

MONSON'S 2002 WATER QUALITY REPORT

We are pleased to report the results of our 2002 water quality testing and inform you about your drinking water, your water system and the quality of the water that you received last year. Also included are improvements we have made and tips to help maintain a safe supply of water and protect public health.

The Massachusetts DEP has completed its Source Water Assessment Program (SWAP) for Bethany Road, Palmer Road and Bunyan Road Wells. The SWAP, established under the federal Safe Drinking Water Act, requires 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 wellhead protection area or land, known as Zone II, that contributes water to our three wells under the most severe pumping and drought conditions. In addition to the Water Department a copy of this report has been distributed to the Monson Planning Board and Board of Health and online at www.state.ma.us/DEP/brp/dws/.

You can protect your drinking water quality by using non-toxic and less toxic alternatives to household chemicals such as cleaners, oil-based paints and insecticides. Follow directions on pesticides, fertilizers, and other household chemicals, more is not better. If you have a septic system, it should be pumped out every two years, never dump hazardous substances down septic or storm drains. Take hazardous household chemicals to hazardous materials collection days. In addition to taking these simple steps you can support water supply protection initiatives at the next town meeting or notify the Board of Water Commissioners or Water Department of Water Quality issues you may have.

During calendar year 2002 we were forced to stop pumping our Bunyan Road Well due to a massive clogging of the well screen and surrounding gravel pack by a specific species of iron reducing bacteria. This bacteria, while not harmful, did cause sporadic red water occurrences in the distribution system. We now rely on our two remaining sources to meet the water demands of our customers. Our two remaining sources are the Palmer Road Well (which runs on electrical power) and Bethany Road Well (run by diesel power), combined these two sources maintain the water in our storage tank. As we continue to look for ways to restore redundancy to our system, your help will be essential by being water wise and making every drop count. It is amazing the amount of water a continuous leak wastes, toilets can lose up to 100 gallons a day, a slow dripping faucet can waste 350 gallons a month. Help by reporting system leaks and fixing household leaks ASAP. If you water, water your lawn wisely, a standard sprinkler emits up to 4 gallons per minute, minimize evaporation by watering in the early morning or evening hours, and use mulch to retain water. Remember use every drop wisely.

Your support is appreciated as we strive to improve and upgrade the water system to provide the best service possible 24 hours a day, 365 days per year, while keeping rates below the state average.

The Monson Water & Sewer Department is committed to servicing customers.

Board of Commissioners - Stephen C. Lobik Chairman, Jack D. Gustafson Vice Chairman, Marshall L. Harris Clerk
Staff - Craig W. Jalbert Superintendent, Thomas J. Murphy W& S Maintenance Man, Dave Martin Laborer, Dale Johnson Secretary

Our goal is to provide a safe, dependable and affordable supply of water.

The Monson Water Commission meets on alternate Wednesdays at 6:30p.m. at the Monson Water Dept. located at 198WD Main Street. Meetings are posted at the town offices and newspaper. The public is always invited to attend or contact us with any concerns at:

P.O. Box 388, 198WD Main Street

Monson, MA 01057

(413)267-4130 or E-Mail us at MONSONWS@SAMNET.NET

PWS ID#1191000

Sources of Drinking 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 material, and can pick up substances resulting from the presence of animals or from human activity. Contaminates that may be present in source water include: **Microbial contaminants**, such as viruses and bacteria; **Inorganic contaminants**, such as salts and metals; **Pesticides and herbicides**, may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses; **Organic chemical contaminants**, include synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production; **Radioactive contaminants** which can be naturally-occurring or be a result of oil and gas production, and mining



Monson's Water Sources Monson has three groundwater sources located along the Chicopee Brook. The Bethany Road Well, located along the East side of Chicopee Brook just North of the center of Monson, was installed in 1950 and is our supplementary source during times of high demand. The Palmer Road Well located approximately 500 feet NW of the Bethany Road Well along the west side of Chicopee Brook serves as our primary supply and was installed in 1965. The Bunyan Road Well was installed in the late 1960s in the northern end of town located along the West Side of the Chicopee Brook. We have decided to stop pumping this source presently due to production decreases and aesthetic concerns caused by the iron reducing bacteria we mentioned in the introduction to this report. This loss has hampered our water production capability, however it is being compensated for by the remaining sources. The search for a new water source to restore redundancy to our system is underway.

Our Testing Program:

The Massachusetts Department of Environmental Protection has maintained our reduced monitoring status for lead and copper sampling throughout the system in calendar year 2002. Samples for lead and copper were last tested on 10/24/02 and demonstrated that we continue to meet all applicable EPA and DEP standards. We will continue to monitor and test accordingly to ensure you receive the safest and highest quality drinking water possible.

Monson 2002 Water Quality Test Results

The table below lists all the drinking water contaminants that we detected during the 2002 calendar year.

Unless otherwise noted, the presence of contaminants does not necessarily indicate that water poses a health risk.

The water quality information presented in the table is from the most recent round of testing done in accordance with the regulations.

All data shown were collected during the last calendar year unless otherwise noted in the table.

Substance or	Level Detected	MCL	MCLG	Sample Date	Violation	Likely Source
MTBE	.51 ppb	N/A	N/A	02/14/02	No	Fuel Storage Tanks
Nitrate	1.7 ppm	10.0 ppm	10 ppm	04/19/02	No	Erosion of natural deposits
Barium	.051 ppm	2 ppm	2 ppm	05/11/01	No	Discharge from drilling wastes and metal refineries, erosion of natural deposits
Tetrachloroethylene	0.53 ppb	5 ppb	0	02/14/02	No	Discharge from factories and dry cleaners and asbestos cement lined pipes
Contaminant	Action Level (AL)	90th Percentile	No. of Sites Sampled	No. of Sites	Sample Date	Likely Source
Copper	1.3 mg/L	.283 mg/L	21	0	10/24/02	Household plumbing
Lead	.015 mg/L	.003 mg/L	21	1	10/24/02	Household plumbing

Terms and Abbreviations Used - We have provided the following definitions to help you better understand some terms used in this table that you may not be familiar with.

Action Level (AL): The concentration of contaminant which, if exceeded, triggers treatment or other requirements which a water system must implement.

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

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

Methyl Tertiary Butyl Ether (MTBE) - gasoline additive used to meet the requirements of the Federal Reformulated Gasoline (RFG) program under the Clean Air Act.

Department of Environmental Protection (DEP) : State ~ **Environmental Protection Agency (EPA) :** Federal ~ **n/a:** not applicable ~ **nd:** not detectable at testing limit ~ **ppb:** parts per billion ~ **ppm:** parts per million ~ **pCi/l:** picocuries per liter (a measure of radiation) ~ **mg/L:** milligrams per liter ~ **90 percentile:** for every 10 sites tested 9 are at or below the action level

How Is Monson's Water Treated? The Monson Water Department has had a corrosion control program in place since February of 1996 at our Bunyan Road Well in the form of a Soda Ash feed system. Soda Ash (Sodium Carbonate) is used to raise the pH of our source water to a level that minimizes corrosion to our distribution system and our customers plumbing. With the production and quality problems at the Bunyan Road Well it has forced us to switch to our Palmer Road Well where a similar treatment system has been installed by the department and initiated in early August 2002. The system at Palmer Road Well requires mixing of two batches daily which is injected into our system using a chemical feed pump. The chemical feed system is inspected and monitored 7 days a week by the Water Department staff as per DEP requirements.

Water Main Flushing To ensure our water quality is at its best our flushing program will include a Spring phase and a Fall phase during 2003. Prior to flushing, notices will be published in the Hometown Section of the Springfield Union paper. We apologize for any temporary reduction in pressure and discolored water that this may cause. The discolored water may not be aesthetically pleasing, but it will be temporary and it is not harmful, however we do advise you to take precautions regarding your laundry routine.

Health Information The EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contamination. The presence of contaminants does not necessarily indicate that water poses a health risk. 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 from their health care providers.



Contact EPA's **Safe Drinking Water Hotline at 800-426-4791** for more information about contaminants and potential health effects; and EPA/CDC guidelines on appropriate means to lessen the risk of Cryptosporidium and other microbial contaminants.

Fluoride is not added to the town's drinking water. Parents should discuss their children's fluoride needs with their pediatrician and dentist. Brush efficiently, don't pour water down the drain, remember to turn water off while brushing your teeth.

