



An aerial view of The Rocky Mountain Tank (open rectangular area) and the Gate House (small building in the upper left corner). The Tank is part of the water system and serves for fire protection and provides the water users with consistent pressure and supply

2023 CONSUMER CONFIDENCE REPORT



An aerial view of the Green River showing the dam (bottom), the Covered Bridge, and in the upper left, through the gap in the trees, the Green River Pumping Station building.

“Wow, I never realized how much work goes into having clean drinking water.”

Water is actually a very inexpensive utility. Water rates in Greenfield for 2023 were \$4.00 for every 100 cubic feet or 748 gallons!

Compare that to a good cup of coffee or a bottle of soda.

When you have finished using the water, we will take it back in the Wastewater Collection System and clean that same 748 gallons before sending to the river.

Makes tap water the best deal in town!

Photos courtesy of Bill Kimball, Greenfield Fire Dept. and their drone. The drone is helpful to monitor conditions during severe weather or locations that are difficult to access..

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
lindsey.knapp@greenfield-ma.gov

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

GREENFIELD, MASSACHUSETTS MAYOR VIRGINIA DESORGHER

CONSUMER CONFIDENCE REPORT
REPORTING YEAR 2023
PUBLIC WATER SUPPLY # 1114000
GRADE 3 SYSTEM

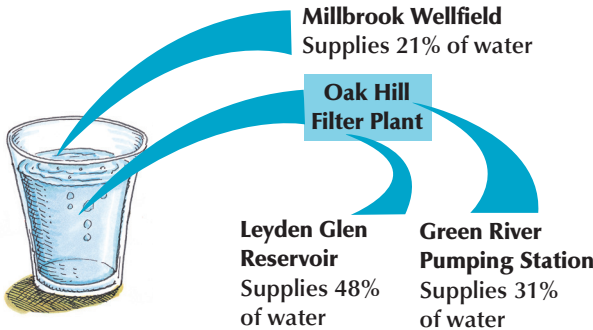
*El reportaje del agua está disponible
en español por solicitud.*

Greenfield Water Supply

Total yearly production for the entire city:
555,134,500 gallons

Average one day production: 1,520,916 gallons.
Maximum one day production : 2,243,600 gallons
Minimum one day production: 1,009,000 gallons

The water produced is directly related to the demand for water in the city – laundry, toilet flushing, bathing, drinking, washing cars, etc.



Why does my water taste like chlorine.

We are mandated by EPA and the Department of Environmental Protection to maintain a small amount of chlorine in the distribution system because we have sources of water that are surface supplies. These are rivers and reservoirs that are open to the environment and, therefore, contain bacteria. We filter the water from the Green River, mix it with water from the Leyden Glen and filter that again at our Oak Hill filter plant. This fine filtration makes the water clear and clean. However, the water did originate from surface supplies, so some chlorine is added. This maintains a sanitary environment and ensures the water is safe to drink in the whole system.



To eliminate the chlorine taste: fill a glass pitcher at night and place it in the refrigerator. By morning the chlorine will have “off gassed” leaving great tasting water with little or no chlorine!
Note: only use glass, as plastic can “pick up” the chlorine flavor and make it worse.

Did you know... Monthly, quarterly and yearly water testing of source waters includes analysis of a wide variety of substances such as, pesticides, inorganic compounds, forever chemicals (PFAS/PFOS) and by-products from disinfection. The water coming out of the treatment plant is checked daily for bacteria, pH, turbidity and chlorine residual. Monthly, over 30 bacteriological tests are performed on the water from sections all over the city. This insures the water coming to your home is of the same quality as it travels over the miles of pipes in the distribution system!

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)	2023	10.0	10.0	0.549	0.111 – 0.549	No	Runoff from fertilizer use; Erosion of natural deposits
Chlorine (ppm)	2023	4	4	1.79	0.17 – 1.79	No	Water treatment chemical used to control microbes
Total Trihalomethanes [THMs] (ppb)	2023	80	0	28.9	8.73 – 28.9	No	RAA = Running Annual Average Disinfection by-products
Haloacetic Acids [HAA] (ppb)	2023	60	N/A	18.7	3.87 – 18.7	No	RAA = Running Annual Average Disinfection by-products
Sodium (ppm)	2023	20	N/A	6.82	4.03 - 6.82	No	Runoff from storm water
Manganese (ppm)	2023	0.05mg/L – 0.3 mg/L	N/A	9.88	ND - 9.88	No	Natural sources
Iron (ppm)	2021	0.3 mg/L	N/A		ND (<0.051ug/L) – 0.05	No	Natural sources
Barium (ppm)	2023	2 mg/L	2	0.0087	0.0079 - 0.0087	No	Natural sources
Nickel (ppm)	2023	100	N/A	1.10	ND - 11.1	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)	2023	15	0	6.2	ND - 11.1	No	Household plumbing and service connections
Copper (ppm)	2023	1.3	1.3	1.26	0.0761 - 2.20	No	Household plumbing and service connections
Secondary Substances (unit of measure)	Year Sampled	SMCL	MCLG	Amount Detected	Range	Exceedance	
Turbidity*(NTU)	2022	Treat tech* = 1	N/A	0.24	0.020 – 0.24		Soil runoff
Asbestos (ppm)	2022	0.17 mg/L	N/A	N/D			
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

Greenfield has been mandated in the testing for Per- and Polyfluoroalkyl Substances (PFAS). After having four consecutive quarters of non detection in source waters we have a waiver from quarterly testing. We will be testing at the DEP recommended intervals going forward. The link below is to MASS DEP’s website that has additional information on testing, results, and concerns. <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas>

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 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 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