Questions... call us!

Water quality questions:
Mark Holley, Water Facilities Superintendent
413-772-1539 or mark.holley@greenfield-ma.gov

Leaks, low pressure, meter problems, or billing information: Department of Public Works
413-772-1528 ext 6106

Hazardous Waste Disposal: 413-772-1539,
Paul Zilinski, or paul.zilinski@greenfield-ma.gov

Thank you for conserving water!

GREENFIELD, MASSACHUSETTS
MAYOR ROXANN WEDEGARTNER

Water Report 2019

CONSUMER CONFIDENCE REPORT
REPORTING YEAR 2019
PUBLIC WATER SUPPLY # 1114000

Greenfield residents used 47 gallons per capita per day

The average consumer used 70 gallons per capita per day

Current water usage in the home:

27% toilet flushing
21% laundry
19% bathing
16% faucets
16% leaks and other uses
1% dish washing

To find out how you compare try this calculator:
https://home-water-works.org/calculator

WATER FACTS

- 3% of Earth's water is fresh water.
- 97% of the water on Earth is salt water
- 68.7% of the fresh water on Earth is trapped in glaciers.
- Water can dissolve more substances than any other liquid including sulfuric acid.
- Approximately 400 billion gallons of water are used in the United States per day.
- The first water pipes in the US were made from wood (bored logs that were charred with fire).
- At 1 drip per second, a faucet can leak 3,000 gallons of water per year.

http://water.epa.gov/learn/kids/drinkingwater/water_trivia_facts.cfm

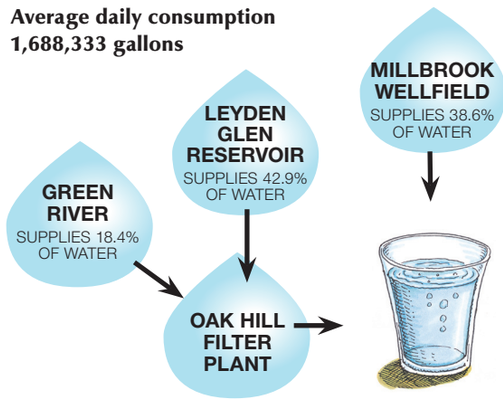
Why do you flush hydrants?

Hydrant flushing is done in the late spring and "spot" flushing is done throughout the year. This is done to help ensure water quality, to clear the mains of tuberculation (corrosion buildup), and to make sure every hydrant works correctly when they are needed! Brown water may result. Keep the faucet running until the brown water stops.

Keeps us clean and working!

Greenfield Water Supply

Average daily consumption 1,688,333 gallons



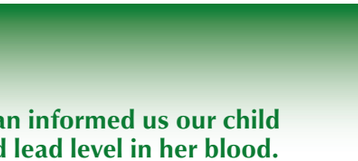
Our pediatrician informed us our child has an elevated lead level in her blood. Can we have our water tested to determine if it is the source of the problem?

Yes. Harmful levels of lead in drinking water are almost never found in the water source. However, in between the source of your water and your faucet is a series of pipes and connections, including the plumbing in your own home that can contribute to the problem. Previous testing has revealed few cases where there was an elevated lead level in our customer's tap water, but if you would like the water in your home tested, please call 772-1539 for further details. There is no charge for this service.

Why does my water taste like chlorine?

As a halogen, chlorine is a highly efficient disinfectant, and is added to public water supplies to kill disease-causing pathogens, such as bacteria, viruses, and protozoans, that commonly grow in water supply reservoirs, and the walls of water mains and in storage tanks. This is required by the Department of Environmental Protection and the Environmental Protection Agency.

What is a cross connection? What can I do about it?



A cross connection is a connection between a drinking water pie and a polluted source. The pollution come from your home. For instance, when you spray fertilizer on your lawn. You hook up your hose to the sprayer that contains the fertilizer. If the water pressure drops(say because of a fire hydrant use in the city) when the hose is connected to the fertilizer, the fertilizer may be sucked back into the drinking water pipes through the hose. Using an attachment on your hose called a backflow-prevention device can prevent this problem.

The DPW recommends the installation of backflow prevention devices, such as a low cost "hose bib vacuum breaker", for all inside and outside hose connections. You can purchase this at a hardware 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 city. For additional information on cross connections and on the status of your water system's cross connection program please contact Mark Holley at 413-772-1539.

SUBSTANCES DETECTED **Below are substances that were detected in the Cities' drinking water during the years listed next to the parameter. None of these substances were detected above the allowable limit.**

CHEMICAL PARAMETERS

Substance/year (unit of measure)	**Year Sampled**	**MCL (MRDL)**	**MCLG (MRDLG)**	**Amount Detected**	**Range of Detected Levels**	**Violation**	**Major Sources in Drinking Water**
Nitrate (ppm)	2019	10.0	10.0	0.23	<0.05 – 0.225	No	Runoff from fertilizer use; Erosion of natural deposits
Chlorine (ppm)	2019	4	4	1.55	0.34 – 1.55	No	Water treatment chemical used to control microbes
Total Trihalomethanes [THMs] (ppb)	2019	80	0	30.3	<0.05 – 30.3	No	RAA = Running Annual Average Disinfection by-products
Haloacetic Acids [HAA] (ppb)	2019	60	N/A	17.5	<1.00 – 17.5	No	RAA = Running Annual Average Disinfection by-products
Sodium (ppm)	2019	20	N/A	6.4	6.4	No	Runoff from storm water
Manganese (ppm)	2019	0.05mg/L – 0.3 mg/L	N/A	0.0885	ND (<0.002 ug/L) ND (<0.0885ug/L)	No	Natural sources
Iron (ppm)	2019	0.3 mg/L	N/A	0.226	ND (<0.050ug/L) – 0.226	No	Natural sources
Barium (ppm)	2017	2 mg/L	N/A	0.009	0.009	No	Natural sources
Nickel (ppm)	2017	No current MCL	N/A	0.001	ND (<0.001) - 0.0010	N/A	Natural sources
Substance (unit of measure)	**Year Sampled**	**Action Level (AL)**	**MCLG**	**Amount Detected 90th percentile**	**Range of Detected Levels**	**Violation**	
Lead (ppb)	2017	15	0	3.5 ug/l	0.59 – 13.00	No	Household plumbing and service connections
Copper (ppm)	2017	1.3	1.3	870 ug/l	ND - 1500	No	Household plumbing and service connections
Secondary Substances (unit of measure)	**Year Sampled**	**SMCL**	**MCLG**	**Amount Detected**	**Range**	**Exceedance**	
Turbidity*(NTU)	2017	Treat tech* = 1	N/A	0.17	.018 – 0.17		Soil runoff
Sulfate (ppm)	2015	N/A	N/A	8	ND – 8.0	No	Natural sources

DEFINITIONS:

90th percentile. Out of ten samples, at least nine were below an accepted level.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there are no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

ppm: One part per million (this would be one penny in 10,000)

ppb: One part per billion (one penny in $10,000,000)

***Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

***Action Level:** The concentration of a contaminant that triggers treatment or other requirement that a water system must follow. Action levels are reported at the 90th percentile for homes at greatest risk.

***Turbidity:** Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Are there any precautions some of our customers should consider?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 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 Crytosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The Town is mandated by EPA to include in this report the following generic language about the health effects of certain contaminants and drinking water sources:

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 result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;

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

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Regarding lead... 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 Greenfield DPW 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. If you would like your water tested for lead at no charge please call the DPW at 413-772-1539. Additional 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

Reporting Violations:

On two occasions, August and September, sampling results were not transmitted to DEP on time.

Sampling Violations:

The new sampling plan for the Revised Total Coliform Rule included new samples. One additional system sample was missed and one raw or source sample was missed in the first month of the new plan.