

MATTAPOISETT WATER DEPARTMENT

PUBLIC WATER SYSTEM ID#4173000

2017 DRINKING WATER

QUALITY REPORT

This is the annual water quality report of the Mattapoissett Water Department. This report is intended to provide you with important information about your drinking water. We know that you count on us for a safe and reliable supply of water every day and our goal is to provide the highest quality of service to you.

We want you, our customers to know that our drinking water is safe and meets Federal and State standards.

YOUR DRINKING WATER SOURCE

All of the drinking water supplied to our customers is provided by ground water from four (4) municipal wells in the Mattapoissett River Valley Aquifer. The four wells are made up of the following:

#2 Station-Well Field, located off Acushnet Road.

#3 Station-Gravel Packed Well, located off Hereford Hill Road.

#4 Station-Gravel Packed Well, located off Hereford Hill Road.

#5 Station-Gravel Packed Well, located on Pumping Station Road, off Long Plain Road. Currently the average daily demand is 417,118 gallons per day, with a peak demand of 1,110,000 gallons per day. The wells are all within the Department of Environmental Protection Approved Mattapoissett River Aquifer Protection District and they are located in the northwestern part of town. Our department also owns the areas around the wells and restricts any activity that could contaminate them.

Mattapoissett also receives water from the Mattapoissett River Valley Water District Public Water Supply # 4173001. The District gets water from five additional groundwater wells in the Mattapoissett River Valley Aquifer.

WHAT CAN BE IN DRINKING WATER?

All sources of drinking water (both tap water and bottled water) including rivers, lakes, streams, ponds, reservoirs, springs and wells are subject to potential contamination that are naturally occurring or are manmade. Contaminants that can potentially be present in source water include:

Microbial Contaminants such as viruses and bacteria may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Organic Chemical Contaminants include synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can come from gas stations, urban storm water runoff and septic systems.

Inorganic Contaminants such as salts and metals can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and farming.

Pesticides and Herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

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

Unregulated Contaminants are those for which E.P.A. has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist E.P.A. in determining their occurrence in drinking water and whether future regulation is warranted.

Health Information In order to ensure that tap water is safe to drink the E.P.A. prescribes regulations that limit the amount of certain contaminants in the water provided by public water systems. All 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 Environmental Protection Agency's Safe Drinking Water Hotline at (1-800-426-4791). Their regulations are set at very stringent levels. Some people may be more vulnerable to contaminants in drinking water than the general population. Immune compromised persons such as persons with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and some infants can be particularly at risk from infection. These people should seek advice about drinking water from their healthcare providers. E.P.A./Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)

ROUTINE WATER QUALITY MONITORING

To ensure that your water is safe, regular monitoring and testing of water quality is conducted by our State licensed operators and analyzed in State Certified laboratories.

WATER QUALITY DATA

This table shows results of monitoring for the period of January 1 to December 31,2017

Contaminant	MCL	MCLG	Highest Level Detected	Range of Detection	Sources of Contaminant	Violation
Inorganic Chemicals						
Chloroform (ppb)	NR	NR	1.5	0.7 – 1.5	Naturally occurring	No
Sulfate (ppm)	NR	NR	10.3	10.3 - 10.3	Erosions of natural deposits	No
Nitrate (ppm)	10	10	0.37	0.28-0.37	Runoff from fertilizer use; leaching from septic tanks, sewerage, erosion of natural deposits.	No
Radioactive Contaminants						
Gross Alpha	15	0	0.6(+or-1.3)	0.0-0.6	Erosion of natural deposits	No
Radium 226	5	0	0.4(+or-0.4)	0.0-0.4		
228	5	0	1.7(+or-0.6)	0.0-1.74	Erosion of natural deposits	No
(pCi/l)						
Beta particles*	4	0	1.1 (+/- 2.5)			
Perchlorate(ppb)	2	NA	0.09	0.09-0.09	Rocket propellants, Fireworks, Munitions	
Lead (ppb)	AL=15	0	5	ND-.5	Corrosion of household plumbing systems. Erosion of natural deposits.	No
Copper (ppm) ²	AL=1.3	1.3	0.38	90%=2 0.02-0.38	Corrosion of household plumbing systems, leaching from wood preservatives; Erosion of natural deposits.	No
Total Coliform ³	1	0	0	90%=0.35 0	Naturally present in the environment	No
Unregulated or Secondary Containment	Date Collected	Result or Range Detected	Average Detected	SMCL (ppb)	EPA Health Advisory	Probable Sources
Manganese ¹ (ppb)	May 4, 2017	0.075 – 0.078	0.76	50	300	Erosion of Natural Deposits
Sodium	2015	7.27-35.1	25.5			Naturally present in the environment

*Monitoring data from 2012-As authorized and approved by E.P.A. the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

WATER QUALITY DATA

This table shows results of samples taking in 2014

UNREGULATED Contaminant monitoring regulation (UCMR3)4.

Substance Unit of measure	Year Sampled	Range Detected	Average
Chromium-6 (ppb)	2014	0.03-0.25	0.088
Chromium(total)(ppb)	2014	ND-0.30	0.30
Moly bdenum (ppb)	2014	ND-1.0	1.0
Strontium (ppb)	2014	40-57	47.25
Vanadium (ppb)	2014	ND-0.03	0.03
Chlorate (ppb)	2014	ND-58	41.25

The previous table shows only the substances that were detected in the Mattapoisett Drinking water.

Additional testing for 56 volatile organic chemicals and 13 inorganic chemicals showed no detection of any of those chemicals.

Our system had **no** violation of water quality for the 2017 reporting period for total coliform. ³

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. Mattapoisett 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>.”

For a complete listing of all the possible contaminants that we are required to test for contact our Water Superintendent.

If you have any questions about this report please contact Henri H. Renauld, Superintendent at (508)-758-4161.

The Mattapoisett Water Department is operated under the direction of the Board of Water Commissioners. Their meetings are held at 6:00 p.m. on the first and third Wednesday of each month in the Water Department Office at 19 County Road.

What’s a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage). Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination. Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum protection.

For more information, review the Cross-Connection Control Manual from the U.S. EPA’s Web site at <http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/index.cfm>. You can also call the Safe Drinking Water Hotline at (800) 426-4791.

Summer water saving tips

You can have a beautiful garden and lawn and still save a great deal of water by following these water saving tips.

- Water your garden and lawn only when it needs it rather than on a regular schedule.
- Water during cooler parts of the day to reduce the amount of evaporation.
- Don’t water the driveway or street, align your sprinkler so the water falls on your lawn or garden not the paved surfaces.
- Know how to turn off your automatic sprinkler if it rains.
- Don’t leave your hose unattended, it can pour out hundreds of gallons in just a few hours.
- Use mulch around trees and plants to minimize moisture loss while also discouraging weeds.
- Fix any leaks on toilets, hoses and faucets as soon as possible.

Source Water Assessment and Protection (SWAP)

The source water assessment and protection program assesses the susceptibility of the public water supplies to potential contamination by microbiological pathogens and chemicals. A susceptibility ranking of high was assigned to this system using the information collected during the assessment by the DEP. The complete SWAP report is available at the Water and Sewer Department at 19 County Road.

This can also be accessed at the DEP website at www.mass.gov/dep/water/drinking/sourcewa.htm

For additional water saving facts and ideas please contact or stop by our office at 19 County Road for more information also visit the Town Web-Page and look at Water and Sewer Department.

TERMS AND ABBREVIATIONS

MAXIMUM CONTAMINATION LEVEL OR MCL: The highest level of a contaminate allowed in drinking water. MCLs are set as close to the MCLGs (see below) as feasible using the best available treatment technology.

MAXIMUM CONTAMINATION 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.

ACTION LEVEL: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.

TREATMENT TECHNIQUE (T.T.): A required process intended to reduce the level of a contaminant in drinking water.

ppm: Parts per Million or Milligrams per liter (mg/l)

ppb: Parts per Billion or Micrograms per liter (ug/l)

NR: Not regulated

ND: Non-Detectable at Testing Limit

pCi/l: Picocuries per liter (a measure of radiation)

¹ Manganese is a nutrient that is part of a healthy diet. Drinking water may naturally have manganese, and when concentrations are greater than 50 ppb, the water may be discolored and taste bad. Over a lifetime, the US EPA recommends that people drink water with manganese levels less than 300 ppb and over the short term, US EPA recommends that people limit their consumption of water with levels over 1000 ppb, primarily due to concerns about possible neurological effects. Children up to 3 years of age should not be given water with manganese over 300 ppb, nor should formula for infants be made with that water.

² Results are from sampling analysis in 2011 as allowed by EPA and DEP.

³ Total coliform – Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other harmful bacteria may be present. Total coliform was detected in two samples collected in November. Repeat samples were collected at these sites and sample analysis showed 0 coliform bacteria present.

⁴ Unregulated contaminates are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminates monitoring is to assist U.S. EPA in determining their occurrence in drinking water and whether future regulated is warranted.