the issue, we would notify you in person, using the media, or by letter. Our goal is to deliver safe drinking water to you at all times.

WHO ELSE MAKES SURE OUR WATER IS SAFE?

The Safe Drinking Water act, enacted by Congress, directs the State and the Environmental Protection Agency (EPA) to establish and enforce minimum drinking water standards. These standards set limits on certain biological, radioactive, organic, and inorganic substances sometimes found in drinking water.

The Maine Drinking Water Program is the primary enforcement agency for the EPA. They ensure that all the EPA regulations are met as well as State Drinking Water requirements. We send reports to the State monthly. These reports contain water quality and quantity information, chemicals used and amounts, and calculated values ensuring that we meet the standards. The Drinking Water Program conducts inspections of our watershed and facilities at regular intervals.

AUBURN WATER DISTRICT

The Auburn Water District's distribution system includes approximately 140 miles of water mains. The system serves 6306 metered customers and provides fire protection service through 606 hydrants. In 2006, the District treated and delivered 952 million gallons of water, an average of 2.7 million gallons each day. The system



Auburn Water District Office Staff: Diane Drinkwater, Jeannine Audet, Diane Tribou, Sue Lajoie

also includes 3 reservoirs and a standpipe, which holds a combined total storage of 7.4 million gallons. This storage allows the system to meet peak system demand periods and satisfy the requirements for fire suppression. The Auburn Water District completed several distribution system improvements aimed at improved water quality and system reliability. Distribution system improvements completed in 2006 included work on Brook, Cleveland, Sheridan, Pleasant, Fairview, Fern, Dexter Newbury, Laurel, East Bates, and High Streets. Approximately 3500 feet of pipe was cleaned and cement lined. Another 5400 feet of cast iron water pipe was replaced with new pipe. Auburn also had a water main installed to Poland Spring Bottling for domestic use. Poland Spring Bottling is not using our water for bottling.

A Board of Trustees appointed to 4-year terms by the Mayor and Auburn City Council governs the District. The Board meetings are open to the public and are scheduled to take place at 4:00 p.m. every third Wednesday of the month at the District Office Building at 268 Court Street. The current Trustees are: **President:** K.C.Geiger; **Treasurer:** Bruce Rioux; **Trustees:** Franklin Goss, Catherine Thorpe, Roy Farnsworth; Preston Chapman; **Mayor:** John Jenkins; **Mayor's Representative:** Richard Gleason

LEWISTON PUBLIC SERVICES WATER DIVISION

Lewiston Public Services Water Division's distribution system includes 160 miles of drinking water mains. The system serves 9239 metered customers and provides fire protection service through 718 hydrants. In 2006, the Division treated and delivered 1.6 billion gallons of water, an average of 4.3 million gallons each day. The system also includes four storage tanks which hold 14.6 million gallons. This storage allows the system to meet peak system demand periods and maintain an adequate supply for fire fighting purposes. The Division replaced over 4300 feet of old unlined cast iron pipe with new lined ductile iron pipe. Also Lewiston Water Division cleaned and cement lined the following: Webster St – 5800 ft, Harold St – 1730 ft, Charles St – 1260 ft, Montello St – 1250 ft, Michaud Hts/ Nimitz St – 1500 ft.

The Lewiston Public Services Water Division is municipally owned and operated. The Lewiston City Council meets bi-weekly, and has 2 year terms. The council meets every first and third Tuesday at 7:00 p.m. in the City Hall Council Chambers. These meetings are open to the public. Following is a current list of Mayor and Council: Mayor: Laurent F. Gilbert Sr.; Council President: Renee Bernier; Councilors: Ward 1:

Stavros Mendros; Ward 2: Renee Bernier; Ward 3: Lilian Lafontaine-O'Brian; Ward 4: Ronald Jean; Ward 5: Paul Samson; Ward 6: Mark Paradis; Ward 7: Normand Rousseau.

LAKE AUBURN WATERSHED PROTECTION COMMISSION

The Lake Auburn Watershed Protection Commission is an eight member board consisting of three members of the board appointed by the Trustees of the Auburn Water District, three appointed by the City of Lewiston Council, one appointed by the town of Turner and one appointed by the Androscoggin Valley Council of Governments. The towns of Hebron, Minot, and Buckfield also have a shared appointment to the Commission but have not chosen to be represented on this Commission.

The Auburn Water District and the Lewiston Public Services Water Division provide professional staff to the LAWPC Board.

The Commission meets every two months. The Commissioners are: Chair: Roger Bouvier, Auburn; Bruce Rioux, Auburn; Raymond Bedette, Auburn; Joseph Grube, Lewiston; Ronald Jean, Lewiston; David Jones, Lewiston; Richard Thibodeau, Turner; Bob Thompson, AVCOG.

In 2006, we completed projects around Lake Auburn to help control erosion and treat pollutants from runoff. One of our most outstanding projects was the creation of retention ponds, a rain garden, and infiltration areas at Central Maine Community College (CMCC). We also completed work in North Auburn and shoreline areas of the Lake. Funding for these projects came from grants and CMCC. Work was completed by water utility personnel.

Invasive plants continue to be a big threat in our Lake and all water bodies in Maine. In 2006, boat inspectors at the public launch checked 222 boats for plant fragments. Over 1000 brochures were brought to town offices with information about invasive aquatic plants. The Commission hired trained divers to help manage Variable leaf milfoil in one of the wetlands connected to Lake Auburn by the old ice house. A small patch of the invasive plant was confirmed to be completely removed by LAWPC staff from another wetland closest to our intakes. The Basin acts as a natural buffer in the watershed and is vital to protecting Lake Auburn. Unfortunately, the Basin has a serious Variable leaf milfoil infestation as does the north cove of Lake Auburn and the stream connecting the two. Other species of invasive plants could pose a much more serious situation for Lake Auburn. We will continue to survey the Lake, Basin, and the wetlands to rapidly respond to new infestations. Please check your boats, trailers, gear, and live wells for plant fragments. Piles of discarded plants left on land can regenerate. Dispose of plant matter in trash receptacles.

In the fall of 2004, Gulls posed a problem in Lake Auburn increasing fecal coliform counts in the untreated water. Since then, we have had a very intensive and successful harassment program in place to discourage gulls from roosting on Lake Auburn. In 2006, our gull harassment program began in June, with assistance from USDA. These efforts were successful in keeping bacteria levels well below the regulatory requirements. Lewiston Water Division and Auburn Water District failed to install filtration as of July 1, 2006 per the requirements of the Surface Water Treatment Rule (SWTR). This is not an emergency situation and there are no particular actions that you need to take. 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. These symptoms are not only caused by organisms in drinking water. If you experience these symptoms you may want to seek medical advice. However, the water systems adequately disinfected the public water and this event did not interfere with our disinfection in any way. The event also did not prevent maintenance of effective disinfection residuals throughout the distribution system. Microbial determinations indicated that the water was properly disinfected. Tests for Giardia and Cryptosporidium (parasites) and viruses were also negative. We test for bacteria every day and exceed requirements for how often we test.

The two water utilities are planning to install ultraviolet light, an additional means of disinfection, to also control microbial organisms and to comply with other federal drinking water requirements. We are also



Retention Pond at Central Maine Community College

looking at other treatment options for the future water regulations, including filtration. As we progress with projects, we will offer information to you either through direct mail or our local media.

You can help discourage gulls from roosting on our lakes and ponds. Please do not feed gulls anywhere and secure your trash receptacles.

COMPOUNDS FOUND IN YOUR WATER

Note: Results include some 2002 data

Contaminant	Units	Violation	(MCLG) Ideal Goal	(MCL) Highest Level Allowed	(AWD Found) Detected Level	(LPSWD Found) Detected Level	Range Of Detections	How it gets in the water
Total Coliform (Microbiological) Reported for your information	Per 100 milliliter	NO	0	1 pos (d)	1 Positive 6/26, 9/6	1 Positive 6/14, 6/18, 7/10, 7/20, 7/21, 8/27 (10/05)		Naturally Found in the Environment
Turbidity	NTU	NO		5 (c)	2.23 (8/06)	2.48 (11/06)		Soil runoff
Copper (90 th % Value)	Parts per million	NO	1.3	1.3(a)	0.17 (7/06)	0.23 (6/05)	.05-.34AWD .05-.4 LWD	Corrosion of household plumbing
Fluoride	Parts per million	NO	4	4	1.39 (1/06)	1.39 (4/06)		Water additive which promotes strong teeth
Lead (90 th % Value)	Parts per billion	NO	0	15(a)	10 (7/06)	7 (6/05)	1-593 AWD 1-725 LWD	Corrosion of household plumbing
Gross Alpha Screen	Pico curies per liter	NO	0	15	0.146 (1/06)	0.552 (2/06)		Erosion of natural deposits
Radium 228	Pico curies per liter	NO	0	5	0.26 (3/02)	0.17 (3/02)		Erosion of Natural Deposits
Haloacetic Acids	Parts per billion	NO	0	60(b)	RAA= 53.3	RAA= 49.69	46-85 AWD 40-58 LWD	By-product of drinking water chlorination
Total Trihalomethanes	Parts per billion	NO	0	80(b)	RAA= 37.7	RAA= 31.8	22-49 AWD 16-45 LWD	By-product of drinking water chlorination
Barium	Parts per million	NO	2	2	0.002 (1/06)	0.002 (5/05)		Erosion of natural deposits

Compounds found in your water. Note results include some 2002 data.

IMPORTANT INFORMATION FROM EPA AND DHS

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 can be obtained by calling EPA's Safe Drinking Water Hotline (1-800-426-4791). 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 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 storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production and can come from gas stations, urban runoff, and septic systems.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people 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, other microbial contaminants and potential health effects are available from the Safe Drinking Water Hotline (1-800-426-4791).

DEFINITIONS

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

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

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

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

NA = Not Applicable

(a) Lead/Copper: Action levels are measured at consumer's tap, 90% of the tests must be equal to or below the action level.

(b) These chemicals are tested for quarterly. Compliance with the regulation is based on a four quarter running average. The result reported is the average value of the four quarters of 2006 and reflects compliance with the regulations. Both Auburn and Lewiston were in compliance for Trihalomethanes and Haloacetic acids in 2006.

(c) Turbidity is a measure of cloudiness or suspended colloidal matter (silt). Excessive turbidity levels can cause problems with water disinfection.

(d) Total Coliform Bacteria: Used as an indicator to determine disinfection effectiveness. E.coli was not detected in any distribution samples in 2006. For Auburn, further testing indicated a contaminated sample site. For Lewiston, further testing indicated that water main flushing was needed.

Notes:

- 1) Total Coliform Bacteria: Reported as the highest monthly number of positive samples.
- 2) Fluoride: Fluoride levels must be maintained between 1-2 parts per million for maximum benefit.
- 3) Gross Alpha: Action level over 5 pico curies per liter requires testing for Radium. Action level over 15 pico curies per liter requires testing for Radon and Uranium.

All other regulated drinking water contaminants were below detection levels.

OTHER SOURCES OF INFORMATION

Organization	e-mail / Phone	Type of Information
American Water Works Association	www.awwa.org	International scientific and educational society dedicated to the improvement of drinking water quality and supply.
US Environmental Protection Agency (EPA)	www.epa.gov 1-800-426-4791	Present and future federal regulations, water quality data, and source water information.
National Center for Disease Control	www.cdc.gov 1-800-311-3435	Information on Disease Control and Prevention
State of Maine Drinking Water Program	www.medwp.com 1-207-287-2070	State agency responsible for enforcing federal and state drinking water rules.
City of Lewiston	www.ci.lewiston.me.us	Lewiston information
Auburn Water & Sewer District	www.awsd.org	Auburn information

CONTACTS AT THE UTILITIES

Normand R. Lamie, PE, General Manager AWD, 784-6469
 John Storer, PE, District Engineer AWD, 784-6469
 Richard Burnham, PE, Lewiston City Engineer, 782-8275
 Kevin Gagne, Water & Sewer Superintendent LPSWD, 782-8275
 Mary Jane Dillingham, Water Quality Manager, 784-6469



DRINKING WATER QUALITY MANAGEMENT



AUBURN WATER DISTRICT
LEWISTON WATER DIVISION
P.O. Box 414
Auburn, ME 04212-0414

PRSRT STD
ECRWSS
U.S. POSTAGE
PAID
PERMIT NO. 56

Postal Patron ECRWSS



FREQUENTLY ASKED QUESTIONS

My water is cloudy or discolored once in a while. What causes it and is it safe to drink?

Water being delivered to your home or business is pumped and has pressure. Sometimes if the system of pipes is being worked on, air can get into the pipes. This is temporary and should clear. Iron will cause yellow water. Both Auburn and Lewiston are replacing or lining the older iron pipes but some still exist. If this occurs, run your cold water until it clears. If it persists, give us a call. It may indicate a problem we don't know about such as a water pipe break. Hydrant flushing will sometimes cause discolored water. Run your cold water until it clears. Since your water has been disinfected, it is still safe but do not wash your white clothes or staining may result.

Is my water hard or soft?

Lake Auburn water is soft. It has 17 milligrams per liter of hardness which equals 1 grain per gallon. You do not need to soften your water.

Why can't I swim in Lake Auburn?

Historically hundreds of thousands of people have died from waterborne diseases. The most effective way to prevent a disease outbreak is to restrict body contact with the water. Domestic animals such as dogs, horses, cows, etc. are also not allowed in the water. The regulations for Lake Auburn restrict all body contact, even your hands from touching the water! The fines are hefty, up to \$2500.00 for each violation.

Why are boats allowed on Lake Auburn?



Certain boats are allowed in the unrestricted area of Lake Auburn. The restricted area is off limits to all boats including non motorized boats such as kayaks and canoes. Sailboats, catamarans, most kayaks, personal watercraft, any boat with sleeping quarters or onboard toilet facilities (whether operational or not) are prohibited from the entire Lake. The "no body contact" provision applies to the entire Lake and all ponds and streams that lead to the Lake within Auburn. The public boat launch on Route 4 is owned by the Commission and is the only public access for Lake Auburn. Both the public access and the intakes are tested for MTBE. MTBE has not been detected thus far at our intakes but has been detected at the boat launch. Please boat safely and clean your boat before visiting our Lake.

Is there Arsenic in my water?

No, Arsenic has not been detected. Other chemicals such as lead, nitrate, nitrite, cadmium, chromium, and mercury also have not been detected.

How much Sodium is in my water?

Sodium levels in the water are low. The treated water has between 8-11 milligrams per liter of Sodium.

What can I do to reduce my exposure to lead in drinking water?

Both water systems treat the water to reduce your exposure to lead from the pipes in your home. Lead is usually found in older solder. The best way to lower lead levels is to run your water a few minutes before using for drinking or cooking. Never take water from the hot tap to make baby formulas, cooking, or for drinking. Be aware of other sources of lead such as paint, soil, dust, and some pottery.