

Opening Statement

Dear Whitinsville Water Company & Northbridge Water Division Customers;

We at the Whitinsville Water Company (WWC) and the Northbridge Water Division (NWD) are pleased to submit our annual "Consumer Confidence Report". The information contained in the report can be beneficial and I hope you will find the time to become familiar with the items in the "helpful advice" section.



Treatment Facility Progress

The Whitinsville Water Company (WWC) is in the process of constructing a water treatment facility in Sutton in order to provide the best water quality to our customers, satisfy new government regulations and the needs of the growing community.

The treatment facility will filter the water from the Sutton well field where the great majority of the water supply originates. Although the water quality from this well field has historically been excellent, government regulations have determined that the water must be filtered for compliance.

In basic terms, the new treatment facility will consist of raw water coagulation followed by pressure filtration. It will be a state of the art facility which will have microprocessor controls throughout the facility which will allow the operator to monitor and control the facility in the central control room. To date, we are approximately 70% complete with construction of the new treatment facility and anticipate it to be in service July 2009.

Although the water company owns much of the land around its water supplies and protects this land vigilantly, the new treatment facility will be capable of removing microscopic particles in the water which will provide an additional layer of protection for your drinking water supply. The cost of this level of treatment will need to be made up in an increase in water rates. You currently pay less than one hundredth of one penny per gallon. Even with a rate increase to cover the cost of a new facility the rates will still be below one hundredth of a penny per gallon.

Water Quality

Enclosed you will find a summary table of all the water quality testing that is done on a routine basis. Every year we collect over 300 water samples and analyze them for numerous different parameters. All of the sample results last year met all USEPA and Massachusetts drinking water health standards. Many people do not realize that their tap water is tested as stringently (and sometimes more so) than the bottled water you buy off the shelf at the grocery store.

If you have any questions with this report or if you ever have any questions with regards to your water service, please contact the Whitinsville Water Company offices at (508)-234- 7358, open Monday thru Friday, 8:00am- 4:30pm.

Randy Swigor
General Manager

WWC Personnel

The WWC is fortunate to have a group of highly skilled and experienced individuals performing all aspects of our operations. Every individual of the field staff is licensed by the State of Massachusetts as a certified water and/or distribution operator. The certification is obtained after extensive written examination and a prescribed amount of experience involved in operations. In addition, there are many employees who are licensed to operate construction equipment such as large trucks and backhoes.

The fact that the WWC owns an extensive line of construction and repair equipment, we are able to respond to emergencies in an expedited manner not found in most water systems.

A WWC employee is "on call" 24 hours per day, 365 days per year to respond to emergencies that may develop. If you ever have an emergency on the weekends or after normal working hours, call the Northbridge Fire Department directly at (508) 234-8448 and they will contact a WWC employee.



THE FOLLOWING INFORMATION IS A REQUIREMENT OF THIS REPORT:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

Water may become contaminated through natural activities or due to the action of society. The following are the type of contaminants for which the water quality is constantly monitored:

MICROBIAL CONTAMINANTS, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

INORGANIC CONTAMINANTS, such as salts and metals 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 may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

ORGANIC CHEMICAL CONTAMINANTS include synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

RADIOACTIVE CONTAMINANTS can be naturally occurring or be the result of oil and gas production, and mining activities.

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The water test results table shows only those contaminants that were detected in the water. In addition, the WWC maintains a listing for all substances we sampled for in 2008 with the results. Please contact us if you should have any questions.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health

care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

EPA Statement

Under the Safe Drinking Water Act (SDWA), EPA is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Similarly, FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. The Whitinsville Water Company continually monitors for these substances and reports directly to the Massachusetts Department of Environmental Protection (DEP). The DEP and EPA use the data to ensure that consumers are receiving clean water and verify that states are enforcing the laws that regulate drinking water. This publication conforms to the new federal regulation under SDWA requiring water utilities to provide detailed water quality information to each of their customers annually. We are committed to providing you with this information about your water supply, because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

A Source Water Assessment Program (SWAP) Report

A Source Water Assessment Program (SWAP) Report was completed on our water system by the Mass DEP. The overall results were deemed to be moderate due to the agricultural activities in the area, specifically, the use of fertilizers and pesticides by the farmers. This only means that there is a potential to contaminate our water source with these materials being used in the area, but, it is not probable. Our neighborhood farmers are encouraged to comply with the US Natural Resources Conservation Service farm plan to protect water supplies.

Please know that the WWC has protection planning in place and was commended by this report for taking an active role in promoting source protection measures.

A copy of this Report is available on the Massachusetts Department of Environmental Protection website:

<http://www.mass.gov/dep/water/drinking/ceroreps.htm>

as well as the Board of Health, and our office.

Long Term 2 Enhanced Surface Water Treatment Rule

The Long Term 2 Enhanced Surface Water Treatment Rule applies to systems that use surface water sources or groundwater sources that are under the influence of surface water. In compliance, the WWC tests bi-monthly for the bacteria E.coli and turbidity as part of our regular monitoring schedule

Important Drinking Water Definitions	
Term	Definition
MCLG	MCLG: Maximum Contaminant 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.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG</u> or <u>MRDLG</u>	<u>MCL,</u> <u>TT, or</u> <u>MRDL</u>	<u>Highest</u> <u>Level</u> <u>Detected</u>	<u>Range</u> <u>Low</u> <u>High</u>	<u>Sample</u> <u>Date</u>	<u>Violation</u>	<u>Typical Source</u>
Disinfectants & Disinfection By-Products							
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)							
Haloacetic Acids (HAA5) (ppb)	NA	60	3.5	0 3.5	2008	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	8.7	5.8 8.7	2008	No	By-product of drinking water disinfection
Inorganic Contaminants							
Barium (ppm)	2	2	0.015	0 0.015	2007	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.3	0 0.3	2008	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	0.83	0 0.83	2008	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)	Guideline	20	22	6 22	2008	No	Erosion of natural deposits; Leaching
Microbiological Contaminants							
Total Coliform (positive samples/month)	0	>1	0	0 0	2008	No	Naturally present in the environment

NOTE: Coliform Bacteria in and of itself is generally not harmful, but used as an indicator for other potentially pathogenic organisms. A total of 252 routine samples were collected & analyzed for Total Coliform bacteria in 2008.

<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your</u> <u>Water</u>	<u>Sample</u> <u>Date</u>	<u># Samples</u> <u>Exceeding AL</u>	<u>Exceeds</u> <u>AL</u>	<u>Typical Source</u>
Inorganic Contaminants							
Copper - action level at consumer taps (ppm) Whitinsville Water Co. Northbridge Water Dept.	1.3	1.3	0.26 0.23	2006	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb) Whitinsville Water Co. Northbridge Water Dept.	0	15	3.1 2.0	2006	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Unit Descriptions

<u>Term</u>	<u>Definition</u>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

LEAD & COPPER TESTING

Lead and copper can be found in water supplies when water comes in contact with piping materials which contain copper and/or lead.

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 Whitinsville Water Company is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for 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 method, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Water tests to determine the levels of lead and copper in the water supply have been conducted on a routine basis. The last round of testing was conducted in August of 2006. The test results indicated that the treatment techniques being used to reduce the naturally corrosive nature of the water are being implemented successfully. Of the 60 samples collected from various homes throughout Northbridge, the highest level measured was 0.004 mg/l. The action level for lead is .015 mg/l. The 90th percentile for copper was .26 mg/l. The action level for copper is 1.3 mg/l.

As always, we thank you for your cooperation in collecting samples. Our next round of testing will be conducted Fall 2009.



WATER SOURCES AND TREATMENT

The water which serves the 14,000 people connected to the WWC and the NWD is obtained from two well fields owned by the WWC. The primary well field is located in Sutton off of Mendon Road and produces the majority of water due to its outstanding water quality characteristics. The 1,100 acres of reservoir and wooded land around the well field is owned and managed by the WWC which protects the water from potential contaminants.

The secondary well field is located on Carr Street on the shore of Meadow Pond. Meadow Pond and a portion of the land near the well field is owned and controlled by the WWC which helps WWC to limit the potential sources of contamination that may affect the quality of the water. Fortunately, no gas stations or other common sources of contamination are located near any source of supply.

The water from each well field receives the same type of treatment which includes the following:

1. The pH is raised to a level of 7.1 - 7.5. By raising the pH, the water becomes less acidic and thereby will not corrode the plumbing in the customer's house or place of business.
2. Poly phosphate is added in small quantities which work in concert with the adjustment of the pH to reduce the aggressive nature of the water and reduces the corrosion of copper service lines and internal household plumbing.
3. The water receives a small quantity of chlorine to ensure that any potential bacterial contamination entering the water once it leaves the well field will be inactivated. Monthly bacteria tests taken directly from the wells dictate that is not necessary to chlorinate the water. Chlorine is added as a precautionary measure only.

CROSS CONNECTION CONTROLS

Being in the water business really means you are in the public health business. Nothing is as important to the health and well being of a community as the water supply. The greatest increase in the longevity of human life occurred in the early 1900's when chlorine began being added to water supplies.

One of the many activities water suppliers concern themselves with is preventing non potable materials from entering the water supply once the water is in the distribution system. Under certain conditions, it is possible for water to flow from inside a building back into the distribution system and contaminate the water supply. In an effort to prevent such an event from occurring, certain devices are installed as part of the plumbing system which only allows water to flow into a building. These devices are known as "back flow preventers." They are commonly referred to as "check valves."

The WWC installs check valves on all new houses immediately after the meter. Homes constructed prior to the early 1980's do not have check valves. Most commercial buildings, schools, fire sprinkler lines and offices have been surveyed and specific backflow devices have been installed where required. The more advanced back flow prevention devices are required to be tested by the WWC at least once per year to ensure proper operation.

Homeowners should be aware of the potential dangers associated with backflow occurrences for the safety of the occupants of the house as well as the neighbors. The following are actions which can be taken to reduce the possibility of contaminated water entering the water system:

- Install "hose bib" type backflow preventers on all outside faucets. They are inexpensive, easy to install and available at all plumbing stores.
- Do not leave a hose submerged in a pool or bucket of water.
- Never use mechanical equipment to add pressure to the water unless the proper back flow prevention devices are installed.
- All irrigation systems are required to have an Atmospheric Backflow Preventer.

If you have any questions on backflow prevention, please contact our office



*Consumer
Confidence
Report*

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HELPFUL ADVICE

WATER CONSERVATION AND OUTDOOR WATER USE

As the Town continues to grow, the need to use the limited water resources wisely is more important than ever. The activity which results in the most inefficient use of water is always associated with outdoor water use. In many instances, automatic irrigation systems are not used as efficiently as possible which results in wasted water and additional cost to the homeowner.

There are many devices on the market which will improve the efficiency of lawn watering and save money. The following are a few common ideas which promote outdoor water conservation:

1. Water lawns in the early morning or evening hours. Watering during mid day hours result in evaporation and the value of the water on the lawn is lost.
2. Keep the grass at least two inches high. The taller grass will provide shade for the root system and hold moisture in the ground.
3. Aerate lawns on a yearly basis which will allow water to soak into the ground more easily when it does rain or when a sprinkler system is working.

It is also strongly suggested that homeowners modify landscaping practices to reduce the area of lawn and install gardens and shrubs which require much less water to maintain.

Conserving water will also reduce your sewer bill if you are connected to the Northbridge Sewer System. Sewer charges are affected by the amount of water you use.

The following websites and their respective links are locations where a tremendous amount of information can be obtained on water conservation and landscaping ideas which will enhance the aesthetics of your property while reducing the use of water and hence your cost.

www.awwa.org American Water Works Association

www.newwa.org New England Water Works Association

www.waterwiser.org Water wiser is a water efficiency clearing house which can provide information on water saving techniques.

FIRE HYDRANTS

Please take a minute to clear snow away from any fire hydrants near your residents or business. The minute it takes could prove to be very beneficial to you and your neighbors in an emergency. The Northbridge Fire Department will be better able to serve the community if we each contribute the minor effort of clearing the snow from in front of the hydrants.

SERVICE LINE OWNERSHIP

There are often questions on who is responsible for the operation and maintenance of the service line which allows water to enter a building. I will provide the following information:

The water provider is always responsible for the water mains in the street and the portion of the service line that travels from the main to the “shut off” located at or near the property line. This includes the “shut off” valve which is accessed through a tubular device known as the “curb box”.

The portion of the service line that travels from the shut off valve into the building is owned and maintained by the property owner. The water provider owns the meter itself. The property owner is responsible for all other plumbing.

As such, the property owner is responsible to maintain the curb box in an accessible manner and is responsible to maintain and repair the service line from the shut off valve into the building.

IRON IN THE WATER

The Whitin well field on the northern shore of Meadow Pond is the source of the iron in the water which can cause discoloration under certain circumstances. During the summer months, when demand is higher, we must use the Whitin well field to meet the needs of the system. Although there are absolutely no adverse health effects due to iron in the water, the iron does result in aesthetic concerns. The following are some helpful suggestions you may wish to implement in order to reduce the aesthetic effects of the iron:

1. **FLUSH THE HOT WATER TANK** - The majority of concerns associated with the discolored water are associated with hot water. This is due to the fact that heat is an enzyme to any chemical reaction and the heat converts the liquid iron to the solid iron which we can then see. Every few months, flush the hot water tank by opening the spigot and running water to waste through a hose or into a bucket until the water clears. This will remove the accumulated iron from the bottom of the hot water tank which will help to keep the water clear while also improving the heating efficiency.
2. **USE IRON OUT OR EQUIVALENT** – Become familiar with the product called Iron Out which is used to clean iron stains or remove stains from clothes. Iron out is available at most hardware stores. There are also other products which are designed to reduce the effects of iron.
3. **INSTALL A CARTRIDGE TYPE FILTER** – There is a simple “cartridge type” filter that can be installed on the water line as it enters the house for a very reasonable cost. The maintenance of the simple filters is very easy and very inexpensive. The initial installation can be accomplished for approximately \$55.00 in parts and then some time to put the plumbing together. The cartridges remove some of the iron if it is already in the solid form.

There is no justification for a water softener type filter or a filter system which uses any chemicals in the process of treating the water. Please do not waste your money should anyone try to sell you such a filter.

LOCATION OF CELLAR VALVE

All residents should be knowledgeable of the location of the valve which shuts off the water just before the meter. In the event of a serious pipe break inside the house, you can go to the cellar valve and shut all the water in the house off with one valve. Quickly shutting off the water when a break occurs will prevent property damage in the house. Always keep a clear path to the meter and the cellar valve.

