



Commissioners

Daniel Rodriguez, Chairman
William E. Leonard, Commissioner
Carmen E. Serrano-Gerena, Commissioner



Dear Customer,

The Springfield Water and Sewer Commission is pleased to issue our Annual Water Quality Report. The report talks about your drinking water, shows test results for 2007, and confirms that your water meets the requirements for safe drinking water established by state and federal standards.

Please read this report carefully and share the information with everyone who resides at your property. If you have any questions or if you need extra copies, please contact us at 413-787-6060.

Estimado Cliente:

La Comisión de Acueductos y Alcantarillados de Springfield se complace en presentar a usted nuestro Informe Anual de la Calidad del Agua. Este informe habla acerca de su agua potable, le demuestra resultados de las pruebas tomadas en el año 2007, y confirman que nuestra agua cumple con los requisitos de agua potable segura para tomar tal como establece los estándares estatales y federales.

Por favor lea este informe cuidadosamente y comparta esta información con todos los que residen en su hogar. Si tiene alguna pregunta o de necesitar copias adicionales, por favor llámenos al 413-787-6060.

La sección en Español comienza en la página 7.

Contact Information/Información Sobre Contactos

- ◆ Billing Questions and Customer Service/Preguntas sobre facturas y Servicios al Cliente: 413-787-6060.
- ◆ Emergency/Emergencias: 413-787-6206.
- ◆ Meter replacement or repair/Reemplazo o reparación del contador: 413-787-6206.
- ◆ New service or service replacement information/Nuevo servicio o información para reemplazo de servicio: 413-787-6060.
- ◆ Public Information/Información al Público: 413-787-6256 Kathy Pedersen ext.111
- ◆ Email/correo electrónico: info@waterandsewer.org.
- ◆ Web Site/Página cibernética www.waterandsewer.org.

For Water Quality concerns:

*Contact Kathy Pedersen at 787-6256 ext. 111
Customer Service at 787-6060, or
after business hours,
Emergency Service at 787-6206.*



Cobble Mountain Reservoir



Borden Brook Reservoir



Ludlow Reservoir



The Springfield Water and Sewer Commission provides this report to meet Federal and State Safe Drinking Water Act Requirements. The report is developed in-house and each copy costs only 43 cents to print and mail.

About Your Water

The drinking water produced by the Springfield Water and Sewer Commission originates from a surface water supply, the Cobble Mountain Reservoir, located in Western Massachusetts. The water is filtered through slow or rapid sand filtration, treated to inhibit corrosion of home plumbing, adjusted for pH, and disinfected with chlorine before it is distributed to your home or business. Clean water is supplied at an annual average of 37 million gallons per day to Springfield and the surrounding communities of Agawam, East Longmeadow, Longmeadow and Ludlow.

Source Protection



Cobble Mtn. Res.

Filtration



W. P. Filters

Disinfection



W. P. Laboratory

Secure Storage



Provin Mtn. Res.

Distribution



To You

The Commission protects the water supplied to you through a multiple barrier approach: land acquisition, source water protection, filtration and disinfection.

Source Water Assessment

The Department of Environmental Protection conducted a Source Water Assessment to provide baseline data about the quality of the reservoir water before it is treated, filtered, and distributed. This is important because it identifies the origins of contaminants within the watershed area and indicates the susceptibility of our water system to such contaminants. A copy of the Assessment may be obtained by contacting the Commission at 413-787-6256. ♦

The Positive Effects of Water

Are you drinking enough water? According to a University of Washington study, 75% of Americans are chronically dehydrated. For 37% of Americans, the thirst mechanism is so weak that it is often mistaken for hunger. Even MILD dehydration will slow down one's metabolism as much as 3%. Here are some facts from this study:

- ♦ One glass of water shuts down midnight hunger pangs for almost 100% of the dieters studied.
- ♦ The lack of water is the number one trigger for daytime fatigue.
- ♦ Preliminary research indicates that 8-10 glasses of water per day could significantly ease back and joint pain for up to 80% of sufferers.
- ♦ A mere 2% drop in body water can trigger fuzzy short-term memory, trouble with basic math, and difficulty focusing on the computer screen or on a printed page.



University of Washington - 2007

Glossary

MCL = Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

MCLG = Maximum Contaminant Level Goal - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MRDL = Maximum Residual Disinfectant Level - 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.

MRDLG - Maximum Residual Disinfectant Level Goal - The level of a drinking water disinfectant below which there is no known expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A = Not Applicable

NTU = Nephelometric Turbidity Units - A numeric value indicating the cloudiness of water.

ORSG = Massachusetts Office of Research and Standards Guideline - The concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

ppb = parts per billion

ppm = parts per million

SMCL = Secondary Maximum Contaminant Level - These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

TT = Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

* **Turbidity** - A measure of the cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.

** **Rapid Sand Filtration** - The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed a maximum of 1.0 NTU in any single measurement.

*** **Slow Sand Filtration** - The turbidity level of the filtered water shall be less than or equal to 1.0 NTU in 95% of the measurements taken each month and shall not exceed a maximum of 5.0 NTU in any single measurement.

**** **Unregulated Contaminants** - They are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is necessary. Unregulated contaminant monitoring results are available by contacting Kathy Pedersen at 413-787-6256 Ext. 111.



Special Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population as a whole. 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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at: 1-800-426-4791. 💧

Enhanced Surface Water Treatment Rule

In accordance with the Long Term 2 Enhanced Surface Water Treatment Rule the Commission began monitoring for cryptosporidium in 2006. The results indicate that no further treatment is required, other than the treatment already provided, which includes filtration.

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Our monitoring indicates the presence of these organisms in our reservoir water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing health problems.

Test dates	Results
07/10/2007	0.1 oocysts/liter
08/14/2007	0.1 oocysts/liter

Most individuals are able to overcome health problems associated with cryptosporidium within a few weeks. However, immuno-compromised people have more difficulty and are at a greater risk of developing severe, life-threatening illness. Immuno-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to prevent infection. Cryptosporidium must be ingested for it to cause health problems, and may be passed through other means than drinking water. Symptoms of infection include nausea, diarrhea and abdominal cramps. 💧

Water Quality Information Table

The table shows only the detections as a result of our more than 51,000 water quality tests, which were completed in 2007. The Commission's state certified laboratory analyzes water samples daily. Private certified laboratories are also utilized to insure that the water supplied to you meets or is better than all state and federal standards.

The data below represents finished water in the distribution system.

Public Water Supply Identification #1281000

Organics						
Substance	Ideal Goal (MCLG)	Maximum Contaminant Level (MCL)	Annual Running Average	Range Detected at Individual Sampling Sites	Violation	Major Sources in Drinking Water
TThms (ppb) (Total Trihalomethanes)	N/A	80 (Annual running average)	59	41 - 73	No	By-product of drinking water chlorination
HAA5s (ppb) (Total Haloacetic Acids)	N/A	60 (Annual running average)	34	5 - 67	No	
Disinfectants						
Substance	MRDLG	MRDL	Annual Running Average	Range Detected at Individual Sampling Sites	Violation	Major Sources in Drinking Water
Residual Chlorine (ppm)	4.0	4.0	0.10	0.01 - 0.65	No	Water additive used to control microbes
Inorganics						
Substance	MCLG	MCL	Highest Detected Level		Violation	Major Sources in Drinking Water
Nitrate (ppm)	10	10	0.08	N/A	No	Natural deposits, stormwater, fertilizer run-off
Barium (ppm)	2	2	0.008	N/A	No	Common mineral in nature
Microbiological						
Substance	MCLG	MCL	Highest Single Measurement Detected	Lowest Monthly Percent	Violation	Major Sources in Drinking Water
Total Coliform	0	5% of Monthly Samples	4.2% October 2007	N/A	No	Human and animal fecal waste
Turbidity *						
Substance	MCLG	MCL	Highest Single Measurement Detected	Lowest Monthly Percent	Violation	Major Sources in Drinking Water
Rapid Sand Filtration (NTU) **	N/A	TT	0.32	99%	No	Soil run-off
Slow Sand Filtration (NTU) ***	N/A	TT	0.24	100%	No	
Unregulated ****						
Substance	ORSG	MCL	Single Measurement		Violation	Major Sources in Drinking Water
Sodium (ppm)	20	None	16.0	N/A	No	Natural deposits
Substance	SMCL	MCL	Single Measurement		Violation	Major Sources in Drinking Water
Sulfate (ppm)	250	None	6.0	N/A	No	Natural deposits

Investing in our future



In Fiscal Year 2007 the Commission continued a five-year infrastructure renewal and replacement program to improve the reliability of our underground water delivery system, sewer collection system, metering capability, heightened security needs and water treatment plant.

In Fiscal Year 2007, the Commission installed:

- ◆ 20,720 feet of new water main pipe.
- ◆ 31 new hydrants.
- ◆ 217 hydrants replaced.
- ◆ 86 gate valves replaced.
- ◆ 136 new gate valves.
- ◆ 3,467 new residential water meters.
- ◆ 514 new commercial water meters.
- ◆ 49 new municipal water meters.
- ◆ 253 new water services.
- ◆ 136 valves installed.

Lead and Copper

The Commission's source water and the water in the distribution system is lead free. However, some older homes may have lead soldered joints or lead or copper pipes as part of the plumbing. The lead may dissolve into the water while the water is not moving, generally overnight or other times when the water is not used for several hours.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flush your tap for 30 seconds to 2 minutes before using tap water to reduce lead content.

For more information on lead in drinking water, contact the Springfield Water and Sewer Commission or Safe Drinking Water Hotline at 1-800-426-4791. ◆



Lead and Copper Sampling Table

Substance	MCLG	MCL	90th Percentile Sample	Sampling Sites Exceeding the Action Level	Violation	Major Sources in Drinking Water
Copper (ppm)	1.3	AL = 1.3	0.048	0 out of 50	No	Corrosion of household plumbing systems
Lead (ppb)	0	AL = 15.0	1.8	0 out of 50	No	

AL = Action Level - The concentration of a contaminant that if exceeded, triggers treatment or other requirements that a water system must follow.

MCL = Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

MCLG = Maximum Contaminant Level Goal - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.



West Parish Lab, Filters and Cobble Mountain Reservoir

Important Information from EPA and the Department of Environmental Protection (DEP)

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. It can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include the following:

microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, humans, and wildlife;

inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

pesticides and herbicides, that may come from a variety of sources such as agricultural, urban stormwater runoff, and residential uses;

organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and

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

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. 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 small amounts 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 : 1-800-426-4791. 💧

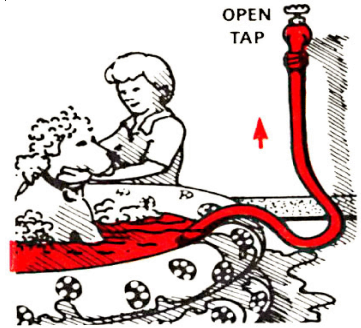
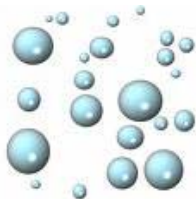


Cross Connection Control Program

A cross connection is formed at any point where a drinking water line connects to equipment, a system containing chemicals, or water of questionable quality, and backflow may occur into the drinking water line.

Some examples of where cross connections may occur are at boilers, air conditioning systems, fire sprinkler systems, irrigation systems, laboratory equipment, plating tanks, or chemical vats.

If you are an owner of industrial, institutional or commercial property you must have your facility's internal plumbing surveyed for cross connection hazards and install proper backflow devices or eliminate cross connections entirely. For more information, contact the Commission's Cross Connection Control Program at 413-787-6206. 💧



What is a Cross Connection?

A simple example is the common garden hose connected to a tap with the end of the hose inserted into a pool or other external source as seen in the illustration above. Another common offender is the hose attached to a container with garden chemicals. The ordinary garden hose is the most common offender because it can easily be connected to the potable water supply (faucets of household plumbing) and used for a variety of potentially dangerous applications.

IMPORTANT WATER INFORMATION INFORMACIÓN IMPORTANTE SOBRE EL AGUA

This report contains important information about your community's water quality. Please have it translated.

Este informe contiene información importante sobre la calidad del agua en su comunidad. Por favor pida que alguien se lo traduzca.

Le rapport contient des informations concernant la qualité de l'eau de votre communauté. Faites-le traduire, ou parlez-en à un ami qui le comprend bien.

O relatório contém informações importantes sobre a qualidade da água da comunidade. Traduza-o ou peça ajuda de uma pessoa amiga para ajudá-lo a entender melhor.

Questo rapporto contiene informazioni importanti della qualità d'acqua della vostra comunità. Traducetelo al più presto possibile o parlate con un amico che lo capisce benissimo.

Sprawozdanie zawiera ważne informacje na temat jakości wody w twojej miejscowości. Poproś kogoś o przetłumaczenie go lub porozmawiaj z osobą która je dobrze rozumie.

Đây là những thông tin quan trọng nói về phẩm chất của nước dùng trong cộng đồng địa phương của bạn. Xin hãy chuyển ngữ các thông tin này cho quý vị.

POSTAL CUSTOMER

This report is required under the Federal Safe Drinking Water Act Public Law 104-182, Section 1414(c) (4)

I'm not so easily replaced.

If only our water infrastructure could talk to us. The pipes running below our streets might remind us that they carry the very lifeblood of our community. Tap water keeps us healthy, fights fires, supports our economy and provides us with the high quality of life we enjoy.



Springfield Water and Sewer Commission
Annual Water Quality Report
Informe Anual de la Calidad del Agua

Only Tap Water **Delivers**

2008