

AGWAWAM WATER DEPARTMENT • PUBLIC WATER SUPPLY ID#: 1005000 ANNUAL WATER QUALITY REPORT • 2018



Health Information

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. People whose immune systems may be compromised because of chemotherapy, organ transplants, or HIV/Aids or other immune 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 (1-800-426-4791).

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. The Agawam Department of Public Works 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 water 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>

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

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems.

Water Quality

The 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 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 can result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or 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, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban storm water runoff, and septic systems.

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

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Agawam is required to collect a minimum of 30 water samples each month from locations throughout Town and tests these samples for coliform bacteria.

About Your Water

The treated drinking water produced by the Springfield Water and Sewer Commission and distributed by the Agawam Water Department originates from a surface water supply located in Blandford and Granville, Massachusetts. Two water bodies make up the water supply: Cobble Mountain Reservoir (Source Water ID #1281000-02S), and Borden Brook Reservoir (Source Water ID #1281000-04S). A source water assessment was completed by the Massachusetts Department of Environmental Protection to evaluate the susceptibility of public water supplies to contamination from surrounding uses. A susceptibility ranking of moderate was assigned to this system using the information collected during the assessment. The assessment is available at:

<<http://www.mass.gov/eea/docs/dep/water/drinking/swap/wero/1281000.pdf>>



Sanitary Survey

In September 2018, the MassDEP conducted a sanitary survey of our public water system. A sanitary survey is an on-site review of the water sources, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the system's ability to produce and distribute safe drinking water. The 2018 sanitary survey identified a few items to address, which have all been completed:

Repaired pressure gauges at Liswell Booster Station; notified public officials of our cross-connection program (and residents via the CCR) and continue to do so annually; updated the AWD Emergency Response Plan & conduct annual training; and AWD has updated our coliform sampling plan with MassDEP.

Does my Drinking Water Meet the Current Health Standards?

We are committed to providing you with the best water quality available. However some contaminants that were tested last year did not meet all applicable health standards regulated by the state and federal government. Due to contaminant violations for five Haloacetic acids (HAA5), which are disinfection byproducts, during the period January 1, 2018 - December 31, 2018 at the entry point to the distribution system (EPTDS) at Provin Mountain. It is important to note that, as the water travels through the water distribution system, the HAA5s dissipate and the concentrations decrease significantly with time.

Our system took the following corrective actions: We mailed a public notification and also provided distributed notices to several public building in town; we also published an ad in the newspaper. As part of the North Westfield Street Water Main Project we installed a new sampling station at the EPTDS. We continue to work with The Springfield Water and Sewer Commission to enhance the treatment of the source water to limit the formation of HAA5.

This was not an emergency. If it had been an emergency, you would have been notified within 24 hours. Our water system and MassDEP monitor and record the effectiveness of actions taken in response to contaminant violations. The health effect statement for this contaminant is listed below.

"HAA5 is a group of five haloacetic acid compounds which form when disinfectants react with natural organic matter in the water.

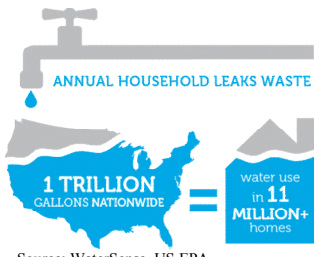
Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer."

Water Consumption and Rates

Agawam purchases its water from the Springfield Water and Sewer Commission (from its 42 million gallon Provin Mountain finish water reservoir) but operates our own system for the distribution of water within the community. This system, comprised of one pump station and approximately 150 miles of pipe ranging in diameter from 4" to 24", and 11,370 service accounts. Residential water use accounted for 57.5% of total usage and overall annual consumption was up 4.6% versus 2017 use at **1,192,631,109** gallons of water in 2018.

The Mass Dept. of Environmental Protection is requiring that all water systems take steps to reach 65 residential gallons per capita per day standard (GPCPD). This residential usage includes water used for lawn irrigation.

In Agawam, the average residence has 2.5 people which, at the 65 gallon rate translates to 4,000 cubic feet (CF) in a 6-month billing cycle. To encourage the necessary reduction in water consumption, an inclining block rate structure was adopted on July 1, 2009, and revised in 2104. Residential usage above 4,000 CF and all other water use, including lawn irrigation, is charged at a rate of \$2.38 per 100 CF (all use read after September 1, 2014). This rate structure has been assisting in meeting the required reduction in residential and non-essential outdoor water use. According to our 2018 calculations, Agawam is at a 64 GPCPD, better than the state standard of 65.



Source: WaterSense, US EPA

Save Water, Use WaterSense Products



Source: WaterSense, US EPA

Cross-Connection Control and Backflow Prevention Program

Protection of the Public Water Supply is very important and a vital component is proper backflow prevention and cross-connection control. Cross-connections are potential sources of backflow and are something that we need to prevent because of the potential adverse effects to public health and safety. If water backflows into the public water system, the system could become contaminated. Therefore, we urge you to implement proper cross-connection controls.

The Agawam Water Department is required by Massachusetts Regulations (310 CMR 22.22) to have a cross-connection control program to prevent backflow. As part of this program, members of the Department survey properties (largely non-residential) to look for potential cross-connections and require proper backflow prevention devices when a need is determined. Backflow prevention devices (BPD) are tested by the Department at a minimum of an annual basis or greater depending on the BPD and hazard to which the BPD protects.

The Agawam Water Department requires notification of the installation, repair, replacement, relocation, and removal of backflow prevention devices and approval needs to be granted **before work can proceed**. Please contact the Deputy Superintendent Water/Sewer, John Decker at (413) 821-0600 x8627 or the Plumbing Inspector, Michael Day at (413) 821-0600 x8636. Work on backflow prevention devices may require a plumbing permit, please contact the Plumbing Inspector to verify the need.

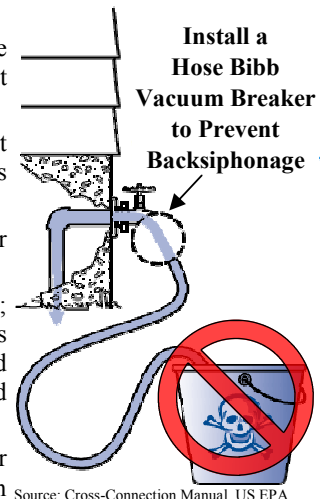
Cross-connection: any actual or potential physical connection or arrangement between a pipe conveying potable water from a public water system and any non-potable water supply, piping arrangement or equipment including, but not limited to, waste pipe, soil pipe, sewer, drain, other unapproved sources.

Cross-connections can be found at heating and ventilation equipment, fire suppression systems, factory or plant equipment, irrigation systems, hose spigots, utility sinks, chemical processing facilities, etc.... Cross-connections hazards such as these can be prevented through the installation of a backflow prevention devices.

Backflow: the flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply from any source other than the intended source; either by **Backsiphonage** or **Backpressure**.

Backsiphonage: when water pressure in the water distribution system decreases, for example: a water main break; firefighting (use of fire hydrants); or other high demand uses. When this happens, water from your building's plumbing may backflow, via backsiphonage, into the public water system if proper cross-connection control and prevention practices are not followed. Installing hose bibb vacuum breakers are an easy way to retrofit threaded fixtures at your property that are not already equipped to prevent backsiphonage.

Backpressure: when water pressure in a building's plumbing is increased above the pressure in the public water system, say by an improperly connected pump in a factory; if this happens, the water in the building's plumbing can be forced back into the public water system.



Source: Cross-Connection Manual, US EPA

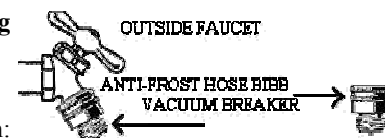
Some Simple steps to take around your home and yard to avoid cross-connections and backflow:

- Install hose bib vacuum breakers on all exterior spigots. These are available at hardware stores and plumbing supply houses
- Toilets need to be equipped with a ballcock with an integral anti-siphon valve. **
- Boilers need to be equipped with approved backflow preventers and expansion tank(s) to prevent backflow of boiler water (which may be treated with chemicals).**
- Install and maintain an approved (by Agawam Water Dept.) backflow device on your irrigation system. Please register the device with the Agawam Water Dept.. **
- All sinks, tubs and tanks need to have a proper air gap to prevent backsiphonage. Typically 1-inch or more (as required by plumbing code) between bottom of the faucet/spout and rim or edge. **

****Work may be required to be done by a MA Licensed Plumber and a Plumbing Permit may need to be issued, contact the Plumbing Inspector for more information.**

Informational Links:

- ◇ [Agawam Water Department Cross Connection Control and Backflow Prevention:](http://www.agawam.ma.us/backflow) <http://www.agawam.ma.us/backflow>
- ◇ [MassDEP Cross Connection Control Program Regulations:](http://www.mass.gov/eea/docs/dep/water/ccdefreg.pdf) <http://www.mass.gov/eea/docs/dep/water/ccdefreg.pdf>
- ◇ [USC Cross-Connections Study:](http://www.watts.com/pages/learnAbout/usc_study.asp?catId=1160) http://www.watts.com/pages/learnAbout/usc_study.asp?catId=1160
- ◇ [Foundation for Cross-Connection Control and Hydraulic Research:](http://fccchr.usc.edu/introduction.html) <http://fccchr.usc.edu/introduction.html>



Source: oakgov.com, Oakland County, Michigan



Hose Bibb Vacuum Breaker (Watts Series 8)
Source: Watts.com



IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Haloacetic Acid 5 (HAA5) MCL Violation in Agawam

The Agawam Water Department (PWS ID#: 1005000) recently violated a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Testing results from samples taken on 3/5/2019 show that our system exceeded the standard or maximum contaminant level (MCL), for HAA5 at one of our four locations, 1057 North Westfield Street. The standard for HAA5 is 60 micrograms per liter (µg/L), also known as parts per billion (PPB). It is determined by averaging all samples collected by our system for the last 12 months, this is also known as a locational running annual average (LRAA). The level of HAA5 average at this location for the April 1, 2018 to March 31, 2019 monitoring period was 65 µg/L; with a range for the last 12 month period of 43-110 µg/L. Our most recent sample results were 51 µg/L, which is below the standard of 60 µg/L, but because the drinking water standard is an average (LRAA) over the past year at that location, we remain in violation of the MCL for HAA5. The other three sampling locations, deeper into the water system, all have LRAAs below the MCL.

What does this mean?

You are advised that the water can continue to be consumed as usual. This is not an emergency, and there was no immediate or short-term health risks. If it had been an emergency, you would have been notified within 24 hours. HAA5 are five haloacetic acid compounds which form when disinfectants react with natural organic matter in the water. People who drink water containing HAA5s in excess of the MCL over many years may have an increased risk of getting cancer. Please see https://www.mass.gov/service-details/haa5-in-drinking-water-information-for-consumers for a fact sheet on HAA5s.

What should I do?

There is nothing you need to do. You do not need to boil your water or take other corrective actions. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water.

Why did this happen:

The higher than normal rainfall in 2018 resulted in a 50 percent increase in the amount of dissolved natural organic matter (NOM) in Cobble Mountain Reservoir, which is the main source of Agawam’s drinking water. The increased amount of dissolved NOM interacting with the necessary disinfectant levels has resulted in higher than typical HAA5 levels in the treated water provided by SWSC to Agawam. Although the levels of dissolved NOM are decreasing, they are still elevated.

Sample Location	March 5, 2019 Q1-19 Results (µg/L)	Locational Running Annual Average (LRAA) (µg/L)	Values in LRAA (µg/L) (Q2-18, Q3-18, Q4-18, & Q1-19)
1057 No. Westfield Street	51	65	43, 56, 110, & 51

What is being done?

We are working closely with our water supplier at the Springfield Water and Sewer Commission (SWSC). They have modified the existing treatment process to reduce the levels of HAA5 in the distribution system while maintaining safe chlorine levels. A return to more normal precipitation patterns in 2019 could also reduce the amount of NOM in the raw water and in turn a reduction in HAA5.

A comprehensive facilities improvement plan for West Parish Filters Water Treatment Plant is also underway. The plan is analyzing various long-term treatment process upgrades to more effectively treat organic matter and reduce HAA5. A pilot study of differing treatment systems to determine the most effective technologies for removal of organic matter is underway and will be completed in 2019-2020. This study will help to determine the necessary investment to address long term water quality issues including HAA5. The SWSC also has a Source Water Protection Plan that identifies land management tools to optimize raw water quality. SWSC states it continuously explores and implements ways to optimize raw water quality.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information, please contact Deputy Superintendent John Decker at (413) 821-0600 or at water@agawam.ma.us.

Our Town

Volume 12 Issue 1

36 Main Street, Agawam, MA 01001
Phone 413-786-0400

Summer, 2019



Dear Residents:

“Our Town” is a publication which informs residents of the latest developments in Agawam. Watch for future publications highlighting exciting projects and issues of importance so that you are aware of all the progress Agawam has made. Also, be sure to like us on Facebook for frequent updates and information. I am very pleased with our progress to date, specifically our streets and sidewalks and hope that you are as well.

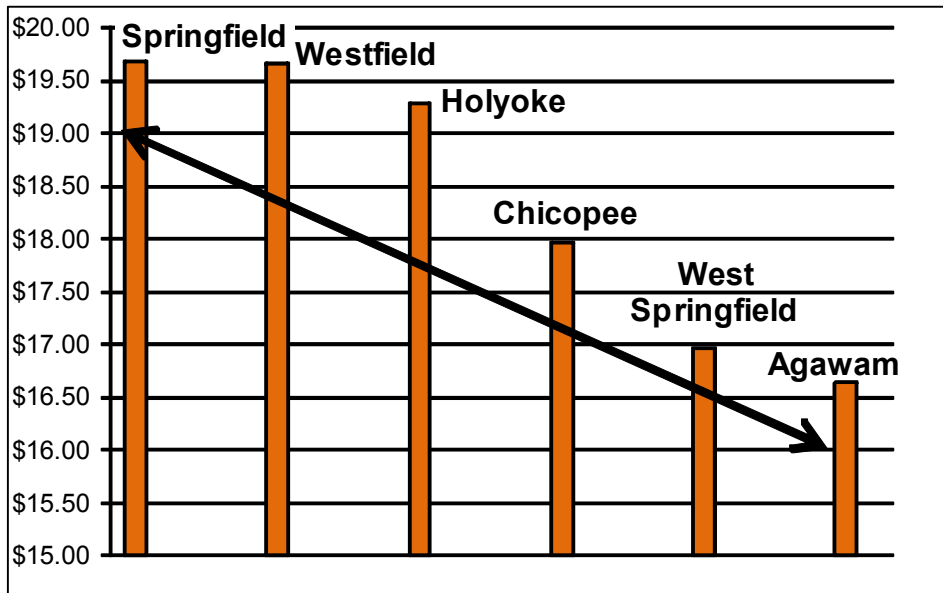
Enjoy this warm weather and have a happy, healthy and safe summer.

William P. Sapelli, Mayor

AGAWAM FINANCES REMAIN STRONG

Agawam continues to operate within proposition 2 1/2 without the need of an override or debt exclusion. Our upgraded bond ratings by Standard and Poor enable us to keep interest costs low as we pursue needed capital improvements. A conservative approach to budgeting and close review of expenditures have allowed us to maintain the lowest residential tax rate of the surrounding communities. The capital budget for FY20 will be voted by the Council on May 20, 2019 and the public hearing for the FY20 budget will be held on June 3, 2019.

AGAWAM'S RESIDENTIAL SPLIT TAX RATE IS THE LOWEST OF THE SURROUNDING COMMUNITIES.



WHAT IS A SEWER BACKWATER VALVE?

It is a type of check valve that is installed at plumbing fixtures, (sink, toilet, tub, etc....) that may be vulnerable to a sanitary sewer backup. These valves work by allowing water to flow out but prevent water from coming back in due to a sewer backup, reverse flow, or backpressure in the sewer system.

The Uniform Plumbing Code of Massachusetts (248 CMR 10.15) requires sanitary sewer backwater valves wherever a fixture is subject to reverse flow or backpressure. Reverse flow or backpressure can occur from the sanitary sewer collection system, typically if the fixture is located below the hydraulically upstream manhole cover's elevation.

Fixtures located in basements will often have these devices located on their drain line; whole house backwater valves are also available. With any backwater valve, you should clearly note or label their location; otherwise a plumber trying to clear a blockage may inadvertently destroy the backwater valve in the process. Depending on the lay of the land and the design of the sanitary sewer system, fixtures besides those in the basement may require protection; in any case, a Massachusetts Licensed Plumber



would look at your plumbing system and determine where these devices are required.

PVC Backwater Valve

Credit: www.oatey.com

Grass Clippings and Stormwater

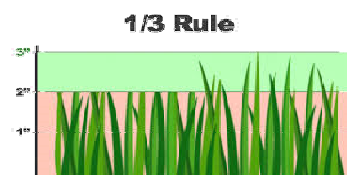
You Can Curb Water Pollution by Starting in Your Own Back Yard

Stormwater runoff, rain or snow-melt that either soaks into exposed soil or remains on top of impervious surfaces such as pavement and rooftops, eventually flows into our local streams, rivers and ponds. Stormwater runoff has become a major and fast growing source of pollution that affects every watershed.

When lawn clippings, fertilizers, soil, leaves, or animal wastes are picked up by stormwater runoff, they are carried directly to our local waterways. All of these material, including grass clippings, contain nitrogen and phosphorus. According to the U.S. EPA, nitrogen and phosphorus are two of the most troublesome pollutants in storm water runoff and are considered the primary cause of water quality problems in our lakes, ponds and streams. Although nitrogen and phosphorus are nutrients that are natural parts of the ecosystem, too much in the water causes algae to grow faster than ecosystems can handle, harming the water quality.

What can you do to protect water quality while keeping your yard maintained?

- Mow your lawn often enough so no more than one-third the length of the grass is removed. Taller grass has deeper roots—preventing erosion, suppressing weeds and helping the rain soak into the ground.
- Leave grass clippings on the lawn or compost them. A mulch-mower is ideal for retaining and spreading clippings on your lawn. Clippings decompose quickly, providing important nutrients for your lawn and reducing the need for nitrogen fertilizers.
- Keep clippings and chopped leaves out of the street and storm drains. Use a broom or leaf blower to blow clippings back into the lawn. Do not use a hose to wash them into the street or storm drains. Keeping clippings out of the streets and storm drains will have significant benefits for our local water ways.
- Fertilize only when necessary. Consider testing your soil to determine how much, if any, fertilizer your lawn needs. Identifying the needs of your lawn will reduce unnecessary applications that may harm your lawn or pollute surface water. Visit the University of Massachusetts Amherst website for additional information. <http://ag.umass.edu/services/soil-plant-nutrient-testing-laboratory>
- Maximize the slow-release nitrogen in your fertilizer. Slow-release nitrogen limits nutrient runoff. This should be applied in the spring, not autumn, to provide a steady source of nutrients throughout the growing season.
- Do not fertilize or use pesticides within 15-20 feet of a stream or waterway. Maintaining this distance will help keep chemicals out of the water. Consider establishing a natural riparian buffer. Sweep any granulated chemicals off hard surfaces and back into your lawn immediately. Your walkway, driveway, patio, or road is a quick route to drainage pipes that discharge into local streams, so make sure they are kept clean of chemicals.
- Consider organic alternatives to chemicals, such as compost or manure.
- Be certain to identify pests and research options before applying pesticides. Many insects are harmless to people and play an important role in maintaining a healthy lawn or garden ecosystem.
- Direct roof drains to a rain garden to significantly reduce stormwater runoff from your property.



Little actions, such as taking a stormwater-friendly approach to your garden and lawn, will have a big impact as all of us work together to protect our water's quality.



Working Together We Can Cease the Grease!

Help the Agawam Department of Public Works STOP the "FOG"

WHAT IS "FOG" ?

FOG is fats, oils and grease that can build up in sewer lines. When grease is washed down the sink, toilet, or drain, it coats and sticks to the inside of sewer pipes. FOG is a major cause of sanitary sewer clogs and overflows.



Grease clog in sewer pipe.

WHERE DOES "FOG" COME FROM?

- ◆ Meat Fats (beef, bacon, sausage, etc...)
- ◆ Grease / Lard
- ◆ Cooking Oil
- ◆ Butter / Margarine
- ◆ Food Scraps
- ◆ Baking Products
- ◆ Milk, Ice Cream, Yogurt, Sour Cream
- ◆ Cream Based Sauces
- ◆ Salad Dressing, Cheese, Mayonnaise
- ◆ Motor Oil & Grease

Keep these foods out of all drains!

WHY IS "FOG" A PROBLEM?

Sewer pipes can become clogged by FOG and cause backups into basements, roadways and waterways and water bodies. Sewer backups create health hazards, can result in expensive property damage, and threaten the environment.



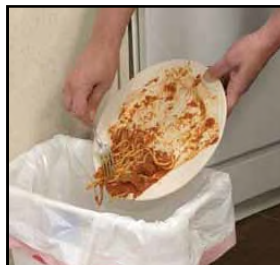
Sewer backup in residential basement.

Best Management Practices for Home Owners

- ◆ Never pour grease or oil down sinks, drains or toilets.
- ◆ Dispose of cooled cooking fats, oils and grease into a waxed food container such as a milk carton or container with a lid and dispose of it in the garbage. Used motor oil can be dropped off at the DPW: Mon. - Fri., 8:30am to 3:00pm.
- ◆ Use baskets or strainers in sinks to catch food scraps. Empty scraps into the trash can.
- ◆ Scrape food scraps from dishes and pans into the trash can for disposal, before washing.
- ◆ DO NOT use the toilet for disposing of: food scraps, sanitary items, rags, cloths, diapers, paper towels, napkins, face tissues, cat litter, 'Flushable' wipes, dental floss, medicines.

Did you know?

Liquid dish detergents that claim to dissolve grease, actually pass grease farther down the sewer line, & cause blockages there. Grease causes the majority of sewer backups. **It is very important to scrape greasy foods off all dishes!**



Best Management Practices for Food Service Establishments

Agawam Town Code §175-29 requires Grease Interceptors (Grease Traps) for all facilities that have on-site food preparation/processing/handling/service or have other related activities.

- ◆ Train Kitchen Staff on methods to reduce the amount of grease.
- ◆ Post "No Grease in Drain" Signs as a reminder to employees. (The DPW & Health Department have signs for establishments)
- ◆ Scrape food scraps from dishes and pans into the trash can for disposal, before washing.
- ◆ Dry Wipe Pots, Pans, and Dishware prior to dishwashing.
- ◆ DO NOT dispose of waste food through a garbage disposal.
- ◆ Inspect and Clean Grease Interceptors ROUTINELY & KEEP RECORDS!



- ◆ Cover floor and sink drains with strainers to catch food scraps. Empty scraps into the trash can.
- ◆ Clean up grease spills with paper towels and disposal of the towels in the trash.



If you have any questions please call the Agawam DPW at 413-821-0600
www.agawam.ma.us
 Created in partnership with the Springfield Water and Sewer Commission
www.waterandsewer.org



Analysis of Agawam's Water

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

Water samples are analyzed daily by state-certified laboratories to ensure that the water supplied is potable and meets all government standards. The water is monitored at the reservoir, the filter plant, the storage tanks and throughout the distribution system. The data in the table on this page represents finished water in the distribution system during calendar year 2018.

Contaminant <i>Inorganics</i>	Major Sources in Drinking Water	Violation	Ideal Goal (MCLG)	Maximum Contaminant Level (MCL)	90 th Percentile	Sampling Sites Exceeding the Action Level
Copper (ppm)	Corrosion of household plumbing systems	No	1.3	AL = 1.3	0.061	0 out of 30
Lead (ppb)	Corrosion of household plumbing systems	No	0	AL = 15.0	1.9	0 out of 30
Nitrate (ppm)	Natural Deposits, Stormwater, fertilizer run-off	No	10	10	0.0516(HDL)	N/A
Barium (ppm)	Common, natural mineral	No	2	2	0.0083(HDL)	N/A
Asbestos (MFL)	Decay of asbestos cement water mains; erosion of natural deposits	No	7	7	None Detected (HDL)	N/A
Contaminant <i>Microbiological</i>	Possible Source of Contamination	Violation	MCLG	MCL	Highest % Positive in a Month	Range Detected at Individual Sampling Sites
E.coli	Human and animal fecal waste	No	0	See Key**	0%	0
Disinfectants	Major Sources in Drinking Water	Violation	MRDLG	MRDL	Annual Average	Range Detected at Individual Sampling Sites
Residual Chlorine (PPM)	Water additive used to control microbes	No	4.0	4.0	0.31	0.03-0.95
Contaminant <i>Microbiological</i>	Major Sources in Drinking Water	Violation	MCLG	MCL	Highest Single Measurement	Lowest Monthly Percent
Turbidity (NTU) Rapid Sand Filtration***	Soil run-off	No	N/A	TT, at least 95% of samples per month below 0.3	0.206	100%
Turbidity (NTU) Slow Sand Filtration****	Soil run-off	No	N/A	TT, at least 95% of samples per month below 1.0	0.61	100%
Contaminant <i>Organics</i>	Major Sources in Drinking Water	Violation	Ideal Goal (MCLG)	Maximum Contaminant Level (MCL)	Highest Locational Running Annual Average (LRAA)	Range Detected at Individual Sampling Sites
TTHMs (ppb) (Total Trihalomethanes)	Byproduct of drinking water chlorination	No	N/A	80 (LRAA)	64	29 - 77
HAA5s (ppb) (Total Haloacetic Acids)	Byproduct of drinking water chlorination	No	N/A	60 (LRAA)	65	Not Detected - 110
HAA5 Site 10005 (1057 N. Westfield St) sampled 12/5/19	Byproduct of drinking water chlorination	Yes	N/A	60 (LRAA)	65	43 - 110
Radionuclides Substance (9/18/2015)	Major Sources in Drinking Water	Violation	MCLG	MCL	Highest Detected Level	Range Detected
Gross Alpha (pCi/L)	Erosion of natural deposits	No	0	15	0.262	N/A
Radium-226 & Radium-228 Combined (pCi/L)	Erosion of natural deposits	No	0	5	0.25	N/A
Unregulated**** Substance	Major Sources in Drinking Water	Violation	ORSG/ SMCL	MCL	Highest Single Measurement	Range Detected at Individual Sampling Sites
Sodium (ppm)	Natural deposits; runoff from use as salt on roadways; by-product of the treatment process	No	20 (ORSG)	None	15.5	N/A
Manganese (ppb)	Erosion of natural deposits	No	50 (SMCL)	None	6.6	N/A
Sulfate (ppm)	Natural Deposits	No	250 (SMCL)	None	2	1-2
Chloroform (ppb)	Byproduct of drinking water chlorination	No	70 (ORSG)	None	3.98	N/A
Bromodichloromethane(ppb)	Byproduct of drinking water chlorination	No	None Established	None	0.53	N/A
Aluminum (ppb)	Byproduct of treatment process	No	200 (SMCL)	None	37.5	0-37.5

KEY TO TABLE Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system. *Compliance with fecal coliform/E.coli MCL is determined upon additional repeat testing. **Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*. Although we detected *E. coli* in 2016 in a single sample, repeat sampling did not have any additional detects; therefore the *E. coli* MCL was not violated. ***Rapid Sand Filtration: The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed a maximum of 1.0 NTU in any single measurement. ****Slow Sand Filtration: The turbidity level of the filtered water shall be less than or equal to 1.0 NTU in 95% of the measurements taken each month and shall not exceed a maximum of 5.0 NTU in any single measurement.

►AL: Action Level. The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow. ►AWD: Agawam Water Department ►HDL: Highest Detected Level. ►IDSE: Initial Distribution System Evaluation. ►LRAA: Locational Running Annual Average ►MCL: Maximum Contaminant Level. The highest level of a contaminant in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology. ►MCLG: Maximum Contaminant Level Goal. 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. ►MFL=million fibers per liter. ►MRDL: Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants (ex. Chlorine, chloramines, chlorine dioxide). ►MRDLG: Maximum Residual Disinfectant Level Goal. The level of a 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. ►N/A: not applicable ►NTU: Nephelometric Turbidity Units. A numerical value indicating the cloudiness of water. ►ORSG: Mass. Office of Research and Standards Guideline. The concentration of a chemical in drinking water at or below which adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded it serves as an indicator of the potential need for further action. ►pCi/L: picocuries per liter: a measure of radioactivity. ►ppb: parts per billion ►ppm:



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Monday—Friday 8:30am—4:30pm

Christopher J. Golba
 DPW Superintendent
 PWS ID# 10050000

John G. Decker
 Deputy Superintendent
 Water Department

Dear Water Consumers,

The Agawam Water Department (AWD), a division of the Department of Public Works (DPW), is pleased to provide you with this Water Quality Report (Consumer Confidence Report) for 2018. This is Agawam’s twentieth annual report, advising the public of the quality of Agawam’s tap water and related health issues as well as water system improvements and future plans. Please share this information with all the other people who drink this water, especially those who may not have received this report directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this report in a public place or distributing copies by hand or mail.

Landlords: Please make this report available to your tenants.

Businesses: Please post this report where your employees and customers may read it.

Public Building and School Officials: Please post this report where people who may drink water may read it.

The Agawam Water Department is responsible for the operation of the public water system. Our goal is to provide you with a continuous supply of quality water. We welcome comments and suggestions you may have to help us reach and maintain that goal. The AWD can be contacted at 413-821-0600 during normal business hours or at water@agawam.ma.us to answer your water-related questions or comments. Emergency water problems at all other times can be reported to the police dispatcher at 413-786-4767, who will contact appropriate water service personnel. As an additional resource, the Mayor’s office may be contacted at 413-786-0400 ext.8200. In addition, the Town Council holds regular meetings on the 1st and 3rd Mondays of each month at the Agawam Junior High School, and conducts a “citizen speak time” before each meeting, when citizens can voice concerns regarding water quality or operations. Citizens should inform the council clerk at 786-0400 ext. 8716 during weekday mornings in advance of any intention to speak.

Yours truly,

Christopher J. Golba, DPW Superintendent

