



2000
WATER QUALITY REPORT



Commitment to Quality

Once again, we are proud to present to you our annual Water Quality Report. With a focus on customer service and efficiency in operations, we continue to strive for excellence through new water quality programs that will ensure a reliable drinking water supply for years to come. To maintain our commitment to you, we routinely collect and test water samples every step of the way — from the source waters right to your home — checking purity and identifying potential

problems. We work with only state-certified laboratories to perform required testing to maintain our quality assurance program. Staffed by highly trained scientists and technicians, these labs have the latest, most sophisticated instruments, and can measure substances down to one part in a billion! We are committed to providing you with this information about your water supply, because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

What's Inside?

This report outlines the processes involved in delivering to you the highest quality drinking water available. In it, we will answer these important questions:

- What is in my drinking water?
- Where does my water come from?
- Where can I get additional information?



Questions?
Call U.S. EPA's Safe Drinking Water
Hotline at 1-800-426-4791

Substances Expected to be in Drinking Water

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 from human activity.

Substances 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;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

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

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 stormwater runoff, and septic systems;

Radioactive Contaminants, which 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, 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, which 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 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 U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Special Health Information

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).

Where Does My Water Come From?

Woonsocket Water utilizes surface water from the Crookfall Brook and Harris Pond watersheds. The Crookfall Brook watershed, located within the towns of Smithfield, North Smithfield and Lincoln, consists of Reservoir #3, Reservoir #1 and Crookfall Brook. The Crookfall Brook watershed extends over approximately 7.93 square miles. It is a protected, high quality and primary source of supply for the Charles G. Hammann Water Treatment Plant located on Manville Road. Woonsocket Water maintains an active watershed protection program and closely monitors the watershed lands to protect water quality. Harris Pond has a watershed area of approximately 33.3 square miles extending through Massachusetts including the communities of Blackstone, Mendon, Hopedale, Upton, Bellingham and Milford. This source is used as a supplemental source as needed. For more information about this report, or for any questions relating to your drinking water, please call Carol Lariviere, Assistant Water Superintendent, at 401-767-2712 or Emerson J. Marvel, Water Superintendent, at 401-767-1411.

Naturally Occurring Bacteria

The simple fact is bacteria and other microorganisms inhabit our world. They can be found all around us: in our food; on our skin; in our bodies; and, in the air, soil and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern because they indicate that the water may be contaminated with other organisms that can cause disease. Throughout 2000, we tested 1,134 samples (95 samples every month) for coliform bacteria. In that time, only 1 sample came back positive for the bacteria. At no time did this incident pose a threat to public health and safety. Federal regulations now require that public water testing positive for coliform bacteria must be further analyzed for fecal coliform bacteria. Fecal coliform are present only in human and animal waste. Because these bacteria can cause illness, it is unacceptable for fecal coliform to be present in water at any concentration. Our tests indicate no fecal coliform is present in our water.

Drinking Water Improvement Projects

The Woonsocket Water Division recognizes the cornerstone to providing quality drinking water and dependable service is the replacement and maintenance of critical infrastructure. This past year the Water Division has started a program for the efficient replacement of key system components. The past years activities include:

- Design of three storage tanks in order to improve fire protection, system pressure, and reliability. They are expected to be placed into service in 2002.
- Improvement of the Rhodes Avenue Pump

Station including new energy efficient pumps, motors and emergency generator.

- Integration of computerized controls into the operation of the system to increase efficiency and provide state of the art monitoring and control.
- Water Quality Study to determine treatment options to meet future Safe Drinking Water Act regulations.

Woonsocket Water's commitment to excellence is further demonstrated by our investment in our employees. All system operators are state-certified based on a successful comprehensive national examination and continuing education requirements.

Community Participation

For public comment on an ongoing basis, customers can contact the office of Mayor Susan D. Menard or attend the Woonsocket City Council meetings. The City Council holds hearings on budget and other financial matters, approves contracts and considers ordinances that create or amend local laws. Some of these matters affect the operation of the Woonsocket Water Division. The City Council meets on the first and third Monday of every month at 7:00 p.m. in Harris Hall located at City Hall, 169 Main Street, Woonsocket, RI. The meetings are televised live on Cox Cable Channel 18. Public comment is welcome.

City of Woonsocket 2000 Water Quality Report

What's In My Water?

We are pleased to report that during the past year, the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. For your information, we have compiled a list in the table below showing what substances were detected in our drinking water during 2000. Although all of the substances listed below are under the Maximum Contaminant Level (MCL) set by U.S. EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2000	2	2	0.02	NA	No	Erosion of natural deposits
Beta/photon emitters (pCi/l) ¹	1997	50	0	1.7	NA	No	Decay of natural and man-made deposits
Nitrate (ppm)	2000	10	10	0.5	0.1 - 0.5	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm) ²	2000	NA	NA	36.9	NA	No	Runoff from winter road salting and sanding
Total Coliform Bacteria (% positive samples)	2000	5% positive monthly sample	0	0.9	NA	No	Naturally present in the environment
TTHMs [Total trihalomethanes] (ppb)	2000	100	NA	42	26 - 71	No	By-product of drinking water chlorination
Turbidity (NTU) ³	2000	TT	NA	1.363	NA	No	Soil runoff

LEAD & COPPER (Tap water samples were collected from homes throughout Woonsocket.)

SUBSTANCE (UNITS)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED	NUMBER OF HOMES ABOVE AL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2000	1.3	1.3	0.05	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb) ⁴	2000	15	0	13	3	No	Corrosion of household plumbing systems; Erosion of natural deposits

¹The MCL for Beta particles is 4 mrem/yr. EPA considers 50 pCi/L to be the level of concern for beta particles.

²The Safe Drinking Water Act does not require testing for sodium however the State of Rhode Island requires testing of source waters during January, February and March when road salting operations are likely to occur. People who are on sodium-restricted diets may wish to discuss this value with their physicians.

³Turbidity 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. During the reporting year, a minimum of 99.1% of all samples taken to measure turbidity met water quality standards.

⁴Infants 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 and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Table Definitions:

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

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the 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 is no known or expected risk to health. MCLGs

allow for a margin of safety.

NA: Not applicable.

Nephelometric Turbidity Units (NTU): Measurement of the clarity, or turbidity, of water.

Parts per billion (ppb): One part per billion (or micrograms per liter) is equivalent to one penny in \$10,000,000.

Parts per million (ppm): One part per million (or

milligrams per liter) is equivalent to one penny in \$10,000.

Picocuries per liter (pCi/L): Measurement of the natural rate of disintegration.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.