

# Acton Water District

## Water Words Notice

SUMMER 2016

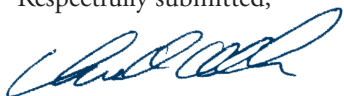
Public drinking water supply, while vitally essential, often goes unnoticed and unregarded; open the tap, water appears. Where does it come from? And, then disappears down the drain. Where does it go? The backbone of any successful community is sustainable infrastructure. Water is one aspect of that, in my opinion, the most vital. According to a recent "State of the Industry" survey by the American Water Works Association (AWWA), the five most important issues facing the water industry are: renewal/replacement of aging infrastructure, financing of capital improvements, public understanding of the value of water systems and services, long-term water supply availability and public understanding of the value of water resources. The citizens of any community play a critical role in the sustainability of the water supply and protection of its shared, natural resources. We've come a long way in the development of a sustainable water resource, but still have a long way to go.

Renewing and replacing infrastructure is, and will remain, a priority for us. This summer, we'll renew approximately 12,000-linear feet of water pipe in the Indian Village neighborhood; the third phase of improvements in that area of town. This improvement will introduce a new technology, Cure in Place Pipe (CIPP). The premise of this is relining of the existing water main pipe (host pipe) with a fully structural liner, allowing it to cure in place, thus removing the host pipe from service renewing the usable life to 50-plus years. The selection of this technology was based on it being minimally intrusive and less expensive than typical trenching. Based on the project success, we'll be employing this technology elsewhere in our 135-mile piping system.

Another step toward sustainability is compliance with current regulations and planning for emerging regulations. Last year, we'd commissioned our state-of-the-art membrane filtration plant in South Acton filtering 40 percent of our source of supply. On May 7th, we held a very successful public open house with static and dynamic displays, giveaways, tours of the facility, and a multitude of information on our water system and the environment. I'd like to acknowledge the efforts of our staff putting this together, and making it such a huge success. It truly took all hands on deck to pull it off. I'd also like to thank all the citizens that came out on a dark, cold, windy day to participate. The plant has been on line for a year, and the water quality is fantastic! It is filtering out the concentrations of iron and manganese, the primary culprits of discolored water in years past. Additional flushing of the area will take place this fall to remove more of the historical buildup of mineral sediment in the pipes.

I would like to thank the staff of the District. In these immensely challenging times, they continue to bring a high level of effort and professionalism each and every day. I would also like to thank the Board of Water Commissioners, Finance Committee, and all elected, appointed and volunteer officials for their wisdom, guidance and unswerving dedication.

Respectfully submitted,



Chris Allen, *District Manager*



The open house on May 7th was a success with over 150 attendees. Tours were conducted, door prizes were given away, including a rain barrel, and educational displays and information were available.

### Water Use Restrictions

Our seasonal water use restrictions are in effect from May 1 to October 1 of each year. These restrictions allow customers with even-numbered addresses to use water outdoors on Tuesday, Thursday, and Saturday. Odd-numbered addresses may use water outdoors on Wednesday, Friday, and Sunday. No lawn watering is allowed between the hours of 7am and 7pm, and no outdoor water use of any kind is allowed on Mondays. These restrictions apply to both new and established lawns. We encourage homeowners to plant new grass either early in the spring or in October. The outdoor water use restriction applies not only to automatic and manual irrigation, but also, to any outdoor water use. Examples include filling or topping off pools, car washing, power washing, and recreation.

## Update on Lead

The recent problems in Flint, MI have prompted interest from the public in all areas of water quality, this is largely fueled by media coverage in both national and local outlets of lead in various water systems. Earlier this year we updated our web page to contain information as it relates to Acton's water system and other resources for you to learn more about Lead and Copper. This can be accessed at <http://www.actonwater.com/water-quality/lead>.

Lead can get into the water supply either by the erosion of natural deposits, or by the corrosion of plumbing fixtures. Homes built before 1940 are more likely to have lead pipes, although over time these pipes will form a coating that may prevent further corrosion. Plumbing fixtures may also contain some lead, although recent regulations have reduced the content of lead in brass fixtures. The solder used to hold pipes together may also contain lead. If the water is corrosive, the pipes or solder can release lead into the water. Generally, drinking water accounts for about 20% of an adult's intake of lead. Lead paint continues to have the greatest exposure potential in the population.

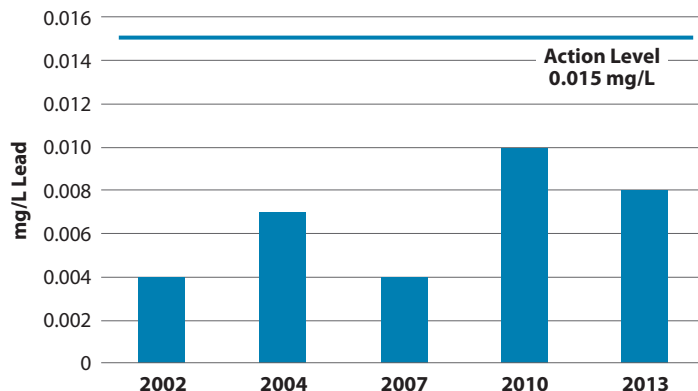
The regulation of lead in drinking water is very stringent. In 1986, the EPA under an amendment to the Safe Drinking Water Act, banned the use of lead plumbing in public water supplies. Up until 2014, solder was considered lead-free if it contained less than 0.2% lead, and pipes if they contained less than 8% lead. The Lead Reduction Act, which took effect on January 4, 2014, changed the definition of "lead-free" from 8.0 percent to 0.25 percent. This act requires new pipes, pipe fittings, plumbing fittings, and fixtures to be "lead free" under this new definition. This amount of lead should not be a problem as long as the corrosivity of the water remains low.

Selected taps throughout town are monitored every three years for lead. If the amount of lead exceeds the EPA Action Level of 0.015 mg/L at more than 10% of the taps tested, then the Water District will increase its monitoring of the lead levels in our water and take further steps to reduce the amount of lead in the water. The latest sampling results can be found at [www.actonwater.com/ccr](http://www.actonwater.com/ccr).

To reduce the hydrogen ion concentration of the water, and thus its corrosivity, the Acton Water District adds potassium hydroxide to the water as needed. Additionally, the aeration of our water, primarily for VOC removal, is often times adequate at adjusting the corrosivity of the water. Generally, the concentration of lead in all samples collected by the Water District is well below the Action Level. Detections of lead above the Action Level are reported to homeowners immediately.

There are some simple steps that you can take to reduce the amount of lead in your drinking water. If the faucet has not been used for six or more hours, flush the pipes before drinking from them. Run the water faucet for about two

FIGURE 1: Lead Levels



**Lead level compliance since 2002 demonstrates effective corrosion control practices at our treatment plants.**

minutes, or until the temperature stabilizes, before drinking the water. Also, use only cold water for drinking, cooking, and preparing baby formula because hot water dissolves lead faster than does cold water. Check to make sure that pots and pans are lead free. Imported cookware may contain lead; if you are unsure, do not use it to heat water for consumption, especially for children. Boiling your water does not reduce the lead content, it will actually increase it.

More information can be found at:

- <http://www.cdc.gov/nceh/lead/tips/water.htm>
- <http://www.mass.gov/eeal/agencies/massdep/water/drinking/is-there-lead-in-my-tap-water.html>

## Clearing the Air on Superfund Issues

Locally, you may have heard about or seen media coverage involving Acton's water being threatened by a contamination plume. The stories would leave the reader believing that this was new information and that the Acton Water District was not aware or responsive to this threat. The contaminant of concern that the District is actively engaged on is 1,4-dioxane. This is an emerging contaminant that was identified in 2006 at the WR Grace Superfund site. Since that time we have been testing our wells and treated water for this chemical and in 2013 began to search for other sources of this contaminant. During that same time, we received a call from a hydrogeologist working on the Nuclear Metals Incorporated (NMI) Superfund Site, in Concord looking for any data we had on 1,4-dioxane from our Assabet Wells. At that time we were in the design phase of the new South Acton Water Treatment Plant (SAWTP). It was decided that the plant should be sited and designed to treat all of our South Acton wells at one location. If the need arose to treat for 1,4-dioxane and a viable technology was identified, it would expedite the implementation

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## WaterSmart: The Next Generation of Public Outreach

**W**e appreciate the relationship that we have with our customers and how we are able to communicate information and educate customers on important water resource issues. As another tool in our outreach toolbox, we proudly introduce WaterSmart software, a third party that we have contracted with for the next three years. All of the information associated with this program remains the property of the District, this should alleviate any worries of your information being sold or shared with other organizations. A small number of residential customers are part of a control group to measure the success of the program, those customers will not receive these communications for the first year.

The remaining customers will have received a welcome letter by mid-June asking them to sign up for the program and take a brief survey. The critical aspect of the program's success is you, the customer. This will give you access to a customized portal to monitor your water usage, and communicate with the District. You'll receive quarterly Home Water Reports to see how you are doing, and get important information about our incentives, happenings, and operations. If a potential leak is detected, you will be notified in a timely manner to prevent excess water waste. Please take the time to sign up and participate in the survey, and let us know how we are doing. We hope you find this tool as beneficial as we do! For more information, please visit [www.actonwater.com/watersmart](http://www.actonwater.com/watersmart) or email us at [watersmart@actonwater.com](mailto:watersmart@actonwater.com).

## WaterFlow: An Intern's Perspective



**Mandella Franciscono is entering water quality into a database for long term trend analysis**

**D**uring three weeks of May, Mandella Franciscono was lucky to be placed in the Acton Water District. As a graduating senior at Acton-Boxborough Regional High School, he was able to participate in the Senior Internship Program, providing a real world experience in which to explore the application of the physical and environmental sciences. As a future Physics major, this kind of research based experience is exactly the kind of outcome

one would hope for from the internship program. Without any previous experience working with water, his main duties included periodic site sampling, data entry, and other office work. It quickly became clear that a complex water distribution system like ours requires constant monitoring and adjusting. For three short weeks, Mandella got to be one of the foot soldiers keeping things running smoothly.

The various pipes, tanks, pumps, and sensors that make up our system cannot tell us everything, so going to the sites and taking regular samples is necessary to understand and verify our water quality status. Between taking routine measurements and troubleshooting various issues or contributing to longer term projects, it provides a large amount of information to collect, understand, and archive. An important piece of that is taking the data collected out in the field and putting it into analyzable spreadsheets. Of the large number and variety of measurements the staff takes, many can only be accurately understood in a well-organized database so that their properties can be examined over time and in context with the other readings.

Although it can be tedious taking notebooks, lab reports, and other sources of information, it is critical to have someone check for the completeness of the data. That way, seasonal trends can be identified, the right adjustments can be made in the future, and long term water quality can be monitored. Mandela took on these tasks and was able to see the benefits this kind of analysis does for the water supply, his efforts were much appreciated and we wish him the best as he begins college in the fall.

## Cross Connections and You

**A** cross connection is any actual or potential connection between potable water supplied by us and any waste pipe, soil pipe, sewer, drain or other unapproved source. If not properly protected or eliminated, a cross connection can cause health problems and spread disease.

There are two methods by which contamination can enter the drinking water, backpressure and backsiphonage. Backpressure occurs when the pressure in the property exceeds the drinking water pressure. This can be caused by air conditioning units, boiler systems, and other pressure-building devices connected to the drinking water system. Backsiphonage occurs when the drinking water pressure drops off and the resulting vacuum sucks the water from the building. This is often caused by use of a fire hydrant, building fires suppression system, water main breaks, and other heavy water demands.

Most cross connections are prevented by installing backflow devices. A hose bibb vacuum breaker, sold at any hardware store, prevents the typical garden hose cross connection. Backflow devices come in all different types to protect even the most dangerous liquids from being able to contaminate the drinking water. To our knowledge, there has never been a cross connection incident in Acton, but there have been several in the state of Massachusetts and even more nationally.

Everyone should be aware of, and do their part to prevent drinking water from becoming contaminated by cross connections. By surveying all industrial, commercial, and institutional facilities for cross connections, the District helps ensure that the water supplied to each tap in a building is protected. All residential homes with irrigation systems are required to have backflow protection. Learn more about cross connections by contacting Bob Murch, AWD Cross Connection Coordinator, at 978-263-9107.

## Clearing the Air on Superfund Issues

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**For more information, additional copies, or comments on this report, contact:**

Acton Water District  
Attention:  
Matthew Mostoller  
PO Box 953  
693 Mass. Ave.  
Acton, MA 01720

Phone:  
978-263-9107

Fax:  
978-264-0148

E-mail:  
[mmostoller@actonwater.com](mailto:mmostoller@actonwater.com)

of that treatment. This also enables us to blend the raw water sources and help maintain water quality within the guidelines being provided by the Massachusetts Department of Environmental Protection (MassDEP).

Having two known sources of 1,4-dioxane has been helpful in that we know where to look for the magnitude of threats to our wells. Unfortunately, both of these source areas are being remediated through the Superfund program, a very comprehensive program, but not a very nimble one. Because 1,4-dioxane has not been regulated in drinking water, it is not given the clear cleanup directives that other more well understood contaminants would have. One key issue with 1,4-dioxane is its widespread use in products, including many personal care products. In the case of the Superfund sites, it was a stabilizer used in the chlorinated solvents historically used in the manufacturing processes at these facilities. Sampling conducted at our other sources of supply did

not indicate 1,4-dioxane contamination at our wells in the North, Center, and West Acton aquifers.

We invite you to visit our website [www.actonwater.com/water-quality/14-dioxane](http://www.actonwater.com/water-quality/14-dioxane) to learn more about 1,4-dioxane and stay updated on the concentrations in our system. It is our primary goal to represent the concerns of our customers to the regulatory agencies involved in monitoring, regulating, and communicating on the issues of 1,4-dioxane. Be assured that the District is being a vocal advocate for cleaning up the 1,4-dioxane at both sites, while simultaneously researching our options to treat and manage our sources for the long-term. This includes evaluating available and emerging treatment technologies, identifying short term alternative water supplies, and accommodating an interim groundwater pump and treat system on District property at 16 Knox Trail. If the water quality is unfit for consumption, that information will be communicated promptly to our customers in cooperation with MassDEP.

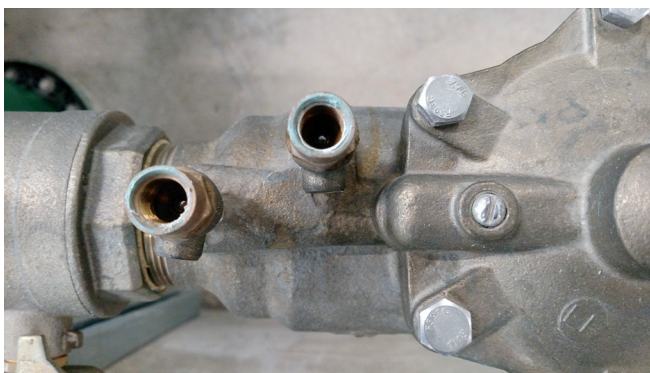


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for all customers of the  
Acton Water District

**District Manager**  
Chris Allen  
**Editor**  
Matthew Mostoller

**Commissioners**  
Leonard Phillips  
Stephen Stuntz  
Ronald Parenti

**Design & Production**  
David Gerratt  
[NonProfitDesign.com](http://NonProfitDesign.com)



### What is it?

Please email your answers to [webgeek@ActonWater.com](mailto:webgeek@ActonWater.com). Winners (and the correct answer) will be posted in the next *Water Words Notice*. Customers with a correct answer, as determined by AWD staff, will receive a prize— in addition to the fame of having your name published in this space!

### What was it?

Our last photo was correctly identified by over 100 customers! Thank you for everyone who reads our newsletter and took the time to respond. For those of you still wondering, the photo was taken during the aquifer investigation related to the NMI Superfund site. A bedrock core was collected to characterize the subsurface material and to collect water quality samples throughout the depth of the aquifer.





# Report on Water Quality

SUMMER 2016 PWS 2002000

## Acton Water District

### Testing for Your Drinking Water

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) prescribes regulations that limit the amounts of certain contaminants in water provided by public water systems. In 2015, as in years past, water supplied by the Acton Water District (AWD) met EPA, state, and our own local drinking water health standards for chemicals regulated under the Safe Drinking Water Act (SDWA). This report is a snapshot of water quality in 2015. Included are details about where your water comes from, what it contains, how it is treated and distributed, and how it compares to standards set by the EPA.

The AWD works diligently to safeguard your water supplies by employing multiple barriers for protection, including source water protection, distribution system protection, ongoing monitoring, and treatment. Last year, we collected more than 650 samples and tested them for more than 100 different potential drinking water contaminants.

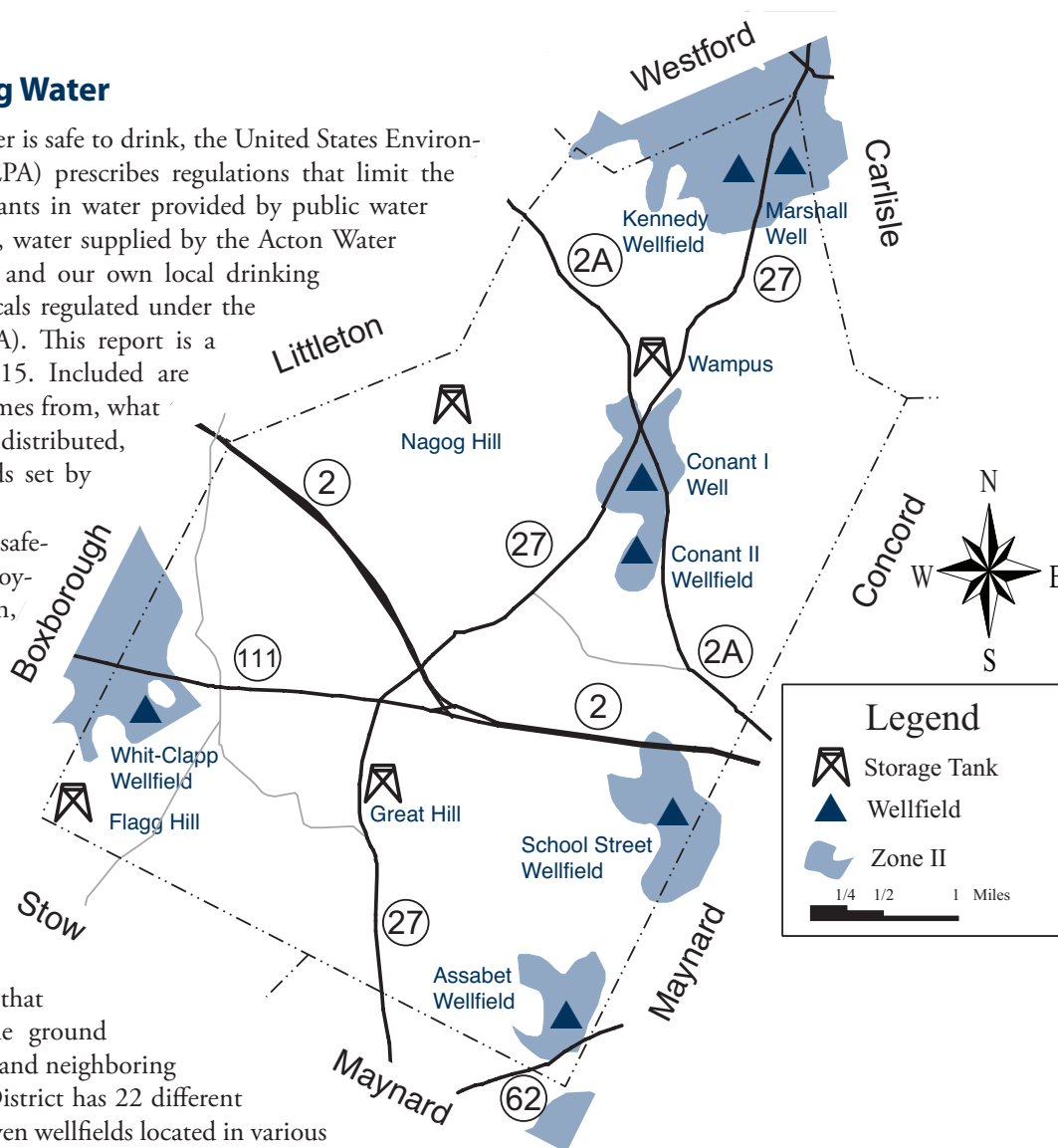
### The Source of Your Drinking Water

Your water comes from wells that tap the water held in the ground beneath the town of Acton and neighboring communities. The Acton Water District has 22 different wells that withdraw water from seven wellfields located in various parts of town. Water from each well is pumped to treatment facilities located in each of the various wellfields, and then into the distribution system (a network of approximately 130 miles of water mains, four storage tanks, and more than 1,100 fire hydrants), where it blends together and is delivered to homes, businesses, schools, and other public users. The map on this page shows the various storage tanks, wellfields, and the critical protective radius (called Zone II) around each wellfield.

### Protection for Your Drinking Water

The Acton Water District employs three important “barriers” to maintain the highest possible quality of drinking water:

- A protective area called Zone II surrounds each of Acton’s wells. Land use activities that could adversely affect water quality are restricted within the Zone II area.
- Each of Acton’s wells is treated in order to remove impurities and improve the taste of the water. Water treatment specifics are listed below.
- The system of pipes that delivers water to your home is protected by a program that works to minimize “cross connections” between potable (intended for human consumption) and non-potable water. An example of a cross connection is a point where a drinking water pipe might connect to a fire suppression system or to an outside irrigation system.



# Water Quality Data Table

The data presented in the table below are from calendar year 2015 unless otherwise noted. Only compounds that were detected in the water delivered to customers are reported in this table. Because water from all wellfields is blended within the distribution system, these data represent the range of water quality in all wellfields.

Substance (units)	Range of Detects	Level Allowed (MCL)	Goal (MCLG)	Typical Source	Exceeds MCL?
Regulated Substances (MCL has been established)					
Alpha Emitters (pCi/l)	3-5	15	0	Erosion of natural deposits	No
Arsenic (ppb)	0-7	10	No MCLG	Erosion of natural deposits	No
Barium (ppm)	0.017-0.09	2	2	Erosion of natural deposits	No
Chlorine (ppm)	0.01 -0.63 0.09:highest running annual average	4 (MRDL)	4 (MRDLG)	Water additive used to control microbes	No
Fluoride (ppm)	0-1.6	4	4	Water additive which promotes strong teeth	No
Haloacetic Acid (ppb)	0-9.4 LRAA 0-6.2	60	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant	No
Nitrate (ppm)	0.43-2.6	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	No
Combined Radium (pCi/l)	0.3-2.2	5	0	Erosion of natural deposits	No
Trihalomethanes (ppb)	2.8-93 LRAA 5.1-66	80	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant	No
Turbidity (Nephelometric Turbidity Unit)	0-0.36 Lowest Monthly % Samples: 99	Maximum Day 1 NTU (TT)	95% of samples <0.3 NTU Monthly (TT)	A measure of the cloudiness of water. It is a good indicator of the effectiveness of our treatment processes.	No
Unregulated Substances (MCL has not been established)					
Iron (ppm)	0-0.821	No MCL	No MCLG	Erosion of natural deposits	Unregulated contaminants have no established MCL
Manganese (ppb)	0-340	No MCL	No MCLG	Erosion of natural deposits	
Nickel (ppb)	1-10	No MCL	No MCLG	Erosion of natural deposits	
Sodium (ppm)	37-87.7	No MCL	No MCLG	Erosion of natural deposits, road salting	
1,4-dioxane (ppb)	0.218-0.371	No MCL	No MCLG	Chemical solvent, lab reagent, stabilizer, adhesive, may be found in cosmetics, detergents, and shampoo.	
Chloroform (ppb)	0-52	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant	
Chlorodibromomethane (ppb)	0.6-3.86	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant	
Bromodichloromethane (ppb)	0-16	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant	
Bromoform (ppb)	0-1.1	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant	
Lead and Copper (30 sites sampled during August/September, 2013. Next sampling during Summer, 2016)					
Substance (units)	90th percentile	# sites above Action Level	Action Level	Typical Source	Exceeds AL?
Lead (ppb)	0.01	1	15	Corrosion of household plumbing systems; Erosion of natural deposits	No
Copper (ppm)	1.1	3	1.3	Erosion of natural deposits; Leaching; Corrosion of household plumbing systems; from wood preservatives	No

For terms and abbreviations, see page 7.

## Why Are Impurities in Your Drinking Water?

As water travels through the ground it dissolves naturally occurring minerals. It can also pick up substances resulting from animal or human activity. Contaminants that may be present in source water include:

- **microbiological** contaminants (such as viruses and bacteria) that may come from septic systems, agriculture, and wildlife
- **inorganic** contaminants (such as salts and metals) that may be naturally occurring or result from stormwater runoff, wastewater discharge, mining, or farming
- **pesticides and herbicides**, which may come from a variety of sources, such as agriculture, stormwater runoff, and residential uses
- **organic chemical** contaminants, which are byproducts of industrial processes, and can also come from gas stations, urban stormwater runoff, and septic systems
- **radioactive** contaminants, which can occur naturally or be the result of oil and gas production or mining activities

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some impurities. The presence of an impurity does not necessarily indicate that the water poses a health risk. The Acton Water District has compiled information on drinking water and health in its drinking water resource center. Please feel free to visit or call us for information, or call the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

## Treatment for Your Water

To meet local, state, and federal requirements, and to improve taste and appearance, the Acton Water District treats all of its water before it is supplied to customers. The table below shows the treatment provided at each wellfield.

Treatment	Conant I Well	Conant II Wellfield	Marshall Wellfield	School Street Wellfield	Assabet Wellfield	Kennedy Wellfield	Clapp/Whitcomb Wellfield
Aeration <i>VOC removal</i>		•	•	•	•	•	•
Chlorination <i>disinfection</i>	•	•	•	•	•	•	•
Fluoridation <i>tooth decay prevention</i>	•	•	•	•	•	•	•
pH Adjustment <i>corrosion control</i>	•		•			•	
Carbon Filtration <i>taste/color control</i>							•
Membrane Filtration <i>mineral/color removal</i>			•	•	•	•	

### TERMS AND ABBREVIATIONS

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

**LRAA** (Locational Running Annual Average): The highest level of contaminant as determined by a running annual average of all the samples taken from a sampling point.

**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.

**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.

**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.

**MRDLG** (Maximum Residual Disinfectant 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.

**90th Percentile**: The concentration of a substance that falls at the top 90 percent of all values for that substance.

**pCi/L**: picoCuries per liter

**ppm**: part per million by volume

**ppb**: part per billion by volume

**TT** (Treatment Technique): A required process intended to reduce the level of contaminant in drinking water of all values for that substance.

## Do You Want to Become More Involved?

The Board of Water Commissioners meetings are typically scheduled on the second and fourth Mondays of each month at 7:30 pm; all citizens of Acton are welcome to attend. If you wish to attend, please call us to confirm the next meeting date. The Acton Water District Annual Meeting is held on the third Wednesday of March. All interested persons are welcome to attend.

## Discussion of Data Table Detections

**FLUORIDE:** The Acton Board of Health voted in 1970 to adjust the fluoride level in drinking water to prevent tooth decay/cavities. On June 8, 2015, the Acton BOH voted to adopt the Centers for Disease Control's recommended adjusted fluoride dose to 0.7 mg/L. AWD implemented that change at all of its treatment plants in 2015 however data presented for 2015 reflects samples collected under the previous recommended dose of 0.7 to 1.2 mg/L.

**SODIUM:** Although sodium does not have a Maximum Contaminant Level, the Commonwealth of Massachusetts does have a guideline of 20 parts per million (ppm) for sensitive individuals, such as those on very salt-restricted diets. The AWD notifies the Acton Board of Health of all sodium results, and results of the most recent sodium tests are posted at various locations in town. Sodium levels in drinking water vary considerably from well to well and month to month. For the most accurate data on sodium levels at your home, an individual tap sample would be necessary.

**LEAD AND COPPER:** 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 AWD 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 methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

**MANGANESE:** Manganese is a nutrient that is part of a healthful diet. Drinking water may naturally have manganese and, when concentrations are greater than 50 parts per billion (ppb), the water may be discolored and taste bad. Over a lifetime, EPA recommends that people drink water with manganese levels of less than 300 ppb; over the short term, EPA recommends that people limit their consumption of water with levels of more than 1,000 ppb, primarily due to concerns about possible neurological effects. Children up to one year of age should not be given water with manganese concentrations greater than 300 ppb, nor should formula for infants be made with that water for longer than 10 days.

**1,4-DIOXANE:** During 2015 the AWD collected samples for this compound in the raw and treated waters of the Assabet and School Street wells. This sampling was conducted due to the presence of this compound at the WR Grace and Nuclear Metals Incorporated Superfund sites near our South Acton wells. 1,4-dioxane is not a regulated contaminant, and the

Commonwealth of Massachusetts has not established an MCL or approved a laboratory process for analyzing this compound. The AWD is following the potential regulation of this contaminant and the effect it may have on our water system. MassDEP established a new guideline in June 2011 of 0.3 ppb for this compound. The running annual average for the samples collected by the AWD did not exceed this guideline in treated water delivered to our customers. EPA required assessment monitoring nationwide between 2013 and 2015 to determine if an MCL or other regulatory action is appropriate. That data is still being reviewed for further regulation at the Federal level. In the interim, AWD is undertaking steps to minimize the risk this contaminant may pose to our water system.

**VOLUNTARY MONITORING:** In addition to the monitoring required by the Safe Drinking Water Act, the AWD voluntarily conducts hundreds of additional tests each year to ensure high-quality water. For more information on our voluntary monitoring, please contact us.

**VULNERABILITY:** Some people may be particularly vulnerable to impurities in drinking water. 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, and some elderly people and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

## Source Water Assessment and Protection Report Available

The Source Water Assessment and Protection (SWAP) program requires states to assess the susceptibility of public water supplies to potential contamination. The Massachusetts Department of Environmental Protection (MassDEP) has completed its assessment on each of the Zone II areas for the Acton Water District's wells. A susceptibility ranking of "high" was assigned to each Zone II using the information compiled by MassDEP. Copies of the SWAP report are available at the Acton Water District office or on the website: [www.ActonWater.com](http://www.ActonWater.com).

The AWD has long recognized the susceptibility of its sources, and has worked closely with the town and state to maximize the protection of all of its Zone IIs. For more information, please call Matthew Mostoller, AWD Environmental Manager, at 978-263-9107.