

# TOWN OF PAXTON



## 2015 Water Quality Report – Public Water Supply #2228000



### Consumer Confidence Report

**This report contains important information about your drinking water. It is designed to inform you about where your drinking water comes from, how it's treated, the results of the water quality testing, cross connection and conservation tips, and the services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve our system, and to make certain that we are providing you with the best quality water possible from source to tap.**

#### **Paxton's Water Supply**

Paxton purchases 100% of its drinking water from the City of Worcester. Worcester obtains its drinking water from ten active surface water sources, or reservoirs, located both in and out of the city. The watersheds for these reservoirs cover a total of 40 square miles. These reservoirs combined hold a total of 7,379,900,000 Gallons. The reservoirs are listed below.

- Lynde Brook Res. (Leicester) 717.4 Million Gallons (MG)
- Kettle Brook Res. No.1 (Leicester) 19.3 MG
- Kettle Brook Res. No.2 (Leicester) 127.3 MG
- Kettle Brook Res. No.3 (Leicester, Paxton) 152.3 MG
- Kettle Brook Res. No.4 (Paxton) 513.7 MG
- Holden Res. No.1 (Holden) 729.3 MG
- Holden Res. No.2 (Holden) 257.4 MG
- Kendall Res. (Holden) 792.2 MG
- Pine Hills Res. (Paxton, Holden, Rutland) 2,971.0 MG
- Quinapoxet Res. (Holden, Princeton) 1,100.0 MG

In addition to these ten active reservoirs Worcester also has two additional reservoirs that are inactive, and two groundwater sources which come from two different wells (also inactive) : the Coal Mine Brooke Well located on Lake Avenue North in Worcester, and the Shrewsbury well located off Holden Street in Shrewsbury. These four additional inactive sites are an excellent emergency water source.

The **first barrier** of protection for any water supply is to have, and maintain a clean source of water. To protect a surface water supply, the land within in the water shed must be controlled. The land within the Water shed that the city of Worcester controls is patrolled regularly in order to maintain, and protect the water supply. However, not all of the land in the reservoir's water shed is owned, or controlled by the city of Worcester. Some of the land within the Water shed is privately owned, and some of the activities held on those lands could pose a threat to water quality in the reservoirs.

The potential threats to the water supply within those privately owned lands include, but are not limited to: dairy farms, livestock operations, manure spreading and/or storage, pesticide storage and/or use, railroad tracks, aquatic life, landfills and dumps, power line right of ways, storm water discharge, highways and roadways. If you are a land owner within the water shed of a drinking water supply please keep in mind that what you do on your land has the potential to contaminate the water supply, so be conscious of what you do, and how you do it for the benefit of you, your neighbors, and your fellow townsfolk.

### **THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) WANTS YOU TO KNOW**

**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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).**

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 accruing minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animal or human activity.

**Contaminants that may be present in source water include:**

**Microbial Contaminants**, such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic Contaminates**, such as salts and metals, which can be naturally occurring, or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and farming.

**Pesticides and herbicides**, which may come from a variety of sources such as agricultural, urban storm water runoff, and residential uses.

**Organic Chemical Contaminants**, Including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also, come from gas stations, urban runoff, and septic systems.

**Radioactive Contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA), and the Massachusetts Department of Public Health (DPH) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and drug administration and Mass DPH regulations establish limits for contaminants in bottled water as well, which must provide the same protection for public health.

### **SOURCE WATER ASSESSMENT PROTECTION AGENCY (SWAP) REPORT**

The Massachusetts Department of Environmental Protection (DEP) has completed a source water assessment program report for our reservoirs supplying the Paxton Water system. The purpose of SWAP is to identify potential threats to our water supply sources so we can take appropriate action to improve source protection.

The susceptibility to contamination for Worcester's water sources was ranked high. This means there is at least one high threat land use within the key water supply areas surrounding the reservoirs. These land uses have the potential to add contaminants to the supply source. Some of these high threat uses are: Dairy Farms, Manure Spreading or Storage, Pesticide storage or use, Landfills and dumps.

Worcester has been commended by DEP for taking an active role in promoting source water protection measures. For a complete copy of the SWAP Report please call the Worcester Water Department at 1-508-799-1484.

**We at the Paxton Water Department work around the clock to provide top quality water to every tap. We ask that all our customers help us to protect our water sources, which are the heart of our community, our way of life, and our children's future.**

More information on watershed protection is available in the Source Water Assessment & protection (SWAP) report prepared by the Department of Environmental Protection Agency (DEP) in 2002 and is available from the Paxton Water Department by calling (508)753-9077 or at [www.mass.gov/dep/water/drinking/2348000.pdf](http://www.mass.gov/dep/water/drinking/2348000.pdf).

#### Immuno-Compromised Persons

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as a person 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 for infections. These people should seek advice about drinking water from 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 hot line (1-800-426-4791).

#### **Water Treatment**

Protecting the water supply is not enough to assure that we are able to supply you with safe and adequate drinking water. All drinking water, including bottled water, begins as rainfall, or snow melt. As this water travels over the surface of the land, and is absorbed into the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material, and can pick up substances or contaminants that occur due to the presence of human, and/or animal activity. Although many of these substances and contaminants may be removed or reduced by natural processes before it reaches the water supply, some may enter into the water supply.

Water treatment is necessary as the **second barrier** of protection. The water treatment process reduces the levels of contaminants to a safe range, and can effectively eliminate some substances, but it will not remove all traces of all possible contaminants. **Drinking water, including bottled water, may reasonably be expected to contain at least some small amounts of some contamination. 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 Environmental Protection Agency's (EPA's) Safe Drinking Water Hotline at 1 (800) 426-4791.**

The city of Worcester treats the water through Ozonation, Coagulation & Flocculation, filtration, and disinfection to remove or reduce harmful contaminants that may come from the source water. Listed below are the methods that the City of Worcester used to treat the drinking water that entered the Town of Paxton in the 2015 calendar year.

- **Ozonation** – Generated on-site at the treatment plant, ozone disinfects and breaks down organic matter making the water more efficiently filtered. This is the most effective disinfectant for the parasites giardia, & cryptosporidium.
- **Coagulation & Flocculation** - using cationic polymer and alum to make tiny particles in the water stick together to form larger particles, which can then be better trapped in the filters.
- **Direct Filtration** – This removes particles from the water using coal and sand filters.
- **PH Adjustment** – Lime (calcium oxide) is added to make the water less acidic, and less corrosive.
- **Disinfection with Chlorine** – to kill bacteria and other microorganisms.
- **Corrosion Control** – A blended phosphate corrosion inhibitor is added to make the water less corrosive.

## Distribution System

In 2015, the Paxton Water Department distributed 102,216,110 gallons of water to our customers. All of our water is purchased pretreated from the city of Worcester. The town of Paxton's water distribution system is made up of varying types of pipe that range in sizes from 3/4" to 12" pipe. The water mains alone add up to 40.28 miles of pipe (this number is not including service pipes that run from the water main into the house, building, or structure at your location). There is a pump station that houses two pumps (a primary, and a secondary pump) that move all of the water entering from the City of Worcester into the town of Paxton. The water travels from the pump station through the distribution lines and into one of the two Water Storage Tanks that house a total of 1.2 million gallons (MG) of water. The water then travels from the water storage tanks throughout the distribution system through water mains ranging in sizes from 1" to 12" pipe. The water then travels out of the water mains through your water service pipe in order to make it to your tap. It is our responsibility to make certain that when you open that tap that you have Safe and adequate drinking water. We at the Paxton Water department take pride in what we do, and work continuously to make sure that the water you receive is Safe, and adequate every time you open your tap.

In 2015 The Paxton Water Department removed the water storage tank on Maple St., and installed a new elevated water storage tank at the same location. The previous tank held .36 MG of water, and the newly erected tank holds .21 MG of water. Although the new tank is the same height as the previous tank, it does hold less water. The thought process behind erecting a smaller tank was that we found through studies, that the age of the water in the system was greater than we would like to see. We also needed to maintain adequate fire flows throughout the distribution system. Since the previous tank was larger, and had no mixing system installed within the tank, the age of the water increased once there because it didn't mix well inside the tank. As the water aged, the Chlorine residual decreased steadily. As a result, it increased the possibility of bacteria growth. The new Elevated water storage tank that has been erected is smaller in both height and diameter (the 40 foot tank sits on top of a 60 foot cement pedestal). The new tank has an internal mixing system which will decrease the age of the water in the tank, and throughout the system. The chlorine residual is more easily maintained since the age of the water has been decreased. The new tank is also equipped to inject chlorine into the water at the tank in emergency situations, or as need. The ability to add chlorine easily at this location makes us better prepared and equipped to handle emergencies situations within our system in order to supply safe drinking water to you, our customers.

In our continuing efforts to deliver safe and dependable drinking water to our customers tap, it may be necessary for the department to make improvements throughout the distribution system. The cost of these improvements may be reflected in the rate structure. Rate adjustments may be unavoidable in order to address such issues. If you have any questions regarding the new water storage tank or about the distribution system, please feel free to call the Paxton Water Department at (508) 753-9077.

**We at the Paxton Water Department work around the clock to provide top quality water to every tap. We ask that all our customers help us to protect our water sources, which are the heart of our community, our way of life, and our children's future.**

### **THE NEW MAPLE STREET ELEVATED WATER STORAGE TANK.**



## 2015 Water Quality Testing Results

The following results are from sampling done in 2015 calendar year, or during the most recent monitoring period for each contaminant group.

Substance (Contaminant)	Date Collected	Highest Level Detected	Range	MCL or MRDLG	MCLG or MRDLG	Violation (Yes/No)	Possible Sources
<b>Inorganic Contaminants</b>							
Barium	2015	0.012 ppm	N/A	2.0ppm	2.0ppm	No	Erosion of natural deposits
Manganese	2015	0.015 ppm	N/A	Unregulated <sup>13</sup>	Unregulated <sup>13</sup>	No	Erosion of Natural Deposits
Nitrate Nitrogen	2015	0.284 ppm	N/A	10 ppm	10ppm	No	Erosion of natural deposits, fertilizer, wastewater
Sodium	2015	12.8 ppm	N/A	Unregulated <sup>1</sup> - ORSG: 20ppm	Unregulated <sup>1</sup>	No	Naturally present in the environment; road salt.
<b>Volatile Organic Contaminants (VOC's)</b>							
None Detected other than disinfection byproducts							
<b>Synthetic Organic Contaminants (SOC's)</b>							
None detected in the samples collected in 2013.							
<b>Radioactive contaminants ( no samples required for 2015 )</b>							
Gross Alpha Activity	2003	0.6 pCi/L	N/A	15.0 pCi/L	0 pCi/L	No	Erosion of natural deposits
Beta Particle Activity	2003	0.1 pCi/L	N/A	50 pCi/L <sup>2</sup>	0 pCi/L	No	Erosion of natural deposits
226 & 228	2003	0.4 pCi/L	N/A	5 pCi/L	0 pCi/L	No	Erosion of natural deposits
<b>Unregulated Contaminants (UCMR3)</b>							
Total Chromium	2015	0.23ppb average Level	<0.2-0.34ppb	100ppb	100ppb	No	Naturally occurring; also used in metal production, plating, tanning, dyes, wood preservatives
Chromium-6	2015	0.06 ppb Average Level	0.05-0.08ppb	Unregulated <sup>1</sup>	Unregulated <sup>1</sup>	No	Naturally occurring; also used in metal production, plating, tanning, dyes, wood preservatives
Strontium	2015	41.5 ppb Average Level	41.1 – 42.3ppb	Unregulated <sup>1</sup>	Unregulated <sup>1</sup>	No	Naturally occurring

<sup>1</sup>Unregulated means that USEPA has not set a **Radium** MCL for this contaminant.

<sup>2</sup>The MCL for Beta Particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for Beta particles.

<sup>3</sup>The EPA has set a health advisory for Manganese of 0.3ppm

### Microbiological Contaminants

**Total Coliform Bacteria** are a group of bacteria that serve as indicators of potential water quality problems. Total Coliform Bacteria are naturally present in the environment in soil, vegetation, and surface water. (Certain types of Total Coliform can survive in water distribution systems despite the presence of chlorine.) Total Coliform Bacteria are used as an indicator, and if they are found in any of the routine monthly samples taken the samples must then be tested for Fecal Coliform. The Paxton Water Department currently collects 6 coliform bacteria samples each month throughout the distribution system, and 1 sample at the entry point of the system (Where the water enters from the city of Worcester).

Bacteria	Highest # of Positive Samples in a Month	MCL	MCLG	Violation (Yes/No)	Possible Sources
Total Coliform	1 positive sample in the month of November.	1	0	No	Naturally present in the environment.

November, 2015 - The Department was notified by the laboratory that there was one sample on November 10<sup>th</sup> that showed the presence of total coliform bacteria. The Water Department flushed that section of the distribution system, and then drew repeat samples of the sample location, along with an upstream and a downstream sample. All of these repeat samples came back absent of Total Coliform.

**Fecal Coliform** are a group of bacteria that thrive at warmer temperatures such as those found in the gut-tract of warm blooded animals. The presence of Fecal Coliform may be a cause for concern since these organisms are sometimes, but not always, associated with sewage, or human/animal waste. **In 2015 there was no presence of fecal coliform in any of Paxton's water.**

Bacteria	Highest # of Positive Samples in a Month	MCL	MCLG	Violation (Yes/No)	Possible Sources
Fecal Coliform or E.coli	0	*	0	No	Human and animal fecal waste

**Turbidity** Is the cloudiness or haziness of the water caused by large numbers of individual particle's that are generally invisible to the naked eye. The measurement of Turbidity is a good indicator of the effectiveness of the filtration system.

Turbidity				
Contaminant	Maximum Turbidity Measured	% of Measurements Below Turbidity Limit	Number of Measurements Greater Than 1.0 NTU	Turbidity Limits (Combined for all filters)
Turbidity (combined for all filters)	0.267 NTU	100%	0	Less than or equal to 0.3 NTU in 95% of monthly measurements, No measurement can exceed 1.0 NTU

**Notes:** The state allows us to monitor for some contaminants less than once per year because the contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

### Lead and Copper

Lead and copper are contaminants with a very specific and unique set of rules for sampling, and testing. Lead and Copper don't contaminate the water at the source as many other inorganics do. Generally it enters the water once it has flowed to the consumer's home. These metals typically dissolve from the water pipes within your house if the water is corrosive. Lead typically comes from the Lead Solder that was used prior 1986, to connect the copper piping in the buildings water supply lines. The copper comes from the piping itself. Ingesting large amounts of copper from water can cause an upset stomach, but there are no long term health effects unless you suffer from Wilson's disease. Lead, on the other hand is known to cause learning impairments in young children, and may cause delays in mental and physical development. Elevated lead ingestion is also known to cause kidney problems, and/or high blood pressure in adults. Elevated lead in water taken from the tap can cause serious health problems, especially in young children, and pregnant women. Lead in your drinking water is primarily from the materials which make up the plumbing inside the home. The Paxton Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials associated with home plumbing. After your water has been sitting unused for several hours you can minimize the potential for lead exposure by flush the tap for 30 seconds, to two minutes before using the water for drinking, cooking, or making formula. If you are concerned about lead in your water you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize your exposure to lead can be found through the Safe Drinking Water hot line, or at <http://www.epa.gov/safewater/lead>.

Lead and copper	Date collected	90th Percentile	Action Level	MCLG	# of sites Sampled	# of Sites Above Action Level	Exceeds Action Level (Y/N)	Possible Sources
Lead	2015	0.003mg/L	0.015 mg/L	0	20	1	No	Corrosion of household plumbing
Copper	2015	0.109mg/L	1.3 mg/L	1.3 mg/L	20	0	No	Corrosion of household plumbing

\*Lead and Copper compliance is based on the 90<sup>th</sup> percentile value, which is the highest level found in 9 out of every 10 homes sampled. This number is compared to the action level for each contaminant.

### Other Analysis

The compounds in this table are general measures of water chemistry. There are no established limits for these compounds since they are not recognized as having significant health effects at levels found in drinking water. These compounds are sometimes referred to as secondary contaminants. At certain levels some of these may discolor the water or create a bad taste. Many of these measurements are made as another way to track the effectiveness of Worcester's treatment process.

Unregulated Contaminants tested by the city of Worcester	Range Detected By the City of Worcester	Possible Sources
Alkalinity	7.8 – 14.2 ppm	Naturally Occurring. Buffering capacity of water.
Aluminum	0.013 - 0.170 ppm	Natural sources and water treatment processes
Calcium	6.4 – 11.2 ppm	Natural sources and water treatment processes.
Chloride	24 – 40 ppm	Natural and manmade sources
Conductivity	99 - 313 umhos/cm	An indirect measure of dissolved solids.
Hardness	19 - 32 ppm	Naturally occurring. An indirect measure of Calcium & Magnesium.
Iron	0.001 – 0.536 ppm	From natural sources and old water mains.
Orthophosphate	0.443 – 0.769 ppm	Added to the water during treatment as a corrosion inhibitor.
PH	7.03 – 8.02 units	Measurement of the acidity or basicity of the water.
Sulfate	8.8 – 12.8 ppm	Natural sources and water treatment processes.
Temperature	1.0 – 28.2 degrees Celsius	Natural processes.
Total Organic Carbon	1.12 – 2.78 ppm	Natural sources.
Total Phosphate	0.91 – 1.68 ppm	Added to the water during treatment as corrosion inhibitor.
Zinc	0.001 – 0.020 ppm	Natural sources; galvanized pipes

## Disinfection and Disinfection Byproducts

Chlorine is a disinfectant used to kill bacteria and microorganisms in drinking water. Its use is recognized as one of the most important public health measures ever taken in the modern world. New federal regulations limit the maximum amount of residual chlorine that can be present in the distribution system to 4.0ppm.

Substance (disinfectant or Byproduct)	Maximum Level Detected (HRAA) <sup>1</sup>	Range Detected	MCL (MRDL) <sup>2</sup>	MCLG (MRDLG) <sup>3</sup>	Violation (Y/N)	Typical Source of Contaminant
Total Chlorine	0.38ppm	0.03ppm – 2.31ppm	4.0 ppm	4.0 ppm	No	Added during treatment.
Total Tri-halomethanes (THM's)	79.90ppm	48.60ppb – 79.9 ppb	80.0 ppb	-	No	Byproducts of Chlorine Disinfection.
Halo acetic Acids (HAA's)	51.60ppm	36.90 ppb – 51.60 ppb	60.0 ppb	-	No	Byproducts of Chlorine Disinfection.

<sup>1</sup>Highest Running Annual Average. <sup>2</sup>Maximum Residual Disinfectant Level. <sup>3</sup>Maximum Residual Disinfectant Level Goal.

## Cross Connection Information

The Paxton Water Department makes every effort to ensure that the water delivered to your home and/or business is clean, safe, and free of contamination. Our staff works very hard to protect the quality of the water delivered to you, our customers, from the time it enters into the system, until it reaches your homes and businesses. But what happens when the water reaches your home and/or business? Is there still a need to protect the water quality from contamination caused by cross connection? If so How?

### What is a Cross-Connection?

A cross-connection occurs whenever the drinking water supply is, or could be in contact with potential sources of pollution or contamination. Cross-connections exist in piping arrangements or equipment that allowed the drinking water to come in contact with non-potable liquids, solids, or gasses (hazardous to humans) in the event of a backflow, or backsiphonage.

### What is a backflow or backsiphone?

Backflow is the undesired reverse of the water flow in the drinking water distribution lines. This backward flow of water can occur when the pressure created by an equipment or system such as a boiler or air-conditioning unit is higher than that of the water pressure inside the water distribution line (backpressure), or when the pressure in the distribution line drops due to routine occurrences such as water main breaks or heavy water demand causing the water to flow backward (or be siphoned backwards) inside the water distribution system (backsiphonage). Backflow and backsiphone is a problem that many water customers are unaware of, a problem that each and every water customer has a responsibility to help prevent.

### What can you do to help prevent a cross-connection?

Without the proper protection something as simple as a garden hose has the potential to contaminate or pollute the drinking water lines in your house. In fact over half of the country's cross-connection incidents involved unprotected garden hoses. There are very simple steps that you can take as a drinking water user to protect, and prevent against hazards your water:

- NEVER submerge a hose in soapy water buckets, pet watering containers, pools, tubs, drains, or chemicals.
- NEVER attach a hose to a garden sprayer without the proper backflow preventer.
- Buy and install hose bib vacuum breakers in any threaded water fixture. The installation can be as easy as attaching a garden hose to a spigot. This inexpensive device is available at most hardware stores and home-improvement centers.
- Identify and be aware of potential cross-connections to your water line.
- Buy appliances and equipment with a backflow preventer already installed on it.
- Buy and install backflow prevention devices or assemblies for all high or moderate hazard conditions.

If you are the owner or manager of a property that is being used as a commercial, industrial, or institutional facility you must have your property's plumbing system surveyed for cross-connection by the Paxton Water Department. If your property has NOT been surveyed for cross-connection please contact the Paxton Water Department to schedule a cross-connection survey.



The Paxton Water Department would like to remind all of its customers with in-ground sprinkler systems that they must have the proper cross-connection devices to be in compliance with the DPW and DEP regulations. More education on cross connection is available at the town hall, or by contacting the Paxton Water Department at (508) 753-9077.

## ***Glossary of Terms***

**90<sup>th</sup> Percentile** – A statistical measure used in the Lead and Copper Rule. A test result at the 90<sup>th</sup> percentile level means that 90 percent of all the test results fall below that level.

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

**Distribution System** – The network of pipes, vaults, and storage tanks that bring water from the treatment plant to the homes and businesses where the water is used.

**Massachusetts Department of Environmental Protection (DEP)** – The State Agency responsible for setting and enforcing drinking water regulations in Massachusetts.

**Maximum Contaminant Level (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.

**Maximum Contaminant Level Goal (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.

**Maximum Residual Disinfection Level (MRDL)** – The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant (chlorine, chloramines, chlorine dioxide) below which there is no known or expected health risk. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Mg/L** – Milligrams per liter

**NTU** - Nephelometric Turbidity Units

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

**Ppb** – Parts per billion

**Ppm** – Parts per million

**pCi/L** – picocuries per liter (a measurement of radioactivity)

**Secondary Maximum Contaminant Level (SMCL)** – These standards are developed to protect the aesthetic qualities of drinking water, and are not health based.

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

**United States Environmental Protection Agency (USEPA)** – The Federal Agency responsible for setting and enforcing drinking water regulations.

**Variances and Exemptions** – Is when State or EPA permission not to meet MCL or a treatment technique under certain conditions.

**Water Shed** – The land upon which rain falls then flows across as runoff that eventually collects into streams, rivers, lakes, ponds, and reservoirs. Watershed boundaries are determined by the topography with hills and mountains determining which direction the runoff will travel.

If you have any questions about this report or concerning your water utility, please contact either Mike Putnam (Paxton DPW director ), or Travis Thibault ( Paxton Water Dept. foreman) by calling (508) 753-9077, or by writing to this address: 107 Holden Road, Paxton, Ma. 01612. We at the Paxton Water Department want to make certain that all of our customers are informed about their drinking water, and their water utility. We welcome any of our customers to attend the Water Board meetings which are held monthly. The dates, times, and locations are posted at the Town Hall (697 Pleasant Street) in Paxton.

