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

Consumer Confidence Report 2021

Leyden Glen Reservoir in early autumn
This reservoir holds 4,500,000 gallons of water. It supplies 56.6% of the Town's needs and is the most economical source because it flows through the –filter plant and into Town by gravity.
Photo by Forrest Herald

GREENFIELD, MASSACHUSETTS
MAYOR ROXANN WEDEGARTNER

CONSUMER CONFIDENCE REPORT
REPORTING YEAR 2021
PUBLIC WATER SUPPLY # 1114000
GRADE 3 SYSTEM

El reportaje del agua está disponible en español por solicitud.

What's new...

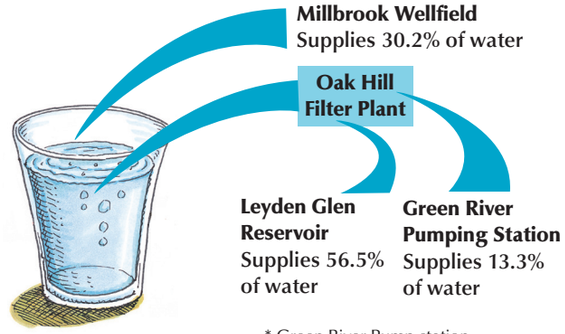
Millbrook well #3 was rehabbed in 2021. This maintenance keeps the efficiency and water quality high. We rehab one well every three years so that each well gets rehabbed every 9 years. While the rehab was going on we replaced the pump and motor, adding to the efficiency! Saving electricity is important in an industry very dependent on electric motors.

Prepared for emergencies...

The Greenfield water system has an interconnect with Old Deerfield for emergencies. We have two subsequent systems. East Deerfield and Gill, Riverside are the two subsequent systems.

Greenfield Water Supply

Average daily consumption
1,6878,359 gallons



* Green River Pump station was used less this year.

Greenfield residents used 47 gallons per capita per day

The average consumer used 50 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

Notice of noncompliance

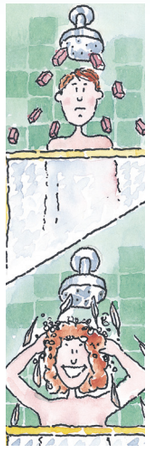
Our system missed two samples for DBPR testing in January and July. We received a notice of non-compliance from MassDEP for this error. The samples that were taken, April and October, were below the standard. We have instituted an electronic calendar and using a system of double checks to avoid future missed samples.

During the month of July there occurred a sample from the storage tank at Rocky Mountain that was coliform positive and the repeat sample was also positive. This necessitated the tank be shut down, drained, disinfected and refilled. Before it could be returned to service a "level one" assessment was required. During this level one assessment, it was discovered the seal between the hatches and roof of the tank allowed rain water to enter the tank. It was determined this was the cause of the contamination and repairs were made to completely seal this joint.

During the past year, the City was required to do one each of the following: Level 1 Assessment; and corrective action. The one Level 1 assessment was completed. Because of the findings of the assessment, we were required to make a corrective action. We completed that corrective action.

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify any problems. We are then required to make repairs to concerns that were found during these assessments.



Is Greenfield's water hard?

No! There is a common misconception that all New England water is hard. This is not true of Greenfield's water. Greenfield's water is categorized "soft" meaning that it contains less than 75 ppm (less than 4 grains) of hardness.

Is Greenfield's water fluoridated?

No! Greenfield's drinking water is not, nor ever has been fluoridated. Parents should discuss their children's fluoride needs with their dentist and pediatrician.

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

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(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)	2021	10.0	10.0		0.115	No	Runoff from fertilizer use; Erosion of natural deposits
Chlorine (ppm)	2021	4	4		0.23 – 1.94	No	Water treatment chemical used to control microbes
Total Trihalomethanes [THMs] (ppb)	2021	80	0	11.0	18.9 – 29.3	No	RAA = Running Annual Average Disinfection by-products
Haloacetic Acids [HAA] (ppb)	2021	60	N/A	4.6	6.23 – 13.7	No	RAA = Running Annual Average Disinfection by-products
Sodium (ppm)	2021	20	N/A		4.3	No	Runoff from storm water
Manganese (ppm)	2021	0.05mg/L – 0.3 mg/L	N/A		ND (<0.002 ug/L) ND (<0.0079ug/L)	No	Natural sources
Iron (ppm)	2021	0.3 mg/L	N/A		ND (<0.051ug/L) – 0.05	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)	2020	15	0		<0.001 - 0.0074	No	Household plumbing and service connections
Copper (ppm)	2020	1.3	1.3		0.0446 - 1.72	No	Household plumbing and service connections
Secondary Substances (unit of measure)	**Year Sampled**	**SMCL**	**MCLG**	**Amount Detected**	**Range**	**Exceedance**	
Turbidity*(NTU)	2021	Treat tech* = 1	N/A		.02 – 0.28		Soil runoff
PFAS (ppt)	2021	20ppt	N/A		ND – 1.1	No	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams

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

Thank you for conserving our water