

WHATELY WATER DEPARTMENT

2018 CONSUMER AWARENESS REPORT

The Whately Water Department is pleased to present their Consumer Awareness Report for 2018. In this report you will find the basic facts and information regarding your public water supplier. Please read this information at your leisure and feel free to contact the department with any questions.

In order to ensure that tap water is safe to drink, MassDEP and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The FDA and Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

WATER ANALYSIS REPORT PUBLIC WATER SUPPLY # 1337010

Below you will find a table showing the results of any tests which we performed which detected a contaminant. **There were no violations of standards**. Any detected contaminants are reported.

<u>Contaminant</u>	<u>Level Detected</u>	<u>MCL</u>	<u>MCLG</u>	<u>Sample date</u>	<u>Violation Y/N</u>	<u>Likely Source</u>
<u>Arsenic</u>	.0053 ppm	.01		10/8/18	N	Erosion of natural deposits
<u>Barium</u>	.214 ppm	2	2	5/2/18	N	Erosion of natural deposits
<u>Fluoride</u>	.21 ppm	4	4	5/3/18	N	Erosion of natural deposits
<u>Sodium</u>	21.4 ppm	none	none	5/8/18	N	Road salt
<u>Sulfate</u>	27 ppm	none	none	2/09/17	N	Erosion of natural Deposits
<u>Manganese</u>	424 ug/l (.424ppm)	none		10/8/18	N	See comments below

Manganese is a naturally occurring mineral found in rocks, soil and groundwater, and surface water. Manganese is necessary for proper nutrition and is part of a healthy diet, but can have undesirable effects on certain sensitive populations at elevated concentrations. The EPA and MassDEP have set an esthetics-based Secondary Maximum Contaminant Level (SMCL) of 50ug/l or 50 parts per billion. In addition, Mass DEP's Office of Research and Standards (ORSG) has set a drinking water guideline for manganese which closely follows the EPA public health advisory for manganese.

Drinking Water may naturally have manganese and, when in concentrations greater than 50 ug/l the water may be discolored and have bad taste. Over a lifetime the EPA recommends that people drink water with manganese levels 300 ug/l and over the short term EPA recommends people limit their consumption of water with levels over 1000 ug/l, primarily due to concerns about possible neurological effects. Children up to 1 year of age should not be given water with concentrations over 300 ug/l, nor should formula for infants be made with that water for more than 10 days.

The ORSG differs from the EPA's health advisory because it expands the age group to which a lower manganese concentration applies from children less than age 6 months to children up to age 1 to address concerns about children's susceptibility to manganese toxicity.

See EPA Drinking Water Health Advisory for Manganese

http://www.epa.gov/safewater/ccl/pdfs/reg_determine1/support_cc1_manganese_dwreport.pdf and MassDEP ORSG for Manganese <http://www.mass.gov/eea/agencies/massdep/water/drinking/manages-in-drinking-water.html>.

Construction of a filtration system to remove manganese from the water is scheduled to begin in the spring of 2019.

While your drinking water meets the EPA standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the

current understanding of arsenic's possible health effects against the task of removing arsenic 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 effect such as skin damage and circulatory problems.

<u>Contaminant</u>	<u>Level Detected</u>	<u>Range detected</u>	<u>MRDL</u>	<u>MRDLG</u>	<u>Violation Y/N</u>	<u>Likely source</u>
Chlorine	0.51 ppm	0.00 ppm- 0.00 ppm	4	4	N	Water additive to control Microbes

<u>Contaminant</u>	<u>Action Level (AL) 90th percentile</u>	<u># sites sampled</u>	<u># sites exceeding AL</u>	<u>Sample date</u>	<u>Likely source</u>	
Lead	15ppb	<1 ppb	10	0	10/3/18	Plumbing Corrosion
Copper	1.3 ppm	.327 ppm	10	0	10/3/18	Plumbing Corrosion

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. The Whately 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 drinking 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>.

The Department has a waiver for testing of Synthetic organic compounds.

We provide the following definitions for terms you may be unfamiliar with:

- AL= Action Level or the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.
- MCL= Maximum Contaminant Level, or the maximum permissible level of a contaminant in water which is delivered to any user Of a public water system.
- MCL are enforceable standards. The margins of safety ensure that exceeding the MCL slightly does not pose significant risk to Public health.
- MCLG= maximum contaminant level goal. The maximum level of a contaminant at which no known or anticipated adverse effect on the health of persons would occur, and which allows for an adequate margin of safety. MCLG's are non-enforceable public health goals.
- MRDL=the highest level of disinfectant (chlorine, chloramines, chlorine dioxide) allowed in drinking water. There is sufficient evidence that addition of a disinfectant is necessary to control microbial contaminants.
- MRDLG=the level of drinking water disinfectant (chlorine, chloramines, chlorine dioxide) below which there is no known or expected health risk. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- pCi/l= picocuries per liter
- ppm= one part per million (one penny in ten thousand dollars)
- ppb= one part per billion
- ug/l=micrograms per liter

QUESTIONS AND ANSWERS

<i>Where does our water come from?</i>	From two deep gravel wells on Chestnut Plain Road.
<i>Is it treated?</i>	The water is treated with a small dose of chlorine for disinfection. An organic phosphate is added to control manganese.
<i>How is it delivered?</i>	The system contains about 14 miles of plastic and ductile iron pipe serving 325 service connections.
<i>Is it affordable?</i>	At a cost of \$4.65 per thousand gallons, that's over 2 gallons for 1 cent.
<i>What are some possible contaminants?</i>	<p>Microbial contaminants, such as viruses and bacteria, which may come from Sewage treatments plants, septic systems, livestock operations or wildlife. Pesticides and Herbicides from agriculture, storm water runoff or residential uses.</p> <p>Inorganic contaminants such as salts and metals which can be naturally occurring or result from runoff, industrial or domestic wastewater, oil and gas production, mining or farming.</p> <p>Organic chemical contaminants including synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production, and can come from gas stations, runoff or septic systems.</p> <p>Radioactive contaminants, which can occur naturally or result from oil and gas production or mining.</p>
<i>What about cross connections?</i>	A cross connection is a connection between a drinking water pipe and a polluted source. The pollution can come from your home. For instance, you are going to spray fertilizer in your lawn. You hook up your hose to the fertilizer sprayer. If the water pressure drops (say because of a fire hydrant use in town) the fertilizer may be sucked back into the water pipes through the hose. Using a backflow device on the hose can prevent this. The department recommends using a device such as vacuum breaker for all inside and outside hose connections. This low cost device is available at hardware or plumbing stores. This will help protect our water system. Contact your water department for information.

You can reach the Water Department at any time by calling 665-3080.

<i>Wayne Hutkoski</i>	<i>Superintendent</i>
<i>GeorgeAnne Dufault</i>	<i>Chairman</i>
<i>George Bucala</i>	<i>Commissioner</i>
<i>Paul Fleuriel</i>	<i>Commissioner</i>

YOUR PUBLIC WATER SUPPLY IS A SAFE, AFFORDABLE AND ABUNDANT RESOURCE. MAKE AN EFFORT EVERY DAY TO PROTECT IT!

FACT #1 Your public water supply is safe and clean. Our department consistently meets or exceeds all water quality standards set forth by the U.S. Environmental Protection Agency and the MA. Department of Environmental Protection.

FACT #2 Drinking water may reasonably be expected to contain some small amounts of contamination. The presence of contaminants does not necessarily indicate that the water poses a health risk. 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, those who have undergone transplants, those with HIV/AIDS or other immune system disorders, some elderly and infants can be at risk for infection. These persons should seek advice from their medical provider.

FACT #3 you can contact EPA at 800-426-4791 for more information on contaminants and their health effects. EPA/Centers for disease control and prevention guidelines on appropriate means to lessen the risk of infection from Cryptosporidium and other microbial contaminants are available at this number.

FACT #4 YOU CAN REACH THE WATER DEPARTMENT AT ANY TIME BY CALLING 665-3080.
Wayne Hutkoski Superintendent
GeorgeAnne Dufault, Chairman Water Commissioners
George Bucala Commissioner
Paul Fleuriel Commissioner
The Commissioners meet on the first Tuesday of the month
In the Water Department office at 4 Sandy Lane at 7:00 P.M.

FACT #5 Irons and manganese are naturally present in our water supply. Water is often discolored during peak demand and flow. Although discolored and unattractive, the water is still safe to drink.

FACT #6 Sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the ground it dissolves naturally occurring minerals. In some cases radioactive materials and substances resulting from the presence of animals or human activity can be picked up.