



Yarmouth Water District

ESTABLISHED, 1895. INCORPORATED, 1923.

2018 Consumer Confidence Report

Public Water System ID ME0091670

INTRODUCTION

We are once again proud to present our Consumer Confidence Report (CCR) covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Thank you for allowing us to continue providing you and your family with high-quality drinking water.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

WATER SYSTEM DATA

The Yarmouth Water District (YWD) was established in 1895. YWD presently serves the municipalities of Yarmouth, North Yarmouth and a very small portion of Cumberland. The YWD uses groundwater supplies from four gravel packed wells. These supplies are all located in the Town of North Yarmouth. The District also maintains a connection with the Portland Water District, which primarily serves as the source of supply for the Wyman Power Station on Cousins Island in Yarmouth. In the last 12 months, we have produced and delivered more than 299,951,000 gallons of water to the distribution system. The YWD actively chlorinates at the sources to provide a chlorine residual in the distribution system to prevent bacteria from forming in the distribution system.

Our water supply and distribution system includes almost 80 miles of water main and 3,030 active services. The Yarmouth Water District has 3 storage tanks; one located in North Yarmouth (200,000 gallons), and two storage tanks located in Yarmouth (500,000 gallons and 1,000,000 gallons). The system serves approximately 8,800 customers and provides fire protection service through 398 hydrants. The District added 33 new water services, 3,461 feet of new water main and 4 new hydrants in 2018.

WATER SUPPLY / SOURCE INFORMATION

The Maine Drinking Water Program, in cooperation with local public water suppliers (PWS), has conducted a statewide assessment of the risks to public water supply wells and intakes from human activities. All wells were rated on the current and future risk for contamination by both acute contaminants, like bacteria, and chronic contaminants, like petroleum hydrocarbons. While most community supplies have low to moderate risk factors based on current conditions, a large proportion have a high risk for future development in their source protection areas. For the YWD, the well itself is rated as a Moderate risk. This is a factor that can only be changed by installing a new well. The current land use around the well results in a Low risk for bacteria and nitrates, and Moderate risk for long-term, chronic contaminants. Water quality testing and limited development in our protection area produce a lower risk ranking. The YWD land ownership and wellhead management planning indicate a Low risk for future bacterial contamination and Moderate risk for chronic contaminants. Land use controls exist that can be used to manage development around the source. The District will work to make sure that these controls are effective in protecting water quality. For a detailed copy of the Source Water Assessment, please contact our district office or the Maine Drinking Water Program at 1-207-287-2070.

WATER QUALITY

The YWD ensures that your water is safe through regular testing of both its source and treated water. All water quality testing is conducted by independent, state-certified laboratories. The YWD uses the Maine Drinking Water Program's Health and Environmental Testing Laboratory and Katahdin Analytical Laboratory for the majority of the testing. This CCR is a comprehensive summary of the laboratory test results. The YWD staff consists of distribution and water treatment operators, licensed by the State of Maine Department of Health and Human Services.

The Safe Drinking Water Act directs the state, along with 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. Two types of standards have been established. Primary drinking water standards set achievable levels of drinking water quality to protect your health. Secondary drinking water standards provide guidelines regarding the taste, odor, color, and other aesthetic aspects of drinking water, which do not present a health risk. During the past year, we have taken numerous water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The State requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken. The 2018 testing results indicate that the YWD's water continuously meets or exceeds all state and federal requirements and had no reportable violations.

Primary Drinking Water Standards

Contaminant	Maximum Contaminant Level	Maximum Contaminant Level Goal	YWD Test Results	Sample Date
Coliform bacteria (1)	1 per month	0	0	1/1/18 - 12/31/18
Barium	2 ppm	2 ppm	0.0064 ppm	4/19/17
Chromium	100 ppb	100 ppb	1.7 ppb	4/19/17
Copper 90 th % (2)	1.3 ppm	1.3 ppm	0.302 ppm	1/1/14 – 12/31/16
Lead 90 th % (2)	0.015 ppm	0 ppb	0.0102 ppm	1/1/14 – 12/31/16
Nitrate (3)	10 ppm	10 ppm	1.69 ppm	5/10/2018
Combined Radium	5 pCi/L	0 pCi/L	1.347 pCi/L	12/17/2018
Combined Uranium	30 ppb	0 ppb	5.8 ppb	4/19/17
Gross Alpha Screen (4)	15 pCi/L	0 pCi/L	4.23 pCi/L	5/12/14
Radium – 226	5 pCi/L	0 pCi/L	0.774 pCi/L	12/17/2018
Radium – 228	5 pCi/L	0 pCi/L	0.573 pCi/L	12/17/2018
Uranium – 238	30 ppb	0 ppb	5.4 ppb	4/19/17
Chlorine Residual	MRDL: 4 ppm	MRDLG: 4 ppm	Range: 0.35-0.65 ppm; RAA: 0.49 ppm	1/1/18 – 12/31/18

Secondary Drinking Water Standards

Non-regulated Aesthetic Standards for Finished Water.

This sample was taken from a representative point in the distribution system which more accurately depicts the water at the customers tap compared to individual source samples.

Substance (Representative Distribution System Sample Collected on 3/25/2019)	Secondary Maximum Contaminant Level	YWD Test Results	Noticeable Effects above Secondary MCL
Chloride	250 ppm	23 ppm	Salty taste
Color	15 PCU	<5 PCU	Visible tint
Iron	0.30 ppm	0.094 ppm	Rusty color, metallic taste, reddish or orange staining
Manganese	0.05 ppm	0.00071 ppm	Black to brown color, bitter metallic taste
pH	6.5-8.5	7.1	Low pH: bitter metallic taste, corrosion High pH: slippery feel, soda taste, deposits
Sodium (5)	20 ppm	12 ppm	
Sulfate	250 ppm	9 ppm	Salty taste
Zinc	2.0 ppm	0.0052 ppm	Metallic taste
Calcium	No Standard	21 ppm	
Magnesium	No Standard	4.8 ppm	
Total Hardness (6)	No Standard	72 ppm or 4.2 grains	

DEFINITIONS

Maximum Contaminant Level (MCL): Highest level of a contaminant allowed in drinking water.

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

Secondary Maximum Contaminant Levels (SMCL): Target for aesthetic quality without posing risk to human health.

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

Action Level (AL): Concentration of a contaminant that, 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.

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)

NTU = nephelometric turbidity units

BDL= Below Detection Limit

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) Lead/Copper: Action levels (AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level.
- 3) 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.
- 4) 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.

- 5) Sodium: Current drinking water standard for sodium is 20 milligrams per liter. Individuals on a low sodium diet due to high blood pressure, or other health problems, should consult their physician about drinking water on a daily basis which exceeds that level. Most Americans consume as much as ten times more salt than the body requires. Excess sodium from salt in the diet increases the risk of high blood pressure and cardiovascular disease. For most healthy people, a sodium level of 100 milligrams per liter of water will not substantially increase risk.
- 6) Total Hardness: Hardness is caused by minerals, primarily calcium and magnesium, which are picked up by water passing through underground mineral deposits. Hard water is not considered contaminated, but it does hinder the cleaning action of soap and forms a scale on cooking utensils, hot water pipes, and heaters. This build-up may eventually reduce pipe capacity and water pressure. Hardness is the total concentration of calcium and magnesium in water. The U.S. Geological Survey general guidelines for classification of waters are: 0-60 ppm is classified as soft; 61-120 ppm as moderately hard; 121-180 ppm as hard; and greater than 180 ppm as very hard. There is no standard for hardness. Hard water is not harmful to health. Calcium and magnesium are essential body elements. In fact, studies suggest that hard water is better for cardiovascular health than soft water, though the reasons for this are not yet known.

WAIVER INFORMATION

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 chemical(s): TOXAPHENE/CHLORDANE/PCB, HERBICIDES, CARBAMATE PESTICIDES, and SEMIVOLATILE ORGANICS. This waiver was granted due to the absence of these potential sources of contamination within a half-mile radius of the water source(s).

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.

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>

LEAD IN HOME PLUMBING

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. Yarmouth 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>

WE ARE HERE FOR YOU

If you have any questions about this report, your water quality, your water service, please contact the Yarmouth Water District's office at (207-846-5821) during normal business hours (Monday through Friday between 7:30 am and 4:30 pm).

The Yarmouth Water District Board of Trustees generally meets the first Tuesday of every month at 7:00 PM at the Yarmouth Water District office on 181 Sligo Road, Yarmouth. Meeting notices are posted on our website, listed in *The Notes*, and are open to the public.

Board of Trustees:

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Yarmouth Water District

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