

# The 2001 Annual Water Quality Report

(also known as the Consumer Confidence report)

As required by the Environmental Protection Agency - a Department of the US Government

El informe contiene informacion impotante sobre la calidad del agua en su comunidad. Traduzcalo a hable con alguien que lo entienda bien.

## Pawtucket Water Supply Board

The Pawtucket Water Supply Board is a semi-autonomous agency of the City of Pawtucket, Rhode Island. The Pawtucket Water Supply Board operates a water system that serves the Cities of Pawtucket and Central Falls and the Valley Falls section of Cumberland. Wholesale customers are Seekonk, MA and Cumberland, RI.

The Pawtucket Water Supply Board of Directors is comprised of six members. Four of those members are appointed by the Mayor of the City of Pawtucket and confirmed by the Pawtucket City Council. The fifth member is the Finance Director of the City of Pawtucket, who serves ex-officio. The sixth member is a City Councilor appointed by the Pawtucket City Council.

The current board is: Mary Tetzner, Chairperson, Edward Dalton, William Masuck, David Pasquariello. Ronald Wunschel, City of Pawtucket Finance Director, and Thomas Hodge, Pawtucket City Councilor.

## Excellent Quality Drinking Water

The PWSB is committed to providing a safe and reliable water supply to its consumers and is happy to provide you with its year 2001 water quality report. This report provides information on PWSB's drinking water quality and what it contains. The report contains some EPA-mandated information that is repeated each year. **We are once again proud to report that PWSB's drinking water met or surpassed all requirements of the Federal Safe Drinking Water Act (SDWA) every single day in the year 2001.**

The PWSB has been and is addressing security issues and continues to make the appropriate changes when necessary.

I trust that you will find the water quality report informative and useful.

*Mary E. Tetzner - Chairperson*

## Water Quality Analysis

The table below shows the results of our water quality analyses. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here along with the highest levels allowed by regulation (MCL), the ideal goals for public health, the amounts detected, the usual sources of such contamination, footnotes explaining our findings and a key to units of measurement.

### TABLE KEY

*AL*= Action Level    *MCL*= Maximum Contaminant Level    *MCLG*= Maximum Contaminant Level Goal    *MFL*= Million fibres per liter

*mrem/year* = millirems per year (a measure of radiation absorbed by the body)    *NTU* = Nephelometric Turbidity Units

*pCi/l* = picocuries per liter (a measure of radioactivity)    *ppm* = parts per million or milligrams per liter (*mg/l*)

*ppb* = parts per billion or micrograms per liter (*ug/l*)    *ppt* = parts per trillion or nanograms per liter    *ppq* = parts per quadrillion or picograms per liter

*TT* = Treatment Technique

### TABLE DEFINITIONS

*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.

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

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

*Variances and Exemptions*: State or EPA permission not to meet an MCL or treatment technique under certain conditions.

THE DATA IN THIS REPORT IS FROM THE MOST RECENT TESTING DONE IN ACCORDANCE WITH REGULATIONS.

<i>Inorganic Contaminant</i>	<i>Period</i>	<i>Unit</i>	<i>MCL</i>	<i>MCLG</i>	<i>Highest Detected Level</i>	<i>Range</i>	<i>Major Sources</i>	<i>SDWA Violation</i>
Copper	2001	ppm	AL=1.3	1.3	0.142 @ 90th percentile	No sites exceeding action level	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives	No, 90th percentile
Lead	2001	ppb	AL=15	15	7 @ 90th percentile	Two sites exceeding action level	Corrosion of household plumbing systems. Erosion of natural deposits	No, 90th percentile

Flouride*	2001	ppm	4	4	1.49	0.08-1.49	Erosion of natural deposits. water additivewhich promotes strong teeth. Discharge from fertilizer and aluminum factories	No
Nitrates (as Nitrogen)	2001	ppm	10	10	0.51	0-0.51	Raw water	No
Sodium	2001	ppm	20		26			No
<b>Microbiological Contaminant</b>	<b>Period</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Highest Detected Level</b>	<b>Range</b>	<b>Major Sources</b>	<b>SDWA Violation</b>
Turbidity**	2001	ntu	TT	0	0.34	Lowest monthly percentage of sample meeting levels=100%	Soil runoff	No
<b>Volatile Organic Compounds</b>	<b>Period</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Highest Detected Level</b>	<b>Range</b>	<b>Major Sources</b>	<b>SDWA Violation</b>
Total Trihalomethanes	2001	ppb	100	0	58.53 Running Quarterly Average	0.12-2.55	By-product of drinking water chlorination	No
Haloacetic Acids***	2001	ppb	60	0	29.06 Running Quarterly Average	29.06-32.13	By-product of drinking water chlorination	No
<b>Radionuclides</b>	<b>Period</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Highest Detected Level</b>	<b>Range</b>	<b>Major Sources</b>	<b>SDWA Violation</b>
Radon	2001	pCi/L			150		Decay of natural and man made deposits	No

**FOOTNOTES:**

\* Pawtucket Water adds fluoride to its treated water as an aid in dental cavity prevention in young children.

\*\* 0.34 ntu was the highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 100%.

\*\*\*\* These results represent the sum of 5 Haloacetic Acid compounds. HAA5s will become required

monitoring under the recently passed Disinfection By-Products regulation scheduled for 12/2001 implementation.

## **ADDITIONAL HEALTH INFORMATION**

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

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 risk and effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline: (800)-426-4791.

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 mineral and radioactive material and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacterial, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or results from urban storm runoff; industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff; and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure the tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS and/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. Environmental Protection Agency/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline: **(800)-426-4791**.

## **CONCERNING LEAD IN OUR WATER**

Most lead in the home comes from paint and non-water related exposure. Whatever lead is in the water comes from old fixtures, solders and antiquated piping.

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 and flush your tap for 30 seconds to 2 minutes before using tap water.

Pawtucket Water has an ongoing lead service replacement program. Additional information is available from the Water quality Supervisor who can be reached at **(401)-729-5022**.

**SAFE DRINKING WATER HOTLINE: ( 800) -426 -4791**

For more information, call the **Pawtucket Water Supply Board at ( 401) -729 -5000**

**Pawtucket Water has been delivering safe, dependable drinking water, 7 days a week, 24 hours a day since February 2, 1878, when water was turned on to the Town and its 24 mile distribution system.**

**Facts and Figures**

Total water pumped in 2001	4,890,949,223 Gallons
Average daily demand	13,399,861 Gallons
Maximum day demand ..... August 12, 2001	21,085,000 Gallons
Minimum day demand ..... Jan. 1, 2001	9,882,535 Gallons
Distribution System	
Services	23,000
Distribution Mains	241.9 Miles
Valves	6,050
Hydrants	1,680
Water Treatment Plant	

Placed in service	1939
Filtration capacity	27,000,000 Gallons per day
Treatment process	Conventional Carbon Media
Abbott Run Watershed Reservoirs	
Storage Capacity	5,009,000,000 Gallons
Watershed Safe Yield	21,500,000 Gallons per day

## **WATER QUALITY REPORT**

Pawtucket Water is pleased to present a summary of the quality of the drinking water provided to you, our customers, during the past year. The Safe Drinking Water Act (SDWA) requires all water utilities to issue an annual "Consumer Confidence" report to its customers. This is the first in a series of reports intended to promote increased consumer awareness of the quality of their water and the actions their utility is taking to insure continued safe drinking water. Our report details where your water comes from, what it contains and how it compares to standards established by the federal government. Rest assured, Pawtucket Water and its employees are committed to providing our customers with the safest and most reliable drinking water possible.

### **THE WATER IS SAFE TO DRINK.**

The PWSB ensures the safety of the drinking water provided to the customer through a program of monitoring and testing. The PWSB Water Quality Laboratory and the RI Department of Health (RIDOH) extensively monitor the water both before and after the treatment process. The water quality is monitored even after it goes through the distribution mains and is delivered to the customer. There are numerous federal and state regulations that govern drinking water. These regulations provide structure on how, when and why samples are to be taken. The regulations tell the water supplier what to monitor for, how often the tests should be run and how much of something can be present in the water. At the present time, there are over 70 regulated contaminants and over 30 unregulated contaminants that must be monitored by the PWSB. The PWSB, with help from RIDOH, tests for over 170 different contaminants in your drinking water. These tests are performed daily, monthly, quarterly or yearly as required.

The water delivered to the customer is monitored daily for turbidity, pH, color, odor, fluoride and bacteriological contamination. The Water Quality Laboratories collect over 20 samples every day with an average of 600 samples taken each month. By sampling so often we are not only meeting federal and state regulations, we are ensuring that the water we provide our customers is SAFE of drink.

The table included in this report only lists those results that had detectable amounts of contaminant. All of the results reported are below the maximum limit set by regulations. If you

would like a complete listing of all the analysis done on the water, please call the PWSB Water Quality Laboratory at 729-5022.

## **OVERVIEW**

The Pawtucket (PWSB) operates the second largest water utility in the State of Rhode Island. The PWSB obtains its water from a series of surface water reservoirs located in the northeast portion of the State, treats all the raw water through conventional treatment techniques including carbon filtration, and transmits the treated water to a retail and wholesale transmission and distribution network. The PWSB retails water to city of Central Falls and the town of Cumberland. Wholesale customers include the towns of Cumberland Rhode Island and Seekonk, Massachusetts.

## **SECURITY**

With the heightened concern among citizens over the security of their drinking water supply the PWSB has been working on projects to enhance security and protection of the watershed and buildings of the PWSB. The PWSB has already completed many straightforward and common sense projects to increase security and reduce threats from terrorism.

Our reservoir patrol services have been reviewed, revised and set up so that they are not repetitive. We have required that the security service send us the same individuals for the term of the contract.

Our buildings have been secured and are locked at all times. Entry for visitors is gained through one source with sign in and escort service to the individual being visited. Employees are fully aware of the importance of vigilance and the seriousness of breaches in security.

Our emergency response plans have been reviewed to ensure they are current and relevant.

The PWSB has applied to the EPA for a grant to fund a Vulnerability Assessment to study the entire system. This will enable us to prepare the proper plans and be ready for any potential acts of terrorism that could be perpetrated against the PWSB.

As consumers and ratepayers you can assist by being another set of eyes and ears for the PWSB. If you see unusual or suspicious activity on the watershed or around the reservoirs you should immediately call us at 401-729-5023. This is the number of our water treatment plant operators who are on the job 24 hours a day seven days a week. If you feel that something is wrong with your water during normal working hours you should call our laboratory at 401-729-5022. At all other times call our water treatment plant operators at 401-729-5023.

## **HOW CAN YOU BE INVOLVED?**

Meetings of Pawtucket's Water Supply Board begin at 5 P.M. on the second Tuesday of every month and are open to the public. Meetings are held in the Board's conference room on the second floor at the Board's 85 Branch Street headquarters in Pawtucket.