

Water News

Crystal Spring Wells: On October 20, 2005 the Water Department was granted from DEP, an increase in the water withdrawal from Crystal Springs well from 400 gallons to 600 gallons per minute. This will help on days that have a greater demand placed on the system. Although the permit increased the amount for daily withdrawal; we still have limits that are placed on the years withdrawal. The years daily average must not exceed 700,000 gallons per day. This is based on the average for 365 days use.

The water department is proceeding with plans to build and operate a new well site on Pleasant Street.

Residents can now use the Town's website for updated notices at www.hanson-ma.gov.

We are reminding residents if they suspect illegal hydrant use to please call the Water Department at 781-447-1200. Fire hydrants are to be operated by authorized personnel only.

Water Conservation

Indoor Water Conservation

The average household can reduce indoor water use by approximately 20 gallons per person per day by following some of these tips.

Bathtub: Fill your bathtub only halfway. Saves 5 gallons or more.

Bathtub drain: Close the bathtub drain prior to turning on the faucet to fill the tub. Saves 3 or more gallons.

Dishwasher: Run your dishwasher only when full. Saves up to 15 gallons per load.

Bathroom faucet: Turn off the tap while brushing your teeth or shaving. Saves 4 to 10 gallons per day.

Shower: Consider taking shorter showers—5 minutes is sufficient to get you clean. Saves 3 to 7 gallons per shower.

Kitchen sink: Fill your sink or basin when washing or rinsing dishes, rather than letting the water run. Saves 2 to 5 gallons per day.

Toilet: Never use your toilet as a wastebasket. Saves 1.5 to 5 gallons per flush.

Washing machine: Run your washing machine only when full, or adjust the water level setting appropriately. Washing machines use 25 to 50 gallons per load.

Outdoor Water Conservation

- Watering your lawn every day for a short time wastes water and is not good for the lawn. Instead water twice a week for 30 to 45 minutes as needed. Use a rain gauge to determine need.
- Water during the early morning or late evening hours.
- If you do own an automatic sprinkler system, install a moisture sensor.
- Use the most drought resistant seed available and consider limiting the extent of your lawn.
- Keep Lawn mower blades sharp and raise the level of the blades; taller grass will help protect the lawn from burning.

Water conservation is always good practice—it can help save valuable resources, save energy, save the environment, and save you money!

Hanson Water Department
1073 West Washington Street
Hanson, MA 02341
Tel. 781-447-1200
PWS ID#4123000



2005 Town of Hanson, Massachusetts DRINKING WATER QUALITY REPORT

This report describes the Town of Hanson's drinking water sources and treated water quality for calendar year 2005, and the process that protects the high quality of our water supply. This publication is mandated by the federal public right-to-know regulation requiring community water suppliers to provide specific treated water quality information annually to their customers.

This report includes additional information beyond the minimum federal requirements in order to respond to typical questions our customers ask about Hanson's water system.

If you are interested in learning more about Hanson's water supply system, water quality and other related information please contact Glen Doherty, the Superintendent at the Hanson Water Department at 781-447-1200.

In addition, drinking water issues are addressed at the Board of Water Commissioner's meetings held the second and fourth Wednesday of each month at 7:30 P.M. at the Water Department Office.



Customer Views Welcome

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Hanson's Water Meets Safety and Health Standards



Hanson's water meets all safety and health standards.

We test our water regularly through a certified laboratory. During the year 2005 we collected over 500 water samples in the system that were then tested for compliance with state health standards. State regulators routinely monitor our compliance and testing protocols to assure that we deliver safe drinking water to our customers.

Hanson's Water Sources

The Hanson Water Department was created in 1916. From 1916 until the early 1980s, Hanson purchased its water from the City of Brockton and the joint waterworks of the towns of Abington/Rockland. Since then, Hanson developed and operated its own water supply at the Crystal Spring Wellfield located on Main Street in Hanson. The Hanson Water Department continues to augment its supply with water purchases from the City of Brockton.

The Crystal Spring Wellfield consists of two well sites on Town-owned land on Main Street at the corner of Franklin Street. The wells have Source IDs: 4123000-01G and 4123000-02G. The land area around the well sites is protected and restricted from many uses in order to insure the high quality of the Town's water supply. The water system includes one storage tank located off of High Street.

Source Water Assessment and Protection (SWAP) Program

The Source Water Assessment and Protection (SWAP) program assesses the susceptibility of public water supplies to contamination due to land uses and activities within the recharge area of the water supply. The Hanson Water Department obtains its water from two wells, the GP Well #1 and the Crystal Spring Well, Source ID #s 4123000-01G and 4123000-02G, respectively. A susceptibility ranking of high was assigned to this system using the information collected during the assessment by the DEP. A high ranking is given to any water supply that has at least one high threat land use within the water supply protection area. Since Hanson has twelve different high threat land uses within the protection area including gas

SWAP continued on last page

DAILY WATERING RESTRICTIONS

Lawn watering is restricted to the hours of 6:00 A.M.— 8:00 A.M. and 5:00 P.M.— 7:30 P.M. Watering must be done with a hand held hose, no sprinklers allowed.

Important Health Information

All sources of drinking water (both tap water and bottled water) including rivers, lakes, streams, ponds, reservoirs, springs and wells, contain some naturally occurring contaminants or substances.

Because water is the universal solvent, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Removing all contaminants would be extremely expensive and in nearly all cases would not provide greater protection of health.

In fact, water without some dissolved minerals and gasses tastes bad and can be harmful. Therefore, the presence of some substances, referred to as contaminants, does not necessarily indicate that the water poses a health risk.

Contaminants that can be present include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from septic systems and wildlife.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- *Inorganic contaminants*, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges.
- *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.

In order to ensure that tap water is safe to drink, the Department of Environmental Protection (DEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

- *Radioactive contaminants*, that can be naturally occurring or be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline, 800-426-4791.



Vulnerability

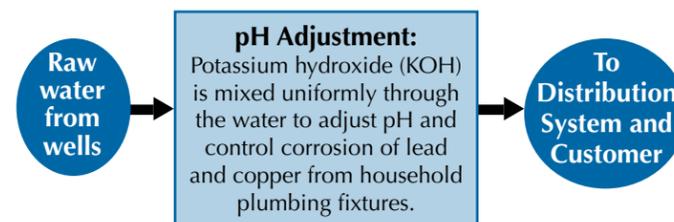
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants 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.

Exceedance of Total Coliform Bacteria

The Hanson Water Department sampled positive for total coliform bacteria in two samples collected in the town's water distribution system in December of 2005. The Town notified the Department of Environmental Protection (DEP) of this occurrence. The location where the total coliform bacteria was detected was resampled over a period of a couple days until the bacterial count cleared the system.

As part of educating the public on substances in your drinking water, the U.S. Environmental Protection Agency (EPA) issued the following statements on the effect of total coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Drinking Water Treatment



Drinking Water Quality

Listed below are substances monitored for in Hanson's drinking water during 2005. All results below are allowable limits. Not listed are the more than 100 other substances for which we tested that were not detected during 2005.

Substance	Highest Detected Level	Range of Detected Levels	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Sources of Contamination
Regulated at the Water Supply Wells					
Nitrate	0.31 ppm	0.31 ppm	10 ppm	10 ppm	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks
cis-1,2 Dichloroethylene	1.0 ppb	ND – 1.0 ppb	70.0 ppb	70.0 ppb	Discharge from industrial chemical factories
Tetrachloroethylene	3.1 ppb	ND – 3.1 ppb	5.0 ppb	0	Discharge from factories and dry cleaners
Gross Alpha ¹	2.8 pCi/L	0.5 – 2.8 ppb	15	0	Erosion of natural deposits
Radium (226 & 228 combined) ¹	0.7 pCi/L	0.2 – 0.7 ppb	5	0	Erosion of natural deposits
Regulated at the Distribution System					
Total Coliform	2 positive samples in 1 month	ND – 2 positive samples in 1 month	1 positive sample per month	0	Naturally present in the environment
Regulated at the Customer's Tap					
Copper	0.5 ppm ^{2,4}	–	1.3 ppm AL # of sites above AL = 0	1.3 ppm	Corrosion of household plumbing
Lead	<1.0 ppb ^{3,4}	–	15.0 ppb AL # of sites above AL = 0	0	Corrosion of household plumbing
Unregulated Contaminants					
Sodium ¹	28.2 ppm	17.8 – 28.2 ppm	not regulated	not regulated	Present in natural water (source water)
Sulfate ¹	18.5 ppm	17.2 – 18.5 ppm	not regulated	not regulated	Erosion of natural deposits (source water)
Methyl Tertiary Butyl Ether (MTBE)	1.5 ppb	ND – 1.5 ppb	not regulated	not regulated	Leaching of gasoline

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.

Action Level (AL) – An Action Level is the concentration of a contaminant which triggers treatment or other requirements which a water system must follow.

Footnotes:

¹ Not sampled in 2005. Results are from 2003 sampling.

² The copper result listed is the 90th percentile of all samples required by regulation.

³ The lead result listed is the 90th percentile of all samples as required by regulation.

⁴ Not sampled in 2005. DEP requires testing for these substances once every three years.

Abbreviations

ND – Not detected **AL** – Action Level

ppm – Part Per Million—One part per million is the equivalent of \$1 in \$1,000,000

ppb – Part Per Billion—One part per billion is the equivalent of \$1 in \$1,000,000,000

> – Greater than **±** – Plus or minus, denoting a range

gpm – gallons per minute

pCi/L – picroCuries per Liter (a measure of radiation)

90th percentile value – Out of every 10 homes, 9 were below this level

Monitoring Waiver

In 2005, Hanson was exempt from testing for the following parameters: inorganics, gross alpha activity, lead and copper, nitrite, radium, SOCs and secondary contaminants.