# HINSDALE WATER DEPARTMENT

### PWS ID# 1132000

39 South Street, Hinsdale, MA 01235

## 2016 DRINKING WATER QUALITY REPORT

Belmont Reservoir

The Town of Hinsdale's public drinking water source is Belmont Reservoir, a nine acre surface water source located on Tully Mountain in Hinsdale, Massachusetts which is approximately 1,600 feet above sea level. The water is filtered using a slow sand filtration plant which was constructed in 1995. Three sand beds are used and the system was designed primarily to provide protection against bacteriological concerns. After disinfection, the water is stored on site in a 530,000 gallon tank. The water is distributed through a 12" main line from the plant and delivered to customers.

The chemical addition process begins as the water is disinfected with a 12.5% sodium hypochlorite solution and enters the storage tank. When the water leaves the storage tank, sodium hydroxide is added to increase the pH level of the water. Increasing the pH level prevents attacks to the copper pipes and fittings in your house which creates a blue color on the fixtures. Bicarbonate of soda is added at approximately the same time as the sodium hydroxide to increase the alkalinity which helps the sodium hydroxide to work more efficiently.

The Hinsdale Board of Selectmen act as the Water/Sewer Commissioners. The current Commissioners are Richard Kardasen, Laural Scialabba, and Harvey Drosehn. They meet on

The first and third Wednesdays of each month at 7:00 p.m. in the Hinsdale Town Hall, 39 South Street, Hinsdale, MA 01235 and can be reached by calling (413) 655-2245. The Water/Sewer Superintendent is Larry Turner and he can be reached by calling (413) 655-2307.

In the event of a water main break or a service problem, please contact Larry Turner at the Hinsdale Water Department (413) 655-2307. In the event of an emergency and if you are unable to reach the Water Department, please call Dalton Dispatch at (413) 684-2816.

#### SUBSTANCES FOUND IN TAP WATER

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, and can pick up substances resulting from the presence of animals or from 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 run-off, industrial or domestic wastewater discharge, oil and gas production.

**Pesticides and herbicides**: these may come from a variety of sources such as agricultural or urban storm water runoff and residential lawn care uses.

**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:** these 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, the United States EPA prescribes regulations that 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 that must provide the same protection for public health. All drinking water, including bottled water, may reasonably be expected to contain at least a small amount of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at 800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general public. Immuno-compromised persons such as persons undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS, some elderly and some infants can be particularly at risk from infections. These people should seek advice about

their drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidioum are available from the Safe Water Hotline at 800-426-4791.

#### **IMPORTANT DEFINITIONS**

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health.

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

**Action Level**: The concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow.

**PPM** – Parts per million or milligrams per liter.

**PPB** – Parts per billion, or micrograms per liter.

pCi/L - Pico curies per liter (a measure of radiation absorbed by the body)

**Unregulated Contaminants (UR)**: contaminants for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrences in drinking water and whether future regulations are warranted.

**Not Detected (ND):** levels not detected in samples.

**Turbidity:** the measure of cloudiness of the water. Turbidity is monitored because it is a good indicator of water quality. Monthly turbidity compliance is related to a specific treatment technique (TT). Our system filters the water so at least 95% of our samples each month must be below the turbidity limits specified in the regulations.

# **WATER QUALITY TESTING RESULTS**

Unregulated Contaminants	Highest Detect Value	MCL	MCLG	Range of Detection	Violation Y/N	Possible Contamination Source
Sodium (PPM)* 5/27/16	3.0	UR	UR	N/A	No	Erosion of Natural Deposits
Regulated Contaminants	Highest Detect Value	MCL	MCLG	Range of Detection	Violation Y/N	Possible Contamination Source
Nitrate (PPM)* 9/8/16	.010	10	10	NA	No	Runoff from fertilizer use; erosion of natural deposit
Regulated Contaminants	Highest Annual Average	MCL	MCLG	Range of Detection	Violation Y/N	Possible Contamination Source
Haloacetic Acids 1st qtr 2016	29.27	60	N/A	6.6-47.1	NO	Major source by-product of drinking water disinfection
Trihalomethanes 2nd qtr 2016	32.42	80	N/A	16.4-45.0	NO	Major source by-product of drinking water disinfection

Turbidity	ТТ	Lowest Monthly % of samples	Highest Detected Daily Value	Violation Y/N	Possible Contamination Source
(NTU) Daily Comp	5*		.27	NO	Soil Runoff
Monthly Compliance	At least 95%	100%		NO	Soil Runoff

<sup>\*</sup>Sodium, Nitrates, Nitrites and Turbidity are tested and monitored by B. St. Martin, Wtr. Operator

Regulated Contaminant	Dates Collected	90 <sup>th</sup> Percentile	Action MCL	# of Sites Sampled	# of sites above AL	Range of Detection	Viol. Y/N
Copper** (PPM)	9/04/2014	0.16	1.3	10	0	.0021- 0.68	NO
Lead (PPB)**	9/04/2014	.0016	.015	10	0	.0016- .0033	NO

<sup>\*\*</sup> No annual sampling is required due to the town's compliance with LCR

### **Possible Sources of Contaminations:**

**Copper:** Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.

**Lead:** Corrosion of household plumbing systems, erosion of natural deposits.

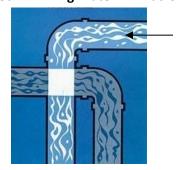
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Hinsdale Water Department is responsible for providing high quality 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. 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>."

#### SOURCE WATER ASSESSMENT PROGRAM

The Massachusetts DEP completed Source Water Assessment Program (SWAP) for the Belmont Reservoir in 2003. The SWAP, established under the Federal Safe Drinking Water Act, required every state to inventory land uses within all public water supply sources, assess the land uses and activities within its recharge area and publicize the results to provide support for improved protection. This report describes boundaries of the land known as Zones A, B and C that contributes water to our reservoir under the most severe drought conditions. A susceptibility ranking of moderate was assigned to this system using information collected during the assessment by DEP. This ranking was based on the following land uses and their potential sources of contamination. In addition to the Water Department posting a copy of the SWAP, this report will be distributed to the Hinsdale Planning Board and the Board of Health as well as being available online at <a href="https://www.state.ma.us/DEP/brp/dws">www.state.ma.us/DEP/brp/dws</a>. The Town of Hinsdale also completed a Source Water Protection Plan (SWPP) in March of 2008 with the help of Mass Rural Water Association. This report can be viewed at Town Hall or by calling the Hinsdale Water Department at (413) 655-2307.

#### **EDUCATIONAL INFORMATION**

Cross Connections are Hazardous to our Drinking Water. What is a Cross Connection and What Can I Do about it?



**Clean Drinking Water** 

Polluted Source ——

A cross connection is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home. For instance, you're going to 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 fire hydrant use in the town) 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 Hinsdale Water Department 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 store 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 town.