

# 2021 Consumer Confidence Report

## Your Annual Drinking Water Quality Information



### Williamstown Water Department

675 Simonds Rd, Williamstown, MA 01267

Massachusetts Department of Environmental Protection Public Water Supply ID# 1341000

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This report provides a snapshot of the drinking water quality that was achieved last year. Included are details about where your water comes from, what it contains and how its quality compares to state and federal standards. We are committed to providing you with information because informed customers are our best allies.

#### **PUBLIC WATER SYSTEM INFORMATION**

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP). MA DEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to you. To ensure that we provide the highest quality of water available, your water system is operated by Massachusetts certified operators who oversee the routine operations of our system. Your water is constantly monitored by us and MassDEP to determine the effectiveness of existing water treatment and to determine if any additional treatment is required. During calendar year 2021, the Water Department conducted leak detection throughout the distribution system, we identified and repaired six water main leaks. Another improvement was the replacement of two fire hydrants in town and also the replacement of three chlorine analyzers, one at each chlorinating building at our three well sites.

#### **OPPORTUNITIES FOR PUBLIC PARTICIPATION**

While we do not have regularly scheduled meetings regarding our water system, we welcome any opportunity to discuss concerns or issues. Please contact us if you would like to publicly discuss your drinking water

#### **YOUR DRINKING WATER SOURCE**

##### *Where Does My Drinking Water Come From?*

Williamstown Water comes from three groundwater sources designated by MassDEP, Source Name and ID Source Numbers are as follows. Well #2 Stetson Road Well [1341000-02G], Well #3 Green River Well [1341000-03G], Well #1A, Replacement Well [1341000-04G]. All three are ground water wells, in a confined aquifer. They are also artesian in their flow characteristics; this means they are under pressure and will come to the top of the ground without the use of a pump. The pumps are only installed to create enough force to fill the underground storage tank (2.75 million gallons), located between the end of South Street and the end of Stone Hill Rd. Two of the wells are located on Stetson Road adjacent the Cal Ripken field, and the other located off Main St. behind the Town's tennis courts. Williamstown still maintains the surface supplies of Sherman Springs Reservoir and Rattlesnake Reservoir as backups for emergency supply. These two sources account for an approximate 10-million-gallon safety net.

##### *How are These Sources Protected?*

To protect against bacterial contamination, your water is treated with a disinfectant solution of Sodium Hypochlorite (NaOCL) Chlorine, and a Poly-orthophosphate (PO<sub>4</sub>)<sub>3</sub> as a sequestering agent for calcium, iron, and manganese. The product name for our poly-orthophosphate is AQUAMAG.

Williamstown Water Department makes every effort to provide you with safe and uncontaminated drinking water. The water quality achieved with our system is monitored by us and MassDEP to determine if any future treatment or improvements that may be required. In addition, MassDEP inspects the system approximately every 3 years to evaluate compliance with current state and federal regulations. Our last Sanitary Survey inspection was conducted by MassDEP in ( May of 2021 ).

Recommendations contained in the survey report were some upgrades to our emergency water supply reservoir buildings and infrastructure and the cleaning and inspections of Pines Lodge Park water storage tank and Williams College water storage tank located on Pine Cobble Road.

## **SOURCE WATER ASSESSMENT AND PROTECTION (SWAP) REPORT**

Significant sources of potential contamination in Williamstown's Zone II recharge are inclusive of the following but not limited to:

Non-conforming Zone I

Residential Lane Uses

Transportation Corridors

Hazardous Materials Storage and Use

Confirmed Oil or hazardous material contamination sites

Comprehensive wellhead protection planning with the City of North Adams

Agricultural Activities

Right of way owned by other Natural gas, National Grid (electric high-tension lines), HQWD (wastewater interceptor mains), and Railroad lines.

Williamstown has high susceptibility to potential sources of contamination due to the vast area of recharge for its Zone II. Sources of potential contamination are controlled through zoning regulations, and best management practices to limit the aquifer's exposure from the threats mentioned above. Through continuous monitoring of land uses, public, residential, commercial and agricultural, it is our mission to keep the public drinking water aquifer safe and potable for the general public. The SWAP report is available for public viewing at 675 Simonds Rd Williamstown at the Public Works Building or on the web at [http://www.mass.gov/eea/docs/dep/water/drinking/swa\\_p/wero/1341000.pdf](http://www.mass.gov/eea/docs/dep/water/drinking/swa_p/wero/1341000.pdf)

*Residents can help protect sources by:*

- *Turn the water off when you are brushing your teeth or washing your hands.*
- *Use a bucket of suds to wash a car or bicycle. Then rinse quickly with a hose.*
- *Wash laundry or do dishes in full loads.*
- *Water the garden in the morning or evening to avoid excessive evaporation.*
- *Use bark mulch around shrubs, trees, or plantings as it retains moisture much better than just soil.*
- *Fix leaks as toilets and faucets can attribute up to as much as 3,000 gallons of waste per year.*

## **SUBSTANCES FOUND IN TAP WATER**

Sources of drinking water (both tap water 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 presence of animals or from human activity. 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 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 stormwater runoff, and septic systems.

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

## **COMPLIANCE WITH REGULATIONS**

### ***Does Drinking Water Meet Current Health Standards?***

We are committed to providing you with the best water quality available. We are proud to report that last year your drinking water met all applicable health standards regulated by the state and federal government.

### IMPORTANT DEFINITIONS

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG)** - The level of a contaminant in drinking water below which there is no known expected risk to health. MCLG's allow for a margin of safety.

**Action Level (AL)** - The concentration of a contaminant which, if exceeded triggers treatment or other requirements that a water system must follow.

**90th Percentile** - Out of every 10 homes sampled, 9 were at or below this level.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

**Secondary Maximum Contaminant Level (SMCL)** – These standards are developed to protect aesthetic qualities of drinking water and are not health based.

**Unregulated Contaminants** – Contaminants for which EPA has not established drinking water standards. The purpose is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

**Method of Detection Limit (MDL)** - The minimum concentration of a substance that can be measured and reported with 99% confidence the analyte concentration is greater than zero and determined from analysis of a sample in a given matrix containing the analyte

**Turbidity** - A measure of the cloudiness of water. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

**Massachusetts Office of Research and Standards Guidelines (ORSG)** - This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure.

### **WATER QUALITY TESTING RESULTS**

The water quality tables show the most recent water quality testing results where levels were detected and compares those levels to standards set by the Environmental Protection Agency and Massachusetts Environmental Protection Agency.

MassDEP has reduced the monitoring requirements for Inorganic Contaminants (IOCs), Synthetic Organic Contaminants (SOCs), and Perchlorate, because the source is not at risk of contamination. The last samples were collected on 9/8/2021 for Perchlorate, 12/01/2020 for Inorganic Contaminants (IOC), 1/20/2021 for Synthetic Organic Contaminants (SOC), 9/8/2021 for Volatile Organic Compounds (VOC), and were all found to meet all applicable US EPA and MassDEP standards. Additionally, we tested its supplies for PFOA and PFOS during the 2021 calendar year and results came in that neither were detected down to the testable limit of 2 Parts Per Trillion (PPT).

With the exception of those compounds noted on the tables below, all other compounds in the panels reported undetectable levels.

Regulated Contaminant	Date(s) Collected	Highest Result	Range Detected	MCL	MCLG	Violation (Yes/No)	Possible Source(s) of Contamination
<b>INORGANIC CONTAMINANTS</b>							
<i>Nitrate (ppm)</i>	<i>11/22/2021</i>	<i>ND</i>	<i>N/A</i>	<i>10</i>	<i>10</i>	<i>No</i>	<i>Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits</i>
<i>Barium (ppm)</i>	<i>12/01/2020</i>	<i>0.0135 (03G)</i>	<i>N/A</i>	<i>2</i>	<i>2</i>	<i>No</i>	<i>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.</i>
<b>DISINFECTANTS AND DISINFECTION BY-PRODUCTS</b>							
<i>Chlorine Residual (ppm)</i>	<i>Daily</i>	<i>.58</i>	<i>.02 - .58</i>	<i>4</i>	<i>4</i>	<i>No</i>	<i>Byproduct of drinking water chlorination</i>

Contaminant (units)	Dates Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source(s) of Contamination
<b>UNREGULATED AND SECONDARY CONTAMINANTS</b>						
<i>Iron (ppm)</i>	<i>11/22/2021</i>	<i>.0541 - .984</i>	<i>0.273</i>	<i>0.3</i>	<i>0.3</i>	<i>Natural and industrial sources, as well as aging and corroding distribution systems and household pipes.</i>
<i>Manganese** (ppb)</i>	<i>11/22/2021</i>	<i>16.5 – 134.0</i>	<i>80.90</i>	<i>50</i>	<i>300</i>	<i>Naturally occurring, corrosion of cast iron pipes</i>
<i>Sodium (ppm)</i>	<i>12/01/2021</i>	<i>2.29</i>	<i>2.16</i>	<i>N/A</i>	<i>20</i>	<i>Natural Sources, runoff from use of salt on roadways, byproduct of water treatment process.</i>
<i>Radon (pCi/l)</i>	<i>09/02/2015</i>	<i>610 (02G)</i>	<i>560 - 610</i>	<i>NA</i>	<i>10,000</i>	<i>Natural Sources</i>

*\*Some people who drink water containing sodium at high concentrations for many years could experience an increase in blood pressure.*

*“Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. (You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your state radon program or call EPA’s Radon Hotline (800-SOS-RADON). “*

Regulated Contaminant	Date(s) Collected	Highest Result	Range Detected	MCL	MCLG	Violation (Yes/No)	Possible Source(s) of Contamination
<b>RADIOACTIVE CONTAMINANTS</b>							
<i>Radium 226 &amp; 228 (pCi/L) (combined values)</i>	<i>09/02/2015</i>	<i>0.681(02G)</i>	<i>0.441 - 0.681</i>	<i>5</i>	<i>0</i>	<i>No</i>	<i>Erosion of natural deposits</i>

**LEAD AND COPPER – 8/03/2021 thru 9/16/2021**

Contaminant (units)	Action Level	MCLG	90 <sup>th</sup> Percentile	Number of Sites Sampled	Number of sites above the Action Level	Possible Sources of Contamination	Violation (Yes/No)
<i>Lead (ppb)</i>	<i>15</i>	<i>0</i>	<i>ND or 0.00</i>	<i>24</i>	<i>0</i>	<i>Corrosion of household plumbing</i>	<i>No</i>
<i>Copper (ppm)</i>	<i>1.3</i>	<i>1.3</i>	<i>0.274</i>	<i>24</i>	<i>0</i>	<i>Corrosion of household plumbing</i>	<i>No</i>

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

ND = Not Detected

N/A = Not Applicable

**HEALTH NOTES**

*In order to ensure that tap water is safe to drink, the Department of Environmental Protection (MA DEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline (800-426-4791).*

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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800)-426-4791.

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. Williamstown 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>.

Cross connections are potentially hazardous situations for public or private potable water supply and a source of potable water contamination. A cross connection is any potential or actual physical connection between potable water supply and any source through which it is possible to introduce any substance other than potable water into the water supply. Common Cross connection scenarios are a garden hose whose spout is submerged in a bucket of soapy water or connected to a spray bottle of weed killer.

Cross connections between a potable water line and a non-potable water system or equipment have long been a concern of the Department of Environmental Protection (MA DEP). MA DEP established regulations to protect the public health of water consumers from contaminants due to back-flow events. The installation of back-flow prevention devices, such as a low-cost hose bib vacuum breaker, for all inside and outside hose connections is recommended. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your community. For additional information on cross connections and on the status of your water system's cross connection program, please contact the Williamstown Water Department.

**Please make sure fire hydrants are not hidden or masked by any foliage, plantings or fencing, it is designed so that your property is adequately protected in the event of a fire!!!!**

**Copies of this report are available at the Town Garage, 675 Simonds Road and Town Hall, 31 North Street. It is also available on the web [www.williamstownma.gov](http://www.williamstownma.gov)**

**David Caron / Water and Sewer Superintendent**  
**Phone: (413) 458-3383 / [Dcaron@williamstownma.gov](mailto:Dcaron@williamstownma.gov)**  
**675 Simonds Road**  
**Williamstown, MA 01267**

For more information regarding our system you may also visit the EPA website at:  
<http://www.epa.gov/enviro/facts/sdwis/search.htm>