Greenfield, Massachusetts
Mayor Roxann Wedegartner

Water Report 2019

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 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 quality:
Green River supplies 42.9% of water
Oak Hill Filter Plant

Water supply:
LEYDEN GLEN RESERVOIR
Millbrook Wellfield supplies 38.6% of water
Green River supplies 18.4% of water
Oak Hill Filter Plant

Thank you for conserving water!

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.

Greenfield Water Supply
Average daily consumption
1,688,333 gallons

ConSUMER CONFIDENCE REPORT
REPORTING YEAR 2019
PUBLIC WATER SUPPLY # 1114000
Our pediatrician informed us our child has an elevated lead level in her blood. Can we have our water tested to determine if mine 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 reservoirs. This is required by the Department of Environmental Protection and the Environmental Protection Agency.

What is a cross connection? A cross connection is a connection between a drinking water pipe and a polluted source. The pollution can 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 low 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 attached hose on your lawn called a hocktail prevention device can prevent this problem.

The DPF recommends the installation of hocktail 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 you drink 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.

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, persons 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 provider. (EPA) (2002) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium 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 general 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 materials. Water can also pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include: Microbiological 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 or farming; Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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. Leaded water is primarily from materials and components associated with service lines and home plumbing. The Greenfield DPF 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 DPF 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.

| 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. |

<table>
<thead>
<tr>
<th>CHEMICAL PARAMETERS</th>
<th>Substances/Year (unit of measure)</th>
<th>Year Sampled</th>
<th>MCL</th>
<th>MCLG Amount Detected</th>
<th>Range of Detected Levels</th>
<th>Violation</th>
<th>Major Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrate (ppm)</td>
<td>2019 10.0 10.6 0.23 &lt;0.05 - 0.225</td>
<td>No</td>
<td>Runoff from fertilizer use; Erosion of natural deposits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorine (ppm)</td>
<td>2019 4 4 1.55 0.34 - 1.55</td>
<td>No</td>
<td>Water treatment chemical used to control microbes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Trihalomethanes (THMs) (ppb)</td>
<td>2019 80 0 30.3 &lt;0.05 - 30.3</td>
<td>No</td>
<td>EPA = Running Annual Average. Disinfection by-products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haloacetic Acids (HAA) (ppb)</td>
<td>2019 60 N/A N/A 11.5 &lt;11.0 - 11.5</td>
<td>No</td>
<td>EPA = Running Annual Average. Disinfection by-products</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Copper (ppm)</td>
<td>2017 15 0 3.5 ug/l 0.59 - 13.00</td>
<td>No</td>
<td>Household plumbing and service connections</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Nickel (ppm)</td>
<td>2017 0.3 mg/L N/A 0.17 .018 – 0.17 0.9 mg/L</td>
<td>No</td>
<td>Household plumbing and service connections</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead (ppb)</td>
<td>2017 20 N/A 6.4 6.4 No</td>
<td>Runoff from storm water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nickel (ppm)</td>
<td>2019 150 0 3.5 ug/l 0.59 - 13.00</td>
<td>No</td>
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</table>

| Turbidity (NTU)     | 2017 <0.001 0.001 ND (<0.001) - 0.001 0.001 | No | Natural sources |
| Sulfate (ppm)       | 2017 20 N/A 6.4 6.4 No | Runoff from storm water |

| 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. MCLGs are set as close to MCLs as feasible using the best available treatment technologies. 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. 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. 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 provider. (EPA) (2002) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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