

# *Old Town Water District's Annual Drinking Water Quality Report for 2017*

**Background:** We are pleased to provide you with this year's Annual Water Quality Report. We want our customers to know about the quality water services we have delivered to you over the past year. Our goal is to provide to you a safe and dependable supply of drinking water.

**Water Source:** The Old Town Water District was formed in 1925. We serve the towns of Old Town, Milford, Bradley, portions of Orono, portions of the University of Maine, and the Penobscot Nation on Indian Island. Our water comes from five gravel packed wells: three on Spring Street and two on Bennoch Road. All of our water is treated at the Spring Street filter plant. We add chlorine for protection against harmful pathogens, adjust pH for corrosion control, and add fluoride to reduce tooth decay, as approved by referendum vote of the citizens of the Old Town Water District.

**Contact Info:** Our office is located at 109 Center Street, and our office hours are Monday through Friday, 8:00 AM to 4:00 PM. If you have any questions about this report or your water utility, please contact Steven M. Lane, Superintendent, Old Town Water District, 109 Center Street, Old Town, Maine 04468. Phone 207-827-2145. Fax 207-827-2191. Email [info@oldtownwater.org](mailto:info@oldtownwater.org). We want our valued customers to be informed about their water utility. Any member of the public is invited to attend any of our regular meetings. They are generally held on the second Tuesday of each month at 7:30 AM at the District office.

**Source Water Assessment:** The usual sources of drinking water include rivers, lakes, ponds and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from human or animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Assessment Program (SWAP). This assessment included geology, hydrology, land use, water testing information, and the extent of land ownership or protection by local ordinance. This information is used to determine how likely our drinking water source is to become 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 207-287-2070.

**Water District Overview:** We provide high quality water for domestic, commercial and industrial use. We maintain fire hydrants throughout Old Town, Milford and Bradley. We install and maintain water services, repair water mains, flush our system once per year, sample and analyze the water both at our wells and filter plant as well as in the distribution system. We read meters and bill residential accounts quarterly for water usage. Most commercial and industrial accounts are billed monthly. We have an approved cross connection control (backflow) program to protect the public water supply from contamination. We have three trustees; two from Old Town, one from Milford. We have a staff of eight dedicated employees consisting of a superintendent, foreman, two office staff, two meter /service people, a filter plant operator and a maintenance and repair person.

**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 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 runoff, and septic systems.

**Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

**Definitions:**

*Maximum Contaminant Level* - The (MCL) is the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLG (see below) as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal* - (mandatory language) The (MCLG) is 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.

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

*Location Running Annual Average (LRAA)*: A 12 month rolling average of all monthly or quarterly samples at specific sampling locations.

*Action Level (AL)*: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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.

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present

*Variances & Exemptions (V&E)* - State or EPA permission not to meet a set standard or treatment technique under certain conditions.

*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).

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

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

pos = positive samples.

MFL = million fibers per liter

**Important Note:** 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/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) or at the following link:

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

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. Old Town 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 the following link:

<http://www.epa.gov/safewater/lead>

**Water Quality:** The Old Town Water District routinely tests for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31, 2017. We are pleased to report no violations of any State or Federal Drinking water rules during 2017.

TEST RESULTS							
Contaminant	Violation Y/N	Date Of Test	Level Detected	Units	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Total Coliform Bacteria 10 samples per month	N	Monthly	0	Present Absent	0	1	Naturally present in the environment
Turbidity	N	5/23/2017	<0.6	NTU	na	TT <sub>3</sub>	Soil runoff

**The following were detected in our water supply:**

<b>Inorganic Contaminants</b>							
Arsenic	N	06/27/2016	<.1	ppb	0ppb	10ppb	Naturally present in the environment
Barium	N	05/22/2017	0.0019	ppm	2 ppm	2 ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
Chromium	N	05/22/2017	1.1	ppb	100 ppb	100 ppb	Discharge from steel and pulp mills. Erosion of natural deposits.
Copper 90% system sample	N	08/19/2015	1.2	ppm	1.3 ppm	AL=1.3 ppm	Corrosion of household plumbing systems-
Fluoride Alternate concentration .7 ppm	N	12/19/2017	0.8	ppm	4 ppm	4 ppm	Water additive which promotes strong teeth. Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
Lead 90% system sample	N	08/19/2015	5.5	ppb	0 ppb	AL=15 ppb	Corrosion of household plumbing systems.
Nitrate (as Nitrogen)	N	05/22/2017	0.25	ppm	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Radionuclides</b>							
Radium	N	11/28/11	0.361	pCi/L	5pCi/L	0pCi/L	Erosion of natural deposits
Radon	N	3/21/13	217 pCi/L	pCi/L	4000 pCi/L	4000 pCi/L	Erosion of natural deposits

<b>Disinfectants and Disinfectant Byproducts</b>							
Total Halocetic acids (HAA5) 09/20/2017	N	RAA	7	ppb	0 ppb	60 ppb	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHM) 09/20/2017	N	RAA	35	ppb	0 ppb	80 ppb	Byproduct of drinking water chlorination
Daily Average Chlorine Residual	N	AA	1.24	ppm	4 ppm	4 ppm	Added as a disinfectant

<b>Unregulated Contaminant Monitoring Rule 3 (UCMR3)</b> (required monitoring for 30 contaminants)							
Manganese	N	05/22/17	.0011	ppm	na	na	Naturally present in the environment
Sodium	N	05/22/17	35	ppm	na	na	For monitoring purposes
Iron	N	05/22/17	0.084	ppm	na	na	Secondary or aesthetic contaminant, not hazardous to health
Chloride	N	05/22/17	26	ppm	na	na	For monitoring purposes

**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.**

In 2017, our system was granted a 'Synthetic Organics Waiver.' This is a three year exemption from the monitoring/reporting requirements for the following industrial chemicals: TOXAPHENE/CHLORDANE/PCB. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of our water source.

**Old Town Water District is pleased to report no drinking water violations during 2017. All other regulated contaminants were below detection levels.**

In our continuing effort to maintain a safe and dependable water supply it is necessary to make continuous investment in the treatment and distribution system. The costs of these investments are reflected in the approved water rates. Rate adjustments are necessary periodically in order to address these improvements. The process of changing rates is regulated by the Maine Public Utilities Commission, and customer notification is required. Thank you for allowing us to continue providing your family or business with safe, clean, quality water during 2017.

We at the Old Town Water District work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

Old Town Water District Board of Trustees;

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