

# The 2000 Annual Water Quality Report

(also known as 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 - Organization and Legal Structure

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 Drinkable Water"

Many of you are aware the Pawtucket Water Supply Board is in the process of building a new water treatment plant to replace the current plant that was built in 1935. The plant will be a facility that will insure compliance with the Safe Drinking Water Act and will continue to provide high quality water at reasonable rates. As you are probably aware the water treatment plant is not the only culprit in meeting the safe drinking water standards. That is why we will continue our aggressive plan to clean, line and re-line our aged distribution system. In a final note, the board has made great progress to satisfy our rate payers in the area of customer service and we are looking forward to assisting you in the future.

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

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

*Variations 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.

<b>Inorganic Contaminant</b>	<b>Period</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Detected Level</b>	<b>Range</b>	<b>Major Sources</b>	<b>SDWA Violation</b>
Copper	2000	ppm	AL=1.3	1.3	0.286	0.009-6.286	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.	90th percentile
Lead	2000	ppb	AL=15	15	18	20.1-18	Corrosion of household plumbing systems. Erosion of natural deposits.	90th percentile
Flouride*	2000	ppm	4	4	1.48	0.31-1.48	Erosion of natural deposits. water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.	No
Nitrates (as	2000	ppm	10	10	2.9	0.3-	Raw water.	No

Nitrogen)						2.9		
Sodium	2000	ppm	20		17.9	15.9-17.9		No
<b>Microbiological Contaminant</b>	<b>Period</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Detected Level</b>	<b>Range</b>	<b>Major Sources</b>	<b>SDWA Violation</b>
Total Coliform Bacteria**	2000	Monthly Max. %	5%	0%	1.56%	0-1.56%	Naturally present in the environment.	No
Turbidity***	2000	ntu	TT	0	2.55	0.12-2.55	Soil runoff.	No
<b>Volatile Organic Compounds</b>	<b>Period</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Detected Level</b>	<b>Range</b>	<b>Major Sources</b>	<b>SDWA Violation</b>
Total Trihalomethanes	2000	ppb	100	0	94.8	22.6-94.8	By-product of drinking water chlorination.	No
Haloacetic Acids****	2000	ppb	60	0	47	17-47	By-product of drinking water chlorination.	No
<b>Radionuclides</b>	<b>Period</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Detected Level</b>	<b>Range</b>	<b>Major Sources</b>	<b>SDWA Violation</b>
Gross Beta/Photon Emitters *****	2000	pCi/L	50	0	2.8	0-2.8	Decay of natural and man made deposits.	No
Gross Alph	2000	pCi/L	15		2.1	0-2.1	Decay of natural and man made deposits.	No
Radon	2000	pCi/L	NA	NA	150	56.5-150	Decay of natural and man made deposits.	NA

**FOOTNOTES:**

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

\*\* This value refers to the highest monthly percentage of positive samples detected during the year. For 2000, Pawtucket Water collected 2249 samples for compliance monitoring. A violation of the MCL for this contaminant occurs if a routine sample and a repeat sample are Total Coliform positive.

\*\*\* 2.10 ntu was the highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 100 %. The average turbidity value for 2000 was < 0.32 ntu.

\*\*\*\* These results are from Pawtucket Water's ICR monitoring data and 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.

\*\*\*\*\* Gross Beta/Photon Emitters are measured in pCi/L. A result of < 50 pCi/L is considered to be in compliance; no further analysis required.

Radionuclide compliance monitoring is conducted every four years.  
State wide waiver in effect for Glyphosate.

## **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**

You can also learn more about the Pawtucket Water Supply Board water system at [www.pwsb.org](http://www.pwsb.org)

**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 2000	4,805,212,629 Gallons
Average daily demand	13,128,996 Gallons
Maximum day demand ..... July 12, 2000	21,357,151 Gallons
Minimum day demand ..... Jan. 1, 2000	9,342,616 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. You can also visit our web site to find this listing and other helpful information about your drinking water.

### **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.

### **PAWTUCKET'S WATER SOURCE**

Pawtucket Water draws its water supply from the Abbot Run watershed, a sub basin of the Blackstone River Drainage Basin. The main source of supply for the Pawtucket system is Happy Hollow Pond, which is the terminal pond on Abbot Run, just prior to the confluence with the Blackstone River. There are other ponds on Abbot Run: Diamond Hill Reservoir, Arnold Mills Reservoir, Rawson Pond, Howard Pond and Robin Hollow Pond. The total storage capacity of these ponds is 5,009 million gallons of water. This reservoir system is located in a basin area totaling 26.9 sq. miles of urban and rural forested lands of which Pawtucket Water controls approximately 28% through outright ownership or through the past purchase of development rights. Pawtucket Water also owns and operates eight wells along Abbott Run that can supplement the surface water supply.

### **DESIGN – BUILD – OPERATE**

You have been reading about Design – Build – Operate for the past year. This is the term used when the private sector designs, finances, builds, and operates the facility over the life of the contract.

A variety of alternative service delivery techniques can be employed to maximize efficiency and increase service quality. Some methods will be more appropriate than others depending on the service.

- ***Contracting Out (also called "outsourcing")***. The government competitively contracts with a private organization to provide a service or part of a service.

A very broad term--but most simply, outsourcing is the transfer of a service delivery from the government to the private sector. Outsourcing runs a very broad range, sometimes leaving very little government involvement, and other times creating partnerships between government and private service providers where government is still the dominant player.

- Merely defining "outsourcing" is difficult. In its purest form, the term refers to the shifting of the production of a service from the government to the private sector, often by contracting out government-owned assets.

The broader definition of outsourcing includes a wide range of public-private partnerships.

- Most definitions of outsourcing, though, are more expansive, covering virtually any action that involves exposing the operations of government to the pressures of the commercial marketplace.

Currently the Pawtucket Water Supply Board is in the process of advertising for the outsourcing of the Water Treatment Plant portion of the operation. This outsourcing is for the design of a water treatment plant, the construction of the new plant and the operation of this new plant. Also part of this outsourcing is the operation of the existing water treatment plant until the new plant comes on line.

When the new plant is finished and online the Pawtucket Water Supply Board will own the asset (the water treatment plant) and the contractor will be responsible for the operation for the next twenty years under the scrutiny and oversight of the Pawtucket Water Supply Board. If the Pawtucket Water Supply Board is not satisfied with the contract operation of the water treatment plant at any time during the term of the contract they can take the operation back.

The project will be paid for by the ratepayers through rate increases that have to be approved by the Rhode Island Public Utilities Commission after a full public rate hearing process.

## **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.