



The Quality of Your Drinking Water

The Maynard Water Department is committed to providing our customers with water that meets or surpasses all state and federal drinking water standards. The Maynard water system is a registered public water supply with ID#2174000. To ensure that we continue to deliver this quality product, the Water Division continues to make investments in water quality monitoring, water source protection, water mains, and the water treatment plants. We are pleased to report the results of our 2009 water testing to inform you about your drinking water. We will be mailing you a report each year with information about annual water quality.

Maynard's Water System

Maynard's drinking water comes from seven groundwater sources. Wells #1-4 are constructed in sand and gravel deposits that overlie bedrock. These wells are 40-60 feet and are located in the southern half of Maynard. The remaining three wells, #5 - 7, are approximately 400 feet deep into bedrock and are located in the northern half of Maynard. White Pond, a surface water supply located in Hudson and Stow, is no longer in service; however it remains available as an emergency backup supply. The Town has the infrastructure to supply 2.75 million gallons per day (MGD) of high quality treated water from the following facilities:

- Old Marlboro Road Treatment Facility – Wells # 1-3: 1.0 MGD
- Green Meadow Treatment Facility – Well #4: 0.65 MGD, expandable to 1 MGD
- Rockland Avenue Treatment Facility – Wells #5-7: 1.1 MGD

Maynard's Water Treatment

To meet state and federal requirements for public drinking water, our source water receives treatment before it is supplied to our customers. All three water treatment facilities disinfect water and have greensand filters to remove iron and manganese. In addition, Old Marlboro Road and Green Meadow facilities add potassium hydroxide to control corrosion from household plumbing, and the Rockland Avenue facility is equipped with an air stripper to remove radon, a common contaminant in bedrock wells.

Help Protect Our Drinking Water Supply

The MassDEP has completed a Source Water Assessment and Protection (SWAP) Report for our system. The SWAP report assesses the susceptibility of public water supplies to potential contamination by microbiological pathogens and chemicals. A susceptibility ranking of high was assigned to our system using information collected during the assessment by the DEP. A source's susceptibility to contamination does not imply poor water quality. The report states the high vulnerability to contamination is due to the absence of hydrogeologic barriers (i.e. clay) that can prevent contamination migration. The complete SWAP Report is available online at the following website: <http://www.mass.gov/dep/water/drinking/ceroreps.htm>

Protecting our water sources is just as important as conserving drinking water. You play an important role in protecting your water resources. To help us protect your water sources:

- Use fertilizers, insecticides, and herbicides sparingly and follow the manufacturers' instructions.
- Never pour harsh chemicals or cleaners down your toilet or sink. Instead, dispose of them and other materials, such as paints and thinners, during household hazardous waste collections programs.
- If you have a septic system, have it pumped out every two years and do not use septic system cleaners.
- Immediately notify the Department of Public Works if you notice anyone trespassing or riding motorized vehicles near the wells, or vandalizing any water supply facilities.

Water Conservation Tips

Here's how you can do your parts to conserve water at home:

- Fix Leaking faucets, pipes, toilets, etc.
- Install water-saving devices.
- Wash only full loads of laundry.
- Don't use the toilet for trash disposal.
- Take shorter showers. Do not let the water run while shaving, washing, or brushing teeth.
- Run the dishwasher only when full.
- Water the lawn as little as possible.
- Choose plants that don't need much water.
- Obey water bans or regulations.

Maynard 2009 H2O Facts

Total Water Pumped: 342 Million Gallons (as pumped through the water treatment facilities)
 Average Day Usage: 0.938 Million Gallons

Any Questions?

Want to know more about the Maynard water supply system or interested in participating in the decision-making process? Please call Jerry Flood, Superintendent at the Maynard Department of Public Works, at 978-897-1017 with any questions, comments, or concerns. Our offices are located at 195 Main Street.



Postal Patron
 Maynard, MA 01754



Town of Maynard
 Department of Public Works
 Water Department
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 Town Building
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Further Information

- MassDEP: www.mass.gov/dep
- MA Drinking Water Education Partnership: www.madwep.org
- American Water Works Association: www.awwa.org
- U.S. Environmental Protection Agency: www.epa.gov/safewater

Cross-Connection Contamination

Cross-connections that could 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). Community water supplies are continually jeopardized by cross-connection unless appropriate valves, know as backflow prevention devices, are installed and maintained. For more information, visit the Web site of the American Backflow Prevention Association (www.abpa.org) for a discussion on current issues.

Water Quality Summary

Listed below are the 15 contaminants detected in Maynard's drinking water in 2009. Not listed are over 100 other contaminants which we tested, but which we did not detect. The complete list of contaminants that we test for is available at the Department of Public Works office.

Samples Collected from Our Water Supply							
Substance (Contaminant)	Date(s) Collected	Highest Level detected	Range Detected	Highest Level Allowed (EPAs MCLs)	Ideal Goals (EPAs MCLGs)	Violation (Y/N)	Possible Source(s) of Contamination
INORGANIC COMPOUNDS							
Barium (ppm)	6/10/09	0.044	0.017-0.044	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	6/10/09	2	0-2	4	4	N	Discharge from electrical, aerospace, and defense industries; erosion of natural deposits
VOLATILE ORGANIC COMPOUNDS							
Benzene, ppb	5/5/09	1	0-1	5	0	N	Discharge from factories; leaching from gas storage tanks and landfills
Perchlorate (ppb)	6/08/09	0.34	0-0.34	2	N/A	N	Rocket propellants, fireworks, munitions, flares, blasting agents
Other Organic Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source	
Chloroform ¹ , ppb	3/4/09 5/5/09 9/9/09	1.9-6.4	4.0	---	---	By-product of drinking water chlorination	
Bromodichloromethane ² , ppb	3/4/09 5/5/09 9/9/09 11/3/09	1.8-5.3	3.1	---	---	By-product of drinking water chlorination	
Dibromochloromethane, ppb	3/4/09 5/5/09 9/9/09 11/3/09	0-1.4	0.35	---	---	By-product of drinking water chlorination	
Chlorodibromomethane, ppb	3/4/09 5/5/09 9/9/09 11/3/09	0-2.2	1	---	---	By-product of drinking water chlorination	
INORGANIC CHEMICALS							
Sodium ^{1, 2}	6/10/09	18	14-18	----	20	Naturally present in the environment	
Sulfate ^{1, 3}	6/10/09	51	19-51	250	----	Naturally present in the environment	

Notes:

¹Unregulated contaminants are those for which the Environmental Protection Agency (EPA) has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulations are warranted.

²The Massachusetts Office of Research and Standards has set a guideline concentration of 20 ppm for sodium and 0.1 ppm for nickel.

³Massachusetts has set a secondary Maximum Contaminant Level of 250 ppm for sulfate. This level was established to protect the aesthetic quality of drinking water and is not health based.

The Substances Found in Your Tap Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, brooks, 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 contaminants resulting from the presence of animals or human activity. Contaminants that may be present in untreated source water include the following:

- **Microbial contaminants** such as viruses and bacteria which may come from septic systems, wastewater treatment plants, agricultural livestock operations, and wildlife.
- **Inorganic contaminants** such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil or gas production, mining, or farming.

- **Pesticides & herbicides** 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, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants** can be naturally occurring or be the results of oil and gas production and mining 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. In order to ensure that tap water is safe to drink the MassDEP and the EPA prescribe regulations, which limit the

Samples Collected from Your Faucets						
Substance (Contaminant)	Date(s) Collected	Highest Running Annual Average	Range Detected	Highest Level Allowed (EPAs MCLs)	Ideal Goals (EPAs MCLGs)	Possible Source(s) of Contamination
DISINFECTION BY-PRODUCTS						
Total Trihalonmethanes, ppb	Quarterly in 2009	28.6	9-58.3	80	----	By-product of drinking water chlorination
Haloacetic Acids, ppb	Quarterly in 2009	15.9	5.1-31.9	60	----	By-product of drinking water chlorination
DISINFECTANT						
Chlorine, ppm	Monthly in 2009	0.55	0.02-1.39	4 (MRDL)	4	Water additive used to control microbes
Substance (Contaminant)	Units	90th Percentile	Range of Detection	Action Level (EPAs MCLs)	Ideal Goals (EPAs MCLGs)	Sources of Contaminant
INORGANIC CHEMICALS						
Copper (0 samples exceeded the action level)	ppm	0.1	0-0.123	1.3	1.3	Corrosion of household pumping systems
Lead (0 samples exceeded the action level)	ppm	0.008	0-0.021	0.015	0	Corrosion of household pumping systems

Definitions:

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 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.

Maximum Residual Disinfection Level Goal (MRDLG) - The level of drinking water disinfectant below which there is no known expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfection Level (MRDL) - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectants is necessary for control of microbial contaminants (ex. chlorine, chloramines, chlorine dioxide).

Action Level (AL) — The concentration of a contaminant, which, if exceeded, triggers a treatment or other requirements that a water system must follow. The action level for lead and copper is the 90th percentile of all samples taken at one time.

ppm — One part per million or milligrams per liter (mg/L); one part per million is equivalent to \$1 in \$1,000,000.

ppb — One part per billion or micrograms per liter (ug/L); one part per billion is equivalent to \$1 in \$1,000,000,000.

ND — Substance not detected in the sample.

NR — Not regulated

amount of certain contaminants in water provided by public water systems. The 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

Lead

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flush your tap for 30 seconds to 2 minutes before using tap water to reduce lead content. Additional

information is available from the Safe Drinking Water Hotline at 800-426-4791.

Vulnerability

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people with cancer undergoing chemotherapy, those 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. More information about contaminants and potential health effects along with the EPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.