# **TOWN OF BELLINGHAM**

### DEPARTMENT OF PUBLIC WORKS

# <u>DRINKING WATER QUALITY AND CONSUMER INFORMATION REPORT CALENDAR YEAR 2013</u> (Public Water System ID# 2025000 – <u>Telephone #508-966-5813</u>)

This year we again utilized the electronic distribution method. This allows us to compile a much more thorough report, as we no longer are trying to fit all the information into a newspaper insert. We continue to produce a low tech no frills report. Although not colorful it is very complete.

#### Introduction

This is the annual water quality report card that we prepare and make readily available to our customers and the public. It contains important information about the quality of drinking water we distribute to our customers and other information about the water supply system. If you read it each year, THANK YOU. The report is redundant and somewhat long. Much of the text in this annual document is the same each year. Our system simply does not change that much from year to year and much of the text is required under MassDEP and Federal Safe Drinking Water Act regulations. The table (The 2013 Water Quality Summary) that appears on page 3, details the results of our water quality analysis. I suggest that everyone read the entire report but if pressed for time, I hope you will at least scan The 2013 Water Quality Summary.

The July 2011 Bacteria detection at one of our sources triggered a dramatic change in the way we treat our water. We now MUST disinfect all sources and adding disinfectant amplifies our dirty water problem. Dirty or discolored water is caused by Iron and Manganese in our source water and pipes. In simple terms, adding a disinfectant makes the Iron and Manganese problem worse. Iron and Manganese is not harmful at current levels but are very undesirable. We are on our way to resolving these water quality problems. As 2013 ended, bids were advertised for the construction of our new drinking water treatment system that will service all of Bellingham water customers. Plans remain on schedule and all projects related to the new treatment systems should be complete by May of 2015. The \$15.4 Million project received \$13.3 Million in State Revolving Loan funds and will allow us to construct a new filtration plant on Wrentham Road, upgrade our existing filtration plant on Hartford Ave, and install many miles of water transmission mains to transport all water to the plants for treatment before it is pumped to our customers.

The Town of Bellingham Department of Public Works (DPW) is committed to providing our customers with high quality drinking water that meets or surpasses state and federal standards for quality and safety. The Town has made significant investments in our pumping stations, filtration plant, and corrosion control facilities and annually performs thousands of dollars worth of water quality tests to ensure that we provide sufficient quantities of safe drinking water.

Bellingham water is safe to drink. The tasks the Bellingham DPW must perform as a public water supplier under the Federal Safe Drinking Water Act 1996 Amendments insure that to be the case. We are pleased to compile this annual report that summarizes the 2013 calendar year water quality testing, and hope it reassures our customers of the safety of our tap water.

#### Where does Bellingham get its drinking water?

The Town of Bellingham's drinking water supply system includes seventeen groundwater wells, nine pumping stations, three storage tanks, approximately ninety-eight miles of water main, and sixty miles of water services. Thirteen wells, which are controlled by five pumping stations, are located in the southern part of Town; they draw water from the Blackstone River basin's underground aquifer (in 2015 water from these wells will be treated at the Wrentham Road Filtration Plant). Four wells, each operated by its own pumping station, are located in the northern part of Town; they draw water from the Charles River basin's underground aquifer (in 2015 water from these wells will all be treated at the Hartford Ave Filtration Plant). The DPW has detailed maps showing these facilities. Anyone who would like to see a map or obtain a copy should contact the DPW.

#### Is our water pure?

No. Pure water would be only hydrogen and oxygen, the compound H2O. 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. Sources of drinking water (tap water and bottled water) include rivers, lakes, reservoirs, streams, and wells. As water travels over land or through the ground, it dissolves naturally occurring minerals and radioactive materials, and can be polluted by animal and human activity. Contaminants that might be expected in untreated water include: microbial contaminants (such as viruses and bacteria), inorganic contaminants (such as metals and salts), pesticides, herbicides, organic chemicals from industrial or petroleum use, and radioactive materials. More information on contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800-426-4791).

# If our water is not pure, what is in it?

The 2013 Water Quality Summary. It is the complete list of the contaminants detected in the samples collected at our drinking water sources and from our water distribution system in 2013. The list contains only the contaminants that were detected at levels above the "detection limit". The "detection limit" is the lowest concentration of a substance that today's laboratory technology can detect. We collected 893 water samples and certified labs performed tests for 133 various contaminants. Contaminants we test for include: Total Coliform Bacteria, Free Chlorine Residual, Iron, Manganese, Trihalomethanes (THM), Haloacetic Acid (HAA5), Nitrate, Tetrachloroethylene (PCE), Volatile Organic Compounds (VOC), Synthetic Organic Compounds (SOC), and Perchlorate.

<u>The 2013 Water Quality Summary</u> also includes contaminants that we were not required to monitor for in 2013, but for which some level was detected within the last five years. The date of sample collection is noted on the table.

We also performed costly Microscopic Particular Analysis tests on several sources. This test is done to verify that our <u>well</u> water is not actually <u>surface</u> water. All tests showed that the soils in our aquifers are acting as a natural filter and the water is well water; therefore, less likely to be affected by some particular contaminants that can occur in reservoirs, lakes, or rivers.

Another testing requirement is the UCMR (Unregulated Containment Monitoring Requirement). The UCMR contaminants are those for which there are no established drinking water standards. The purpose of UCMR monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

The Mass DEP has reduced the monitoring requirements for Inorganic (IOC) and Radionuclides for some of our sources because these sources are not at risk of contamination. The last samples collected for these contaminants were: 2012 for IOC at all sources and 2006 for Radionuclides. Those sampling results were found to meet all applicable EPA and Mass DEP standards.

#### There are allowable or safe levels of contaminants in water. How are these levels determined?

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) prescribes regulations and the Massachusetts Department of Environmental Protection (MassDEP) administers regulations that limit the amounts of certain contaminants allowed in water provided to public water systems customers. The USEPA sets Maximum Contamination Levels, Maximum Contamination Level Goals, Action Levels, and defines allowable testing procedures for over 100 water contaminants. Food and Drug Administration (FDA) and Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that provide the same protection for public health.

# **The 2013 Water Quality Summary**

#### Notes explaining abbreviations & possible health effects of exposure to detected contaminants appear on the next page

Regulated Contaminants (Unit of Measurement)	Date(s) Collected	Highest Result or Highest RAA*	Range Detected	MCL or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source			
Inorganic Contaminants										
Nitrate (ppm)	May 2013	2.07	0.18 – 2.07	10	10	N	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits			
Barium (ppm)	May & Aug 2012	0.06	0.01 – 0.06	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits			
Chromium (total) (ppb) (UCMR3)	Oct 2013	0.34	0.24 - 0.34	100	100	N	Discharge from steel and pulp mills; Erosion of natural deposits			
Radioactive Contaminants										
Radium 226 & 228 (pCi/L) (combined values)	May 2012	0.87	0.42 – 0.87	5	0	N	Erosion of natural deposits			
Disinfectants and Disinfection By-Products										
Total Trihalomethanes (TTHMs) (ppb)	Quarterly	46	3 – 112	80		N	Byproduct of drinking water chlorination			
Haloacetic Acids (HAA5) (ppb)	Quarterly	32	0 – 32	60		N	Byproduct of drinking water disinfection			
Chlorine (ppm) (free)	40 per Month	0.44	0 – 2.4	4	4	N	Water additive used to control microbes			

Bacteria	Highest % Positive in a month	Total # Positive	MCL	MC LG	Violation (Y/N)	Possible Source	
Total Coliform	10%	6	>5%	0	Y *	Naturally present in the environment	
E. Coli	0%	0	**	0	N	Human and animal fecal waste	

Unregulated and Secondary Contaminants	Date(s) Collected	Range of Results Detected	Average Detected	SMCL	ORSG or EPA Health Advisory	Possible Source			
Unit of Measurement for the below listed contaminants is ppm									
Sodium	May & June 2012	49 – 96	57		20 ***	Natural sources; runoff from use as salt on roadways; by-product of treatment process			
Sulfate	May& June 2012	5 – 11	9	250		Natural sources			
Unit of Measurement for the below listed contaminants is ppb									
Manganese	Quarterly	0 – 220	38	50	300 ****	Erosion of natural deposits			
Nickel	May & June 2012	0 – 2	1		100	Discharge from industrial processes			
Strontium	Oct 2013	63 – 110	92		4,000	Naturally occurring element			
Vanadium	Oct 2013	0.21 - 0.43	0.10			Naturally occurring metal			
Chromium-6	Oct 2013	0.07 - 0.35	0.19			Naturally occurring element used in plating, dyes, wood preservation			
Chlorate	Oct 2013	140 – 560	329			Agricultural defoliant; disinfection by-product			
Chlorodifluoromethane	Oct 2013	0 – 0.22	0.04			Used as refrigerant and in resins, polymers, & solvents			
Chloromethane	Oct 2013	0 – 0.26	0.04			Foaming agent; disinfection by-product			

<sup>\*</sup> Possible Health Effects - Total Coliform Bacteria: Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria, may be present. If Coliform were found in more samples than allowed, this would be a warning of potential problems.

<sup>\*\*</sup> Compliance with the E. coli MCL is determined upon additional repeat testing.

<sup>\*\*\*</sup> Sodium-sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, should be aware of the levels of sodium in their drinking water where exposures are being carefully controlled.

<sup>\*\*\*\*</sup> US EPA and MassDEP have established public health advisory levels for manganese to protect against concerns of potential neurological effects.

- <u>MCL Maximum Contamination Level</u>: The highest level of a contaminant in drinking water. MCLs are set as close to the MCLGs (see below) as feasible using the best available treatment technology.
- MCLG Maximum Contamination Level Goal: 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.
- SMCL Secondary Maximum Contaminant level: These standards are developed to protect the aesthetic qualities of drinking water and are not health based.
- ppm is the abbreviation for parts per million. Parts per million is the same as milligrams per liter (mg/L) which is the scientific unit of measure for most contaminants.
- <u>ppb</u> is the abbreviation for parts per billion. A part per billion is the same as micrograms per liter (ug/L) which is the scientific unit of measure for some contaminants.
- <u>UR</u> means Un-Regulated. Unregulated contaminants are those contaminants for which the USEPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the USEPA in determining their occurrence in drinking water and whether future regulation is warranted
- Highest RAA Highest running annual average of four consecutive quarters
- Monthly % is the percent of a month's system samples that indicate a presence of Total Coliform Bacteria.
- pCi/L is the abbreviation for picocuries per liter (a measure of radioactivity)
- MRDL is the abbreviation for Maximum Residual Disinfectant Level. MRDL is the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- MRDLG is the abbreviation for Maximum Residual Disinfectant Level Goal. MRDLG is the level of drinking water disinfectant below, which there is no known or expected risk to health. MRDLGs do not reflect the benefit of the use of disinfectants to control microbial contaminants.
- <u>ORSG</u> is the abbreviation for Mass Office of Research and Standards Guideline 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.
- <u>UCMR3</u> Sampled as part of the Unregulated Contaminant Monitoring Rule

#### Why doesn't tap water taste better?

Our tap water is safe to drink! However, to meet the extensive safe drinking water quality standards, public water suppliers must add treatment chemicals.

Caustics for corrosion control, Chlorine for disinfection, and Potassium Permanganate for iron and manganese removal and filtration enhancement are chemicals added to our source water. These chemicals work very well to make tap water safe, but they can often affect the water's taste, color, and odor.

The Chlorine (swimming pool smell) unfortunately will be with us from now on. MassDEP now requires that we disinfect throughout our system. To achieve good disinfectant residuals at the outskirts of the system, the amount we add at our sources had to be increased.

Consider the fact that the average cost for a gallon of bottled water from a store is \$1.50 and the average cost for that same gallon of safe tap water is \$0.004. The cleaner tasting bottled water cost 375 times more than the safe water coming from the tap.

#### What measures are taken to insure that our water stays safe?

The EPA and MassDEP are continuously studying drinking contaminants and adding them to the required list if there is a potential health risk and if technology is available to yield reliable analytical results. The UCMR program is part of this effort.

In 2002, MassDEP issued a draft of our Source Water Assessment Program (SWAP) Report. The SWAP program was established under the Federal Safe Drinking Water Act and it requires that every state: Inventory land uses within the recharge areas of all public water supply sources, assess the susceptibility of drinking water sources to be contaminated from these uses, and publicize the results to provide support for improved protection.

Some of the land uses that exist within our recharge areas include: Auto Body & Repair Shops, Salvage Yards, Photo Processors, an Old Landfill, Railroad Tracks, Hazardous Material Storage, Industries and Industrial Parks, Large Quantity Hazardous Waste Generators, and Underground Storage Tanks. There are others but these are considered the highest threat.

A hard copy of our SWAP report is available upon request from the DPW (508-966-5813) or online at http://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf. The report notes that all of our sources have a <a href="http://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf">http://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf</a>. The report notes that all of our sources have a <a href="http://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf">http://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf</a>. The report notes that all of our sources have a <a href="https://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf">https://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf</a>. The report notes that all of our sources have a <a href="https://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf">https://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf</a>. The report notes that all of our sources have a <a href="https://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf">https://www.bellinghamma.org/Pages/BellinghamMA\_DPW/swap.pdf</a>.

and some of the information is not current; however, it still contains a wealth of information about our source waters and potential risks to its quality.

It is impossible to eliminate all threats from past and present land use, but we have established protective land use restrictions that dramatically reduce our exposure to certain contaminants. We are well equipped to prevent future land uses that could further increase our susceptibility to aquifer contamination. Our key regulations include Board of Health Floor Drain Regulations, Water Resource Protection Bylaws, and the Water Resource District Zoning Map. The Bylaws and Maps are available online at the Town's Website <a href="www.bellinghamma.org">www.bellinghamma.org</a>.

Our Zone II drinking water well recharge areas extend into Medway, Franklin, Milford, and Wrentham and are all protected by bylaws except in Milford. Annually, we send a letter to the Town of Milford asking them to add our Zone II to their water protection district and some progress has been made, but to date our Zone II areas within the borders of the Town of Milford do not have bylaw or zoning protection.

#### Is our drinking water system at risk from a terrorist attack and prepared for a crisis?

The actual risk of a terrorist attacking a water supply system, like ours, is minimal; however, the nationwide fear such an attack would create is great. This fact makes all water systems potential targets, as creating fear is the terrorist's goal.

Our system has many sources (wells) and auxiliary power capabilities. These redundancies make it hard to knock us out completely. We have studied our system's vulnerable points and routinely discuss water system security at the Bellingham Emergency Planning Committee (BEPC) meetings. In 2013, the BEPC held a table top exercise to analysis our preparedness. We plan to hold an annual table top exercise.

We also subscribed to an emergency phone call system. The "CODE RED" system can call every Bellingham phone number and deliver a specialized warning to all of our customers within five minutes. If a health hazard ever occurs, the DPW will utilize this system and every other practicable means to notify and protect our customers.

We have used the CODE RED system to warn of relatively minor water main breaks and shut downs, as well as for routine activities like calling in our long list of snow plow vendors. This MassDEP required notice was a warning but no action was needed. We hope we never have to use this system to issue a boil water order or do not drink order, but it is very comforting to know that we have the tool to help us protect the health of our customers in case of a major crisis.

I urge all customers, residents, and people who work in Bellingham to enter their cell phone numbers into the CODE RED system. CODE RED automatically picks up listed phone numbers but will not call a cell phone unless the information is added manually. To Subscribe - If you have internet access you can add your number on line at www.bellinghamma.org, click on the link to CODE RED and fill in your information. If you do not have internet access, call the Bellingham DPW (508-966-5813) Monday Through Friday, (7am-3pm) and we will enter your information into the database.

#### Should I be concerned about the Bacteria in my tap water?

Each month we collect at least 40 tap water samples along with a raw and treated water sample at each active well. Bacterial testing requirements for public drinking water are very strict. Drinking water samples must have a count of zero Total Coliform Bacteria colonies. Total Coliform Bacteria is a very common bacteria; it is not harmful and used as an indicator. When Total Coliform Bacteria is detected we do additional sampling and testing. In 2013, Total Coliform Bacteria was present in 11 of 523 system samples that we collected.

All Total Coliform Bacteria samples that show a presence are automatically tested for E. Coli or Fecal Bacteria. Confirmation sampling indicated that we did not detect these potentially harmful bacteria in any customer tap samples in 2013.

If ever we determine that there is an acute health risk, we will use every means possible to immediately contact our customers. With today's technology we are well prepared to inform our customers of any problems. Our CODE RED call system is the primary resource. It routinely produces a contact rate over 85%. We would also flood electronic media (radio and TV) with the information needed to protect our customer's health.

# There are a few ways that Drinking Water can become contaminated in the pipe system after being pumped from a clean source.

# 1. Stagnation & Discoloration

Water can deteriorate in the pipes before it gets to the tap. To avoid this, we routinely perform hydrant flushing, which cleans out any water that may be stagnating in the piping system and also removes iron and manganese particles that coat the walls of water pipes. Iron and Manganese can cause severe water discoloration. Dirty water complaints are the most common water complaint we receive; it's caused by the iron and manganese in our source water. Even with flushing, some areas of town experience chronic discoloration. Disinfection amplifies the discoloration as the chlorine reacts with iron and manganese in the water system. The water filtration project will significantly reduce or eliminate our iron and manganese problem.

# 2. Cross Connections - Backflow

The drinking water supply system can be contaminated if water from a customer's building flows back into the water supply system. This can occur if the water main pressure drops, or if the interior plumbing from a building is not properly installed. Backflow occurs through a plumbing connection that is called a Cross Connection. A cross connection is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home. For instance, you're going to spray fertilizer on your lawn. You hook up your hose to the sprayer that contains the fertilizer. If the water pressure drops (say because of fire hydrant use in the town) when the hose is connected to the fertilizer, the fertilizer may be sucked back into the drinking water pipes through the hose. Using an attachment on your hose called a backflow-prevention device can prevent this problem.

#### Some things you should do to prevent backflow at your home:

- The Bellingham DPW recommends the installation of backflow prevention devices, such as a low cost hose bib vacuum breaker, for all inside and outside hose connections. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your town.
- For additional information on cross connections and our cross connection program, please contact Tom Ostrowski, Assistant DPW Director and Cross Connection Control Program Coordinator.

To avoid backflow at non-residential customers' properties, the DPW administers the Cross-Connection Control Program. Under this program, commercial properties are routinely surveyed to be sure that special protective check valves are installed and maintained. The Cross-Connection Control Program and the Plumbing Code help to insure that the risk from this form of system contamination is minimized or eliminated.

The potential for backflow through a cross connection seems remote, but the consequences are severe. Cross connection backflow has the greatest potential for having your water contaminated to a degree that it can cause immediate illness or death. Imagine taking a drink of water that is laced with pesticides, lawn chemicals, or pool chemicals.

#### 3. Corrosion (Lead and Copper)

Tap water can have high levels of Lead and Copper due to corrosion of internal plumbing pipes and fixtures. The regulations, known as the Lead and Copper Rule (LCR), require that we test samples from residential customer's water taps. This testing is performed to confirm our ability to control internal pipe and plumbing corrosion. The LCR is different from other USEPA regulations in that it uses an Action Level for the contaminant as opposed to a Maximum Contamination Limit. (See the Lead and Copper Summary Notes below for the definition of Action Level.) The way the LCR works is the Town must take residential first draw tap water samples from a specific list of homes that are the most likely to yield the highest Lead and Copper levels. The results are tabulated and the 90<sup>th</sup> percentile is compared with the Action Level. If the result is below the Action Level, no additional action is needed. If the result is above the Action Level, additional action is required to reduce the customers' exposure to these contaminants.

In the early 1990's, when the Lead and Copper Rule took effect, we were exceeding the Action Level. We constructed Corrosion Control Facilities to address the problem and now feed Caustic Soda (NaOH-Sodium Hydroxide) into the source water that lowers the water's acidity (raises the pH). This thereby reduces corrosion and our Lead and Copper levels.

# **Lead and Copper Sampling Summary – 2012**

Below is a list of the worst results for Lead & Copper from the samples collected during the 2012 sampling. We did not need to sample for Lead and Copper in 2013. Our next scheduled sampling for these contaminants is 2015.

Parameter	Dates Collected	90th Percentile*	Action level (AL)	MCLG	Number of Samples	Number of Samples Above AL	Exceed ed AL (Y/N)	Possible Source of Contamination
Lead	2012	4.0 ppb	15 ppb	Zero	33	None	N	Corrosion of household plumbing
Copper	2012	0.7 ppm	1.3 ppm	1.3	33	1	N	Corrosion of household plumbing

- **ppb** is the abbreviation for parts per billion. The AL for Lead is set in this unit of measure.
- **ppm** is the abbreviation for parts per million. Parts per million is the same as milligrams per liter (mg/L) which is the scientific unit of measure for most contaminants.
- AL is the abbreviation for Action Level, which is the concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a
  water system must follow.
- \*90th percentile = Out of every 10 homes sampled, 9 were at or below this level. Compliance is determined by comparing this number to the action level.

Modifications to the plumbing code have reduced the amount of lead allowed in any plumbing fixture; however, these changes are relatively new and older buildings have plumbing fixture that are very likely to continue to contain lead. Drinking water regulations and plumbing code modifications have made significant advances in the reduction of Americans exposure to lead in their drinking water.

# Some more important info about Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Bellingham DPW is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, you can minimize the potential lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. 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 exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

#### REGULATORY VIOLATIONS

### We had two new violations in 2013, and continue to move to resolve a 2011 violation.

- 1. In May, we exceeded the allowable 5% of our samples showing a presence of Total Coliform Bacteria. We had 6 of 58 samples that had a presence of Total Coliform Bacteria. That is a violation of the state drinking water regulations (310 CMR 22.05 (8)(a): Monthly Maximum Contaminant Level Violation). MassDEP issued a Notice of Noncompliance (NON-CE-13-5D036) and Return to Compliance (RTC- CE-13-5D036). We publicized the violation as directed by MassDEP. MassDEP approved a written notice informing all customers of the higher than 5% results. The notices were published as general ads in the Milford Daily News and Woonsocket Call on June 13<sup>th</sup> and were posted on the Town's website and noted on the Cable TV government scroll channel for several weeks.
- 2. In December, we failed to perform repeat sampling for Total Coliform Bacteria with the timeframe required by the Drinking Water Regulations; therefore, we violated monitoring and reporting requirements. (NON-CE-145D503).
  - Notice: Even though this was not an emergency, our customers have the right to know what happened and what we did to correct the situation. We are required to monitor your drinking water for specific man-made and naturally occurring contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the monitoring periods listed above we did not monitor and/or did not complete all monitoring for the contaminants listed and therefore cannot be sure of the quality of our drinking water during that time.
  - What This Means: There is nothing you need to do at this time.
  - Steps we took and are taking:
    - We immediately collected and analyzed samples. No Total Coliform Bacteria were found in the repeat samples.
    - This section of the annual water quality report is providing public notice to our customers of the violations in accordance with the requirements and recommendations for MassDEP. MassDEP and the local board of health receive a copy of this report.
    - We will continue to collect samples for all contaminants according to our most recent sampling schedule.

Please Share this information and this report with all people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). For More Information or questions regarding this notice, please contact Don DiMartino, DPW Director 508-966-5813

2011 GWR Violation: On July 13, 2011, we received lab results indicating an E-Coli bacteria detection at the Well #12 raw water sample collected on the July 11, 2011. That is a violation of the State Drinking Water Regulations GWR (310 CMR 22.26). This violation is being resolved by our actions to construct new town wide water filtration with permanent disinfection.

# More information on contaminants in drinking water and why they may be in the water.

<u>Microbial Contaminants</u>, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

<u>Pesticides and Herbicides</u> may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

<u>Inorganic Contaminants</u>, 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.

<u>Organic Chemical Contaminants</u>, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

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

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 special advice from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the US EPA's Safe Drinking Water Hotline (800-426-4791)

If you want to know more about the Bellingham water supply system, have any other questions about the report, or would be interested in volunteering to help us with our water education programs, please call Donald DiMartino, Director of the Bellingham Department of Public Works, at 508-966-5813. The DPW office is located at 26 Blackstone Street beside the Fire Station.