

PWSID ME0090520
ELLSWORTH WATER DEPARTMENT
2015 Consumer Confidence Report

General Information

Water System Contact Name: Larry Wilson _____

Address: One City Hall Plaza _____

City, State, Zip Code: Ellsworth, Maine 04605 _____

Telephone #: 207-667-8632 **Fax#:** 207-667-4908 **Email:** lwilson@ellsworthmaine.gov _____

Report Covering Calendar Year: Jan 1 - Dec 31, 2015

Upcoming Regularly Scheduled Meeting(s): Upon request

Source Water Information

Description of Water Source: Surface Water Intakes: 1 (Branch Lake)

Water Treatment & Filtration Information: We operate a water treatment plant on Branch Lake which coagulates & cleans the lake water through gravel, sand, and anthracite filters to remove dissolved and suspended organics & algae. After removing these impurities, we pass ultraviolet light through the water to reduce Giardia and other harmful microscopic organisms. Our finishing treatments add caustic soda to reduce corrosion of pipes, fluoride to reduce tooth decay, and chlorine bleach to keep us safe from harmful bacteria.

Source Water Assessment:

Our drinking water source is 3000 acre Branch Lake, which is located entirely within the City of Ellsworth, Maine. The lake is in turn supplied by tributary streams, ponds, and wetlands in Orland, Dedham, and Ellsworth. These waters, and the land draining into them, make up our 30.6 square mile Branch Lake Watershed, in Hancock County, Maine.

As water travels over the surface of this land and through the ground, it dissolves natural minerals, radioactive material, and also picks up substances resulting from human and animal activity.

To address human activity, the Drinking Water Protection ordinance is intended to protect our drinking water supply and its sources from pollution, development, recreational use, and invasive aquatic species.

Water quality data from Branch Lake has been periodically collected by members of the Maine Volunteer Lake Monitoring Program (VLMP) and the Department of Environmental Protection (DEP) since 1974. A 2003 VLMP report states the water quality in Branch Lake at that time was excellent in the north basin, and above average in the south basin, with low potential for nuisance algal blooms. Since 2006, more frequent measurements of clarity and dissolved oxygen (D.O.) have been performed by the Ellsworth Water Department at the deepest holes in each of the lake's three basins (Upper Lake, Mcgown Cove, and Lower Lake).

The Maine Drinking Water Program (DWP) has evaluated our public water supply as part of the Source Water Assessment Program (SWAP). They assessed geology, hydrology, land use, water test results, and the extent of land protection by local ordinance to see how likely it is that our drinking water source will become contaminated by human activities. The SWAP assessment indicates that susceptibility to human contamination of the water quality in Branch Lake is low-moderate. Their conclusion is based on conditions observed, including development density, conservation ownership in the watershed, relative absence of activities that handle chemicals in the watershed and water quality data.

Please contact Lawrence Wilson Superintendent at 667-8632 if you have any questions.

Water Test Results

<i>Contaminant</i>	<i>Date</i>	<i>Results</i>	<i>MCL</i>	<i>MCLG</i>	<i>Source</i>
Microbiological					
COLIFORM (TCR) (1)	Jun 2015	1 pos	1 pos/mo or 5%	0 pos	Naturally present in the environment.
Inorganics					
BARIUM	3/3/2015	0.0014 ppm	2 ppm	2 ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
FLUORIDE (2)	11/17/2015	0.8 ppm	4 ppm	4 ppm	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
NITRATE (4)	3/25/2014	0.03 ppm	10 ppm	10 ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.

Radionuclides

RADIUM-228	4/5/2011	0.375 pCi/l	5 pCi/l	0 pCi/l	Erosion of natural deposits.
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Lead/Copper

COPPER 90TH% VALUE (3)	1/1/2013 - 12/31/2015	0.066 ppm	AL = 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems.
LEAD 90TH% VALUE (3)	1/1/2013 - 12/31/2015	3.3 ppb	AL = 15 ppb	0 ppb	Corrosion of household plumbing systems.

Disinfectants and Disinfection Byproducts

318 MAIN STREET

TOTAL HALOACETIC ACIDS (HAA5) (7)	LRAA (2015)	59 ppb	60ppb	0 ppb	By-product of drinking water chlorination.
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Range (28-47 ppb)

TOTAL TRIHALOMETHANE (TTHM) (7)	LRAA (2015)	48 ppb	80 ppb	0 ppb	By-product of drinking water chlorination.
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Range (28.5-65.2 ppb)

368 HIGH ST (BECKWITH HILL OTR)

TOTAL HALOACETIC ACIDS (HAA5)	LRAA (2015)	56ppb	60 ppb	0 ppb	By-product of drinking water chlorination.
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Range (17-57 ppb)

TOTAL TRIHALOMETHANE (TTHM)(7)	LRAA (2015)	66ppb	80ppb	0 ppb	By-product of drinking water chlorination
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Range (49.8-83 ppb)

Chlorine Residual (Add chlorine residual information)

CHLORINE RESIDUAL	RAA	0.42_ ppm	MRDL=4 ppm	MRDLG= 4 ppm	By-product of drinking water chlorination.
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Range (_0.30-0.55_ppm)

Turbidity (Add turbidity information, highest monthly reading in 2015)

TURBIDITY	Oct. 2015	.74 NTU	5 NTU	N/A	Soil runoff.
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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.

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

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.

Maximum Residual Disinfectant 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.

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

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 (µg/L).

pos = positive samples.

MFL = million fibers per liter

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.

All other regulated drinking water contaminants were below detection levels.

Secondary Contaminants (You are not required to list detects for secondary contaminants, but this information, particularly sodium levels, might be useful to your customers. The decision to supply this information in your CCR is up to you.)

CHLORIDE	9 ppm	3/3/2015
SODIUM	6 ppm	3/3/2015
SULFATE	2 ppm	3/3/2015
MAGNESIUM	0.51 ppm	3/3/2015
MANGANESE	0.0022 ppm	3/3/2015
NICKEL	0.00076 ppm	3/3/2015
ZINC	0.0015 ppm	3/3/2015

Health Information

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.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from 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 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. 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 (1-800-426-4791).

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.

Ellsworth Water Department 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>

Violations

Violation Period	Violation Type
9/1/2015-9/30/2015	SM Violation – STATE MONITORING FLUORIDE DIST SYS

We are required to monitor our drinking water for specific contaminants on a regular basis. Results of regular monitoring indicate whether or not our drinking water meets health standards. During 2015, we did not test for, or failed to collect all necessary tests for Fluoride.

Waiver Information (to be included in the CCR for systems that were granted a waiver)

In 2013, our system was granted a 'Synthetic Organics Waiver.' This is a three year exemption from the monitoring/reporting requirements for the following industrial chemical(s): TOXAPHENE/CHLORDANE/PCB. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source.

Certification

I _____ hereby certify and attest that I have distributed copies of this Consumer Confidence Report to all users of my public water system on _____, by mail , posted in the newspaper , or electronically , (check one) in accordance with 40 CFR§141-142. I further certify that the information contained in this annual Consumer Confidence Report is correct and consistent with compliance monitoring data. Any intentional deception or misinformation represented in this report may be cited as a violation of State and U.S. EPA National Primary Drinking Water Rules.

Signed: _____ Dated: _____

Instructions: Please complete this CCR template (fill in the blanks) with all pertinent information or use the information provided in this template to create your own CCR report. Distribute copies of this CCR to all customers or residents served by this water supply as well as to the State of Maine Drinking Water Program by July 1st. Also send a signed and dated (Certification) CCR to the DWP for our records by October 1st. If you have provided the CCR electronically please provide documentation on how consumers were notified as well as the direct link to the CCR on the internet. If the CCR was provide via e-mail please provide a sample copy of the e-mail with the embedded or attached CCR. Should you have any questions, contact your Compliance Officer at the DWP, telephone: 207-287-2070.

