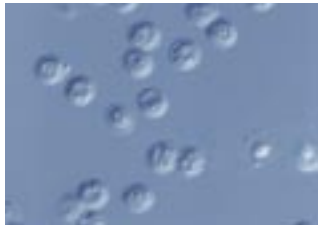
Cryptosporidium Testing Update

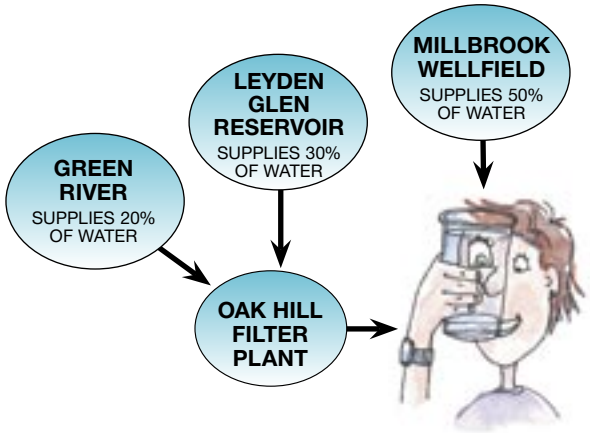


In 2008 EPA mandated that systems that use surface water test the water monthly for the pathogen Cryptosporidium for 24 months. Cryptosporidium is a microbial parasite found in surface water throughout the USA. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps.

After 22 months of testing only oocycts have been detected in the raw, untreated water. This is a very low level and an average of 0.009 oocycsts/liter. Given the fact that the water is treated through slow sand filters which typically achieve a higher level of treatment that the more commonly used rapid sand filtration process, and disinfected prior to discharge to the system, these low levels indicate that no further treatment will be required.

Greenfield Water Supply

Average daily consumption 1,750,500 gallons



Commonly asked questions

Is Greenfield's water hard?

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

Is Greenfield's water fluoridated?

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

I'm concerned whether there is lead in my water. Can I have my water tested?

Yes, the DPW provides this service at no charge! Call 413-772-1539 for details. 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.

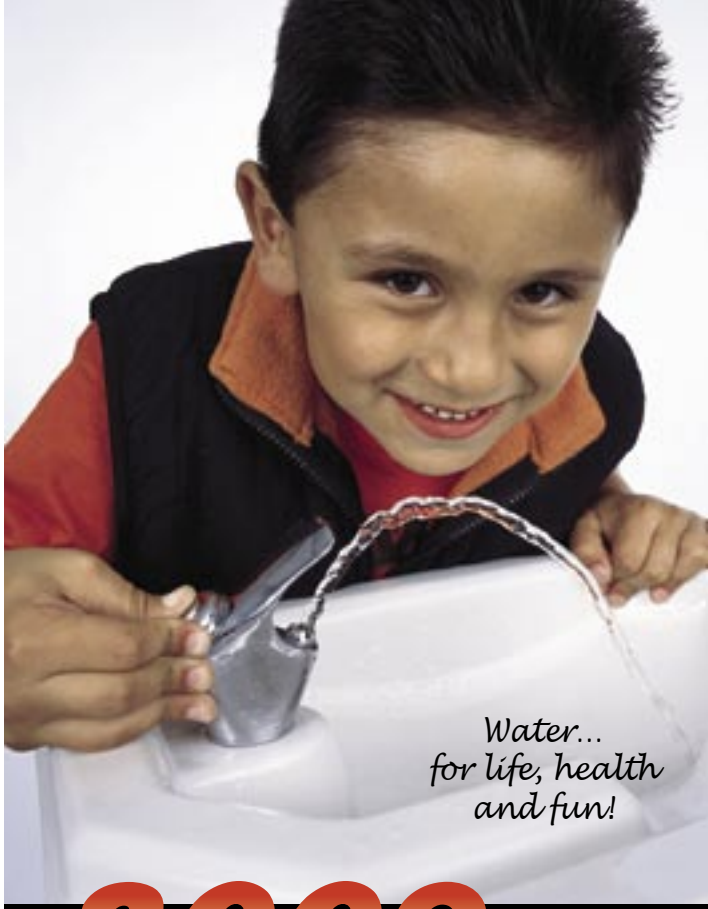
The DPW is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing fixtures within your home. When your water has been sitting for several hours you can minimize the potential for lead exposure by running your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information is available from the Safe Drinking Water Hotline or http://www.epa.gov/safewater/lead.

Water quality questions: 772-1539

Leaks, low pressure, meter problems, billing information: 772-1528

Department of Public Works Office Hours:
Mon. – Fri.: 7:00 am to 5:00 pm,

EPA's Safe Drinking Water Hotline: 1-800-426-4791



2009 Water Quality Report

GREENFIELD, MASSACHUSETTS

MAYOR WILLIAM MARTIN

VOLUME XII • REPORTING YEAR 2009

PUBLIC WATER SUPPLY # 1114000

What's new in my water system?

With the help of the $250,000 energy conservation grant the Town received last year from the Commonwealth, the DPW has been working to make its facilities as energy efficient and "green" as possible. This work has included the installation of heat pumps in the Green River Pump Station and the Oak Hill Filter Plant. This technology extracts heat from the river and reservoir water as it runs through the units. It is expected that the units will supply the majority of the heat needed for these buildings. The existing propane fired furnaces will stay in place as backup units and to assist during periods of extreme cold if needed.

Did you know?

An average leaking toilet will waste up to 78,000 gallons of water per year! That is enough water to fill over 6 large above ground swimming pools and would cost you over $685 in water and sewer fees! Call the DPW at 772-1528 to schedule a free leak check of your home or building.

Don't let the water run !

When you brush your teeth, shave or wash your face, just take the water you need and save the rest!

SUBSTANCES DETECTED

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

CHEMICAL PARAMETERS

Substance/year	Units	Highest Level Allowed (EPA's MCL)*	Highest Level Detected	Range of Detected Levels	Ideal Goals (EPA's MCLG)*	Major Sources in Drinking Water
Nitrate '09	ppm	10.0	0.37	0.22 - 0.37	10.0	Runoff from fertilizer use; Erosion of natural deposits.
Chlorine '09	ppm	MRDL= 4	1.72	0.13 – 1.72	MRDLG = 4	Water treatment chemical used to control microbes
Total Trihalomethanes '09	ppb	100	13.0 Annual average	4.3– 27.0	0	Disinfection by-products
Haloacetic Acids '09	ppb	60	5.5 Annual average	0.83 – 9.5	N/A	Disinfection by-products
Turbidity* '09	NTU	Treat tech* = 1	0.25	.02 - 0.25	none	Soil runoff
Lead '08	ppb	Action level* = 15	5.2 90th percentile	1.0 – 58.0 2 sites > 15	0	Household plumbing and service connections
Copper '08	ppm	Action level* = 1.3	0.98 90th percentile	0.10 - 1.67 2 sites > 1.3	1.3	Household plumbing and service connections
Sodium '09	ppm	N/A	2.9	2.9	N/A	Runoff from stormwater
Sulfate '09	ppm	N/A	47	10.0 - 47.0	N/A	Natural sources
Dinoseb '06	ppm	7	0.1	< 0.1 - 0.1	7	Agricultural runoff
Perchlorate	ppb	2	0.1	< 0.05 - 0.1	none	Fireworks. explosives

DEFINITIONS:

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 the following generic language about the health effects of certain contaminants and drinking water sources:

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of certain substances, which EPA calls "contaminants" even if the source of the contaminant is from naturally occurring phenomena such as rock formations. The presence of contaminants does not necessarily indicate that water poses a health risk. 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, inorganic, organic and radioactive contaminants.

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.