

# 2018 Annual Drinking Water Quality Report

## Yarmouth Water

99 Buck Island Rd. West Yarmouth, MA  
Massachusetts Public Water Supplier # 4351000

If you have questions about this report call the Interim Water Superintendent, Gary Damiecki, at 508-771-7921  
Further discussions to publicly discuss water quality issues can be held at the Selectman's meetings.

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This report is a snapshot of drinking water quality that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with information because informed customers are our best allies. Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (DEP). They inspect our system for its technical and managerial capacity to provide safe drinking water to you. Furthermore your water system is operated by a Massachusetts certified operator 24/7. In response to the latest Sanitary Survey, Yarmouth Water has made significant investments in water treatment facilities, water quality monitoring, and distribution systems.

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**Yarmouth's Water Sources:** Within the Town of Yarmouth there are 24 groundwater wells that draw water from 2 aquifers or lens. The Sagamore Lens which supplies most of the water for Yarmouth, and the Monomoy Lens. Your tap water may come from either of these sources depending upon where you live and the time of year. Emergency water supplies can be achieved through interconnections with the Dennis Water District, Barnstable Fire District, and the Hyannis Fire District. No emergency water supplies were required in 2018. Below is a listing of the locations of our water systems well sites. PS = Pumping stations.

PS 1 Main - Union Street – 4351000-01G PS 1,2,3,14,20,24 - Higgins Crowell Road – 4351000-02G,03G,14G,20G,24G  
PS 4,5 - Long Pond Drive – 4351000-05G,06G PS 6,7,8,9 North Main St. – 4351000-07G,08G,09G,10G  
PS 10 - Forest Road – 4351000-11G PS 11 - Kristin Path – 4351000-12G PS 13,18,19 - Chickadee Lane –  
4351000-13G,18G,19G PS 17 - Horse Pond – 4351000-17G PS 15,16,21,22 - North Dennis Road – 4351000-  
15G,16G,21G,22G PS 23 - Midtech Drive – 4351000-23G

Even though Yarmouth Water uses basic treatment techniques along with some of the most advanced equipment available, it is still necessary to start with the highest quality water sources. That is why Yarmouth Water owns and protects over 963 acres of land surrounding well fields and aquifer recharge areas. We also inspect these areas regularly for any condition that could adversely affect the quality of the water. In addition our staff reviews and comments on local land development plans near our well fields that could impact water quality. A complete list of all the contaminants tested for is available at our offices, located at 99 Buck Island Road W. Yarmouth, 8:30 am – 4:30 pm.

**Is My Water Treated?** Yes, the water is treated. Potassium Hydroxide is added for adjusting the pH of your water. We do this to achieve a pH range of 6.8 to 7.20 in an effort to make your water pH neutral or less corrosive. The quality of our water is constantly monitored by us and the DEP.

**Source Water Protection Information** The Department of Environmental Protection (DEP) has prepared a Source Water Assessment Program (SWAP) Report for the water supply sources serving our community. The SWAP Report assesses the susceptibility of public water supplies. There are a number of land uses and activities that are potential sources of contamination.

**The SWAP Report** notes the following key issues for our sources; inappropriate activities in Zone I's, residential land uses, hazardous materials, transportation corridors, oil or hazardous material contamination sites, and comprehensive wellhead protection planning.

### **What Is My System's Ranking?**

A susceptibility ranking of "High" was assigned to this system using the information collected during the assessment by the DEP.

**Where Can I See The SWAP Report?** The complete SWAP report is available at the Water Division, Board of Health, and online at <http://www.state.ma.gov/dep/water/drinking/sourcewa.htm>. For more information, call Superintendent Damiecki at 508.771.7921.

**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, and 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 that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

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

**In order to ensure that tap water is safe to drink**, the Massachusetts Department of Environmental Protection (DEP) and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration and the MA Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health

**Important Definitions**

**Maximum Contaminant Level or 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.

**Maximum Contaminant Level Goal or 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.

**The Safe Drinking Water Act (SDWA):** was signed into law on December 16, 1974. The purpose of the law is to assure that the nation's water supply systems serving the public meet minimum national standards for the protection of public health.

**Total Coliform Bacteria,** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

**Fecal Coliform and e. Coli,** Fecal coliforms and e. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely-compromised immune systems.

**Unregulated Contaminants** are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminants monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

**A Cross Connection** is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home. For instance, you're going to spray fertilizer on your lawn. You hook up your hose to the sprayer that contains the fertilizer. If the water pressure drops when the hose is connected to the fertilizer, the fertilizer may be sucked back into the drinking water pipes through the hose. An attachment called a backflow-prevention device can prevent this problem. Yarmouth water recommends the installation of such devices, and we have an expert on staff to answer your questions on this matter.

## Water Quality Testing Results

The water quality information presented in the tables is from the most recent round of testing done in accordance with the regulations.

All data shown were collected during the last calendar year unless otherwise noted in the table.								
Regulated Contaminants								
Microbial Contaminants								
Yarmouth Results								
Contaminant	Highest % Positive in a month	MCL	MCLG	Violation (Y/N)	Date of Sample	Typical Source of Contaminant		
Total Coliform	0	<5%	0	NO	None	Naturally present in the environment.		
	Date Collected	90 <sup>th</sup> percentile	Action Level	MCLG	# of Sites Sampled	# of Sites above the AL	Possible source of contamination	
Copper (ppb)	Sept, 2016	0.63	1.3	1.3	30	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.	
Lead (ppb) *	Sept, 2016	0.0048	.015	0	30	0	Corrosion of household plumbing systems; Erosion of natural deposits.	
Inorganic Contaminants, VOC's, Nitrates								
	Date Collected	Highest Detect Level	Range Detected	Average Detected	MCL	MCLG	Violation (Y/N)	
Nitrate (ppm)	first quarter 2018	6.3	0.0-6.3	1.2	10	10	NO	Runoff from fertilizer use. Leaching from septic tanks, sewage; Erosion of natural deposits.
Chloroform (ppb)	first quarter 2018	6.0	0-6.0	0.3	N/A	Unregulated contaminant	NO	Occurs naturally here on Cape Cod. Future studies by D.E.P. are planned to determine why.
Chloromethane	first quarter 2018	0.63	0-0.63	0.04	N/A	Unregulated contaminant	No	Chloromethane is found in air, surface water, groundwater, soil, and sediment
Barium	first quarter 2018	0.14	0.0-0.14	0.01	2	2	No	Some people who drink water containing barium in excess of the MCL over many years could
Nickel	first quarter 2018	0.27	0-0.27	0.135	.05	0	NO	Erosion of natural deposits
Sodium	first quarter 2018	150	0-150	10.18	20	Unregulated contaminant	No	Sodium is a naturally occurring common element found in soil and water
Cadmium	first quarter 2018	.0013	0-.0013	0.005	0.005	0	No	Erosion of natural deposits

MassDEP has reduced the monitoring requirements for radioactive contaminants to less often than once per year because the source is not at risk of contamination. The last sample collected was in the third quarter of 2013 and was not in violation.

### **The Substances Found in Your Tap Water**

**Consumer Educational Statements: 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 for advice from your health care provider.

**Lead.** If present, elevated level 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 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>.

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.

**Water Related Informational / Educational Sites:** Visit these web sites at your public library or from your home for more information on all aspects of water. American Water Works Association – [www.awwa.org](http://www.awwa.org) - an international nonprofit scientific and educational society dedicated to the improvement of drinking water quality and supply. Water Environment Federation - [www.wef.org](http://www.wef.org) - a not-for profit technical and educational organization. Its goal is to preserve and enhance the global water environment. Yarmouth Water – [www.yarmouthwater.org](http://www.yarmouthwater.org) - your local water provider with links to other water related sites and updated information on our department activities.

*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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).*

*The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presences of animals or from human activity.*

*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 (800-426-4791)**.*

The department received two notices of non-compliance from the DEP. One was we failed to conduct an assessment due to a total coliform hit that Hyannis received and the other was we failed to submit the annual statistical report to the DEP in a timely manner. At no time, due to these oversights, was the water system or quality in jeopardy.

Landlords, please forward to your tenants. Additional copies are available upon request.