



Dear Valued Customer:

At Maine Water, we know that water touches everything we care about. Our team of 80 dedicated, highly trained professionals is committed to providing you with a reliable supply of high quality water and responsive service. We know the most important thing we do each and every day is to provide clean, safe drinking water so families can trust the water we provide will contribute to their good health.

We strive to make this report easy to read to help you understand more about your drinking water – where it comes from, what is done to protect and treat it, and what is in it. Within these pages are details about the drinking water quality test results, the source(s) of the drinking water supply, and an assessment about the susceptibility of water supply sources to potential contamination.

Maine Water is committed to the stewardship of its water resources, land and the environment and to its protection and conservation for current and future generations. We have a comprehensive source protection program for our water supplies, aquifers and watershed areas.

Maine Water's 2018 Annual Water Quality Reports include the results of more than 110,000 water samples tested at state certified laboratories for more than 120 potential contaminants and water quality parameters. We are pleased to report the water quality results in your system meet all state and federal drinking water standards.

Delivering safe drinking water to our customers and communities is our highest priority. Our Maine Water team appreciates the trust you put in us every day when you turn on the tap, and we are committed to honoring that trust and delivering you a world-class product. If you have any questions or comments about your drinking water or this report, please call our Customer Service staff at 1-800-287-1643 or send an e-mail to customerservice@mainewater.com.

Sincerely,

A handwritten signature in black ink that reads "Rick Knowlton".

Rick Knowlton

Water touches everything we **LOVE** about Maine and everything we **CARE** about.



Maine's future depends on our ability to successfully manage our **water resources** and **protect our drinking water supplies**.



Quality water service is important to our **health and well-being** and a priority for Maine Water.



Maine Water is committed to preserving our environment for generations to come. Conserving open spaces and drinking water sources through:

Protection of **WATERSHED LANDS**

WATER CONSERVATION education and programs

INFRASTRUCTURE INVESTMENTS to reduce system water loss

SUSTAINABLE DESIGN of buildings and facilities

A lot goes into delivering **high quality water** from the source to you.

PROVIDING SAFE AND RELIABLE WATER SYSTEM OPERATIONS 24/7:

- 5 surface water supplies
- 14 groundwater wells
- 11 treatment facilities
- 530 miles of water main
- 2,600 fire hydrants
- 3,200 service lines
- 3,600 water quality tests per year
- 9 million gallons of water per day



It takes a **TEAM** to provide **safe reliable service** to Maine communities.

- 80 water professionals to serve you
- Licensed and certified by State of Maine
- Over 1,600 customer appointments per month
- 5,000 customer calls per month
- Provide timely, accurate customer information
- After hours and emergency response
- Preventive maintenance and contingency plans minimize service interruptions

Maine Water is In your life and community.



- Charitable Giving
- Partnerships
- School Programs
- Tax Contributions
- Watershed Clean-ups and Events

Maine Water is a company with **people from Maine** serving in the **interest of Maine**.

We are dedicated to serving our customers and communities.

POPULATION OF 80,000 ACROSS 21 TOWNS AND COMMUNITIES:

Families | Businesses | Schools | Hospitals | Municipal needs





2018 Water Quality Report

Maine Water Company - Union Division

PWSID# ME0091537



Maine Water is pleased to present a summary of the quality of the water provided to you during the past year. This report was prepared under the requirements of the Federal Safe Drinking Water Act to report annually the details of where your water comes from, what it contains, and the risks that our water testing and treatment are designed to prevent. The federal law allows water providers to make reports available online as the accepted form of notification. In our effort to reduce costs and environmental impacts of printing, we will

provide the information online and will mail the report to customers who request it. Maine Water will notify all customers through bill inserts, news releases and our website that water quality reports for all systems are available online or upon request.

If you have any questions about this report, please call our customer service team at 1-800-287-1643 or e-mail us at customerservice@mainewater.com.

For the year 2018, we are pleased to report that your drinking water met all national primary drinking water standards.

Sources of Supply -- Three bedrock wells on utility property provide the primary water supply for our Union customers. We use chlorine for disinfection and add a corrosion inhibitor to reduce corrosion in the pipe system. Certified operators ensure the quality of the water we produce.

Sources of drinking water include rivers, lakes, ponds and wells. As water flows on the surface of the land or through the ground, it can dissolve naturally occurring minerals and in some cases, radioactive material, and can also accumulate substances resulting from human and animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Protection Program. 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 being contaminated by human activities in the future. In 2003, a source water assessment was completed for the Union system and indicates a low to moderate risk of significant contamination. Assessment results are available at town offices, public water supplies and the DWP (207.287.2070).

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, or wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban runoff, industrial or domestic wastewater discharge, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- Organic chemicals contaminants, including synthetic and volatile organics, 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 can be the results of oil or gas production or mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations established limits for contaminants in bottled water, which must provide the same protection for public health.

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 and potential health effects can be obtained at EPA's Safe Drinking Water Hotline website <https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline>.

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 website <https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline>.

Protecting Water Sources: Many people do not know that most contaminants enter rivers, lakes, and reservoirs with storm water runoff from streets, parking lots, golf courses, athletic fields, construction sites, farms, and residential neighborhoods. You can help reduce polluted runoff using the following guidelines:

- Restrict the use of lawn chemicals, especially before heavy rains.
- Dispose of pet or animal waste properly so that it does not wash into a nearby stream or storm drain.



- Have septic tanks inspected every two years, and cleaned as needed. Make septic system repairs as soon as possible.
- Do not pour used motor oil on the ground or into storm drains. Contact your town for proper disposal of household chemicals.
- Report muddy runoff from construction sites to your town's zoning or wetland officials.

Educational Information about Lead and Copper: Maine Water believes it is important to provide you with information about the sources of lead and copper in drinking water and the health effects associated with them.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink water containing lead in excess of the action level over many years could develop kidney problems or high blood pressure.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. Anyone with Wilson's Disease should consult their personal doctor.

Maine Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. We have a comprehensive corrosion control program in the system to reduce the risk of lead leaching from customers' service line or internal plumbing. For information on the levels of lead and copper detected in your drinking water system, please refer to the table in this water quality report.

You can minimize the potential for lead or copper exposure by flushing your tap water for 30 seconds to a minute before using the water for drinking or cooking anytime your water has been sitting idle for several hours. If you are concerned about elevated lead or copper levels, 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 at <http://www.epa.gov/safewater/lead> or through the EPA's Safe Drinking Water Hotline website <https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline>.

Water Quality Data: The following table lists the contaminant levels that were detected in your water system. The Safe Drinking Water Act allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. The Safe Drinking Water Act also allows monitoring waivers to reduce or eliminate certain monitoring requirements. In 2016, the Union system was granted a partial three year “Synthetic Organics Waiver” from monitoring/reporting requirements for the following industrial chemicals: Toxaphene/Chlordane/PCB and Carbamate pesticides. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source.

Microbiological Contaminants: During 2018, none of the 4 distribution system samples tested positive for coliform bacteria.

Violations: No violations in 2018.

National Primary Drinking Water Contaminants

Compounds	Test Date	Violation Y / N	Detection Value	Range of Detection	Federal/State Standard		Major Sources in Drinking Water
					MCL/ MRDL	MCLG/ MRDLG	
Inorganics and Radionuclides							
Barium, ppm	2017	N	0.0356	NA	2	2	Erosion of natural deposits
Gross Alpha (pCi/L)	2015	N	0.264	NA	15	0	Erosion of natural deposits
Radium 228, pCi/l	2016	N	0.234	NA	5	0	Erosion of natural deposits
Nitrate, ppm	2018	N	1.44	NA	10	10	Runoff from fertilizer use
Combined Radium, pCi/l	2016	N	0.234	NA	5	0	Erosion of natural deposits

Disinfectants and Disinfection Byproducts -- Compliance for Haloacetic Acids and Total Trihalomethanes is based tri-annual samples.							
Residual chlorine, ppm	2018	N	0.17 ave	0.01-0.28	4	4	Water additive used to control microbes
Haloacetic Acids (HAA5), ppb	2016	N	ND	NA	60	NA	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs), ppb	2016	N	2.3	NA	80	NA	

Lead and Copper Results-- Samples are from consumer’s taps. 90% of the tests must be equal to or below the action level for rule compliance.

Lead and Copper	Test Date	90th Percentile	Total Number of Samples	Samples Exceeding Action Level	Federal/State Standard		Major Sources in Drinking Water
					Action Level	MCLG	
Copper, ppm	2018	0.454	5	0	1.3	1.3	Corrosion of household plumbing
Lead, ppb	2018	<1	5	0	15	0	

Notes:

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

Fluoride: Fluoride may help prevent tooth decay if administered properly to children, but can be harmful in excess. US Department of Health and Human Services recommend a level of 0.7 ppm.

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. Some levels are based on a running annual average.

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 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.

NA: Not applicable.

ND: Not detected.

NTU: Nephelometric turbidity unit (cloudiness of water)

pCi/L, picocuries/Liter: A unit of concentration for radioactive contaminants.

ppb: A unit of concentration equal to one part per billion.

ppm: A unit of concentration equal to one part per million.

PWSID: Public water supply identification number.

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

TTHM and HAA5: Total Trihalomethanes and Haloacetic Acids are formed as a byproduct of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water.

Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take < 40 samples per month.

Turbidity: Monitored as a measure of treatment efficiency for removal of particles.

Our water systems are designed and operated to deliver water to our customers' plumbing systems that complies with state and federal drinking water standards. This water is disinfected using chlorine, but it is not necessarily sterile. Customers' plumbing, including treatment devices, might remove, introduce or increase contaminants in tap water. All customers, and in particular operators of facilities like hotels and institutions serving susceptible populations (like hospitals and nursing homes), should properly operate and maintain the plumbing systems in these facilities. You can obtain additional information from the EPA's Safe Drinking Water Hotline at 800.426.4791



Water touches everything we CARE about!