

Acton Water District

Water Words Notice

SUMMER 2025

Welcome to another summer season, this year, marked more by the calendar and less by the weather we expect for May and June. As I write this greeting, we have had 13 consecutive Saturdays of rainfall (and counting), following a drought that began last summer and persisted through the spring. Changing weather patterns in the northeast are something we have been tracking for at least 10 years now. These changes impact the recharge of our aquifers, the winter deicing practices of roads, driveways, and walkways, as well as the demand for supplemental irrigation of lawns, landscaping, and gardens. Shifts in high and low demand periods for water, and the periods in between, can also impact our water quality as water age increases and rapid changes in demand cause sudden changes in the water level of our storage tanks. This creates added considerations of how we manage the public water supply to meet our core functions of providing public health, public safety, quality of life, and economic development.

You may remember from our Summer 2024 *Water Words Notice* that the District received our amended Water Management Act permit last year, requiring a baseline two-day per week seasonal limit on non-essential outdoor water uses. This is a more stringent request to reduce demand by our customers than our prior program, and we appreciate your cooperation with the new requirements to help us both maintain compliance and sustainably manage the water system. In addition to being a permit condition, it also helps us to meet the changing demands for water noted above and the increased maintenance activities associated with our treatment plant upgrades discussed below. We thank our customers for abiding by these important restrictions and discuss the outdoor water use program in greater detail on page 3.

Efforts to address Per- and Polyfluoroalkyl Substances (PFAS) in our water supply continue. In the past year we were in compliance with state standards, attributed mainly to our North Acton Water Treatment Plant (NAWTP) having been upgraded with Granular Activated Carbon (GAC) filters last year. This facility has been producing water with non-detectable levels of PFAS since June 2024 and we are completing the first media changeout over the past several weeks. Construction of the improvements at the South and Central Acton Water Treatment Plants began last summer and are expected to be completed and producing water with non-detectable levels of PFAS this Fall. This includes the construction and startup of the deep bedrock wells off Main Street which we hope to complete this summer. Finally, we submitted claims against PFAS manufacturers and



The PFAS filtration equipment was delivered to both South Acton (above) and Center Acton sites in April, we anticipate these systems being operational in the fall of 2025.

settlements with four companies are in the works. Our first settlement funds from 3M were received at the end of May and we are in the process of determining the best ways to put these funds to work. Our PFAS web page www.actonwater.com/pfas continues to be the most comprehensive place to learn about the status of these contaminants.

The staff and local officials that run the District are a dedicated group of individuals. I am fortunate to work with such a diverse and talented group and can assure you, our customer, that everyday is about providing the best and most reliable water service that we can. In all weather, 365 days a year, we work to minimize disruptions, provide safe and plentiful water, while meeting the ever-changing needs of our highly regulated business. This newsletter also serves as our *Consumer Confidence Report*, or *Annual Water Quality Report*, and summarizes what is in your water, how we treat it, and other regulatory information. Please visit our website, attend a meeting, see us in the community, or use your preferred method of communication to learn more and have your questions answered.

Respectfully submitted,

Matthew Mostoller
District Manager

Unregulated Contaminant Monitoring Rule (UCMR) Results

In accordance with provisions in the Safe Drinking Water Act (SDWA), public water suppliers are required to monitor for up to 30 unregulated contaminants on a five-year cycle. Unregulated contaminants are those that don't yet have a drinking water standard set by the United States Environmental Protection Agency (EPA). Monitoring for these contaminants helps EPA determine the contaminant's occurrence and whether future regulation is warranted to protect public health. During 2023 and early 2024, the District monitored for 30 contaminants at our treatment facilities as part of the UCMR 5 program. These contaminants included 29 Per- and Polyfluoroalkyl substances (PFAS) and lithium.

During this monitoring, eight of the 29 PFAS analytes were detected above the Minimum Reporting Level (MRL) at one or more of the District's treatment plants, while lithium was not detected in any of the samples. These results are comparable with those from routine monitoring conducted in accordance with Massachusetts' PFAS6 standard. Four of the detected analytes are currently regulated in the Commonwealth, while three do not presently have any proposed regulatory standards.

Results of the 2024 monitoring are presented in the Water Quality Data Table on page 8. All results from 2023–2024 monitoring are available on our website at <https://actonwater.com/water-quality/ucmr>. More information on the UCMR 5 program and the specific contaminants monitored for can be found at <https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule>.

What is it?

Please email your answer to 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, may receive a prize—in addition to the fame of having your name published in this space!



Welcome Aboard!



Corey Godfrey and Shawn Case joined the District this spring as our newest employees.

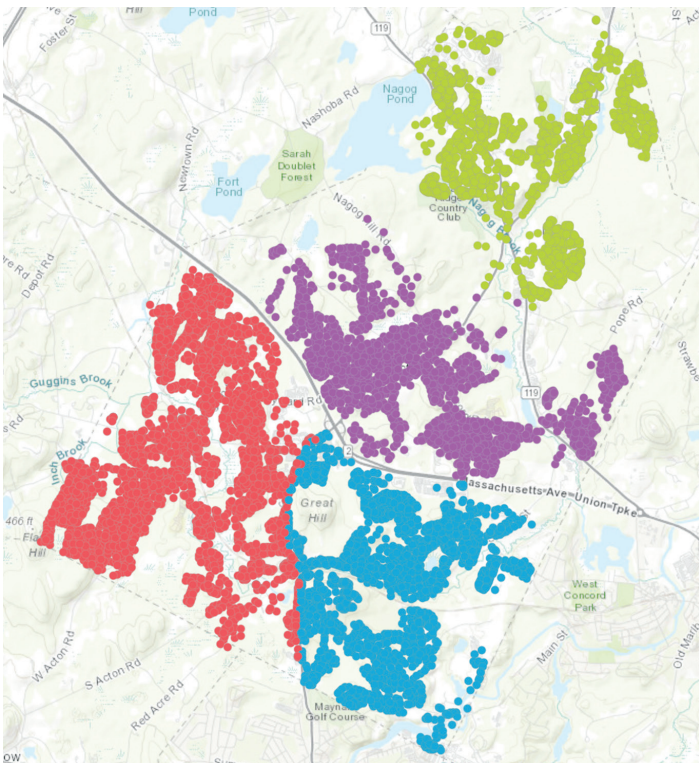
This spring, we welcomed a new Environmental Analyst, Shawn Case, and our first-ever Deputy District Manager, Corey Godfrey, to help manage the demands of our increasingly complex water system. Shawn comes to us with a bachelor's degree in Geology and experience in groundwater supply development, regulatory compliance, and source water protection. Prior to joining the District, Shawn worked for an environmental consulting firm and oversaw the installation and permitting of the new bedrock wells at the Center Acton Water Treatment Plant. He's looking forward to seeing those wells become operational this summer. Corey was previously the Water & Sewer Superintendent for the neighboring Town of Littleton and has over 20 years of experience in water resource management. In addition to 11 years of direct experience in public water system management, Corey has significant experience providing consulting services to the US Environmental Protection Agency (EPA) and has provided technical assistance to small communities addressing water resource issues throughout the US and internationally. Shawn and Corey are both eager to put their skills to work here in Acton and are valuable additions to our team. If you see Shawn or Corey in your neighborhood or at our office, please say hello!

Revised Outdoor Water Use Restriction Program

With the first official day of summer just around the corner, we'd like to remind our customers that our seasonal out-door water use restriction program was revised last year and now restricts non-essential outdoor water uses to a maximum of two days per week from may 1st through September 30th. The three day per week odd/even schedule that was previously the default for over two decades is now only permitted between October 1st and April 30th as a result of a condition in the District's final amended Water Management Act (WMA) permit issued by the Massachusetts Department of Environmental Protection (MassDEP).

During times of drought, or times of operational constraints such as those we are currently experiencing while our treatment plants are being upgraded with PFAS filtration, the number of days non-essential outdoor water use is permitted may be reduced. We have assigned numbered levels to our water use restrictions to quickly communicate the level of current restrictions and provide a resource on our website to understand the uses, days, and times associated with that level.

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Water Use Restriction Levels

Level	Irrigation Days	Irrigation Hours*	Other Uses/Notes
Level 1	3 Days —Even addresses: Tuesday, Thursday, Saturday. Odd addresses: Wednesday, Friday, Sunday	Before 7AM and After 7PM	All outdoor water uses limited to odd/even schedule.
Level 2	2 Day Lawn Watering by Quadrant — ● North: Tuesday & Saturday; ● Center/East: Wednesday & Saturday; ● West: Thursday & Sunday; ● South: Friday & Sunday	Before 7AM and After 7PM	Non-essential use days by quadrant. All other outdoor water uses limited to odd/even schedule. <i>Default May 1 through September 30.</i>
Level 3	1 Day Lawn Watering by Quadrant — ● North: Tuesday; ● Center/East: Wednesday; ● West: Thursday; ● South: Friday	Before 7AM and After 7PM	Non-Essential use day by quadrant. All other outdoor water uses limited to odd/even schedule. <i>In accordance with low stream flow triggers, state drought declarations, and/or operational constraints.</i>
Level 4	0 Days	None	No outdoor water uses except for production of food and fiber or public health and safety.
Level 5	0 Days	None	All water users must curtail indoor and outdoor water uses. <i>Water supply emergency.</i>

* Lawn and landscape watering by automated inground irrigation system or above ground sprinklers.

NOTES

- Lawn watering by hand with a handheld auto shut-off nozzle is permitted in Levels 1–3 following the odd/even schedule.
- Non-essential water uses include lawn & landscape irrigation, pool filling, car washing, and washing of exterior surfaces (walls, roofs, driveways, walkways, patios, decks, etc.)

Water Use Restriction FAQ's

Q: Are there any exceptions for watering new lawns?

A: No. The water use restriction applies equally to both new and established lawns. The District does not have a waiver program for new lawns.

Q: How do I determine my outdoor water use days?

A: To find your watering days, please visit our website at <https://www.actonwater.com/conservation/outdoor-water-restrictions>.

Q: Can I water my garden/plantings/lawn by hand?

A: Watering of gardens, ornamental plantings, and lawns using a handheld spring-loaded hose nozzle or watering can is not subject to mandatory restrictions. We recommend doing so before 7 AM and after 7 PM as a best management practice to reduce water lost to evaporation and evapotranspiration.

Q: I have a private well or other source for outdoor water use. Do these restrictions apply to me?

A: No, these outdoor water use restrictions do not apply to properties served by private wells or other alternative water sources like harvested rainwater. However, all property owners are encouraged to abide by these restrictions to conserve and protect our collective water resources.

Q: I've seen others not abiding by the outdoor water use restrictions. How can I report them?

A: You may report suspected water use restriction violations by calling our office at 978-263-9107, emailing corey@actonwater.com, or using our non-emergency online reporting form at <https://actonwater.com/customer-service/reporting-form>. District staff will further investigate violations.

Outdoor Water Use Restrictions

continued from page 3

Most often, the summer restrictions limit non-essential uses to **one or two days per week. Non-essential outdoor water uses are restricted to one or two days per week before 7AM and after 7PM** and include lawn and landscape watering via aboveground sprinklers and automated irrigation systems, pool filling, vehicle washing, and washing of exterior surfaces (i.e. power washing). Outdoor water use days have been assigned geographically by the quadrant of town you live in. To find your watering days using our interactive map or address search tool, please visit <https://www.actonwater.com/conservation/outdoor-water-restrictions>.

Please note that watering of lawns, gardens, and ornamental plantings using a handheld spring-loaded hose nozzle or watering can is not subject to mandatory restrictions, nor is watering with harvested rainwater, a private well, or other privately owned water source. Limiting these activities to before 7AM and after 7PM remains encouraged as a best practice. **No outdoor water use is permitted on Mondays.** Violations will be subject to a fine of up to \$200 per incident. Any changes to the status of our outdoor water use restrictions will be shared on our website, through our WaterSmart program, and via [Facebook](#) and [Twitter](#). Read on for answers to some of the most frequently asked questions about our outdoor water use restriction program.

How can we help you?

The Acton Water District has several programs designed to help our customers. These include rebates on water efficient toilets, shower heads, faucets, and washing machines. Our annual discounted rain barrel sale provides an opportunity to harvest rainfall and use that collected water for your garden and landscape watering needs. This not only reduces the amount of water you pay for, it also helps to manage stormwater, and plants generally like rainwater better than treated drinking water! Finally, we offer a Senior Citizens Water Bill Discount for those qualifying for the Town of Acton Senior Citizen Property Tax Exemption.

In addition to these financial assistance programs, we are rolling out an additional program to help you learn about the District. We are naming it "Field Trip Fridays" and envision opportunities to hear from the District Manager or his special hosts or guests, tour facilities, and meet to talk about specific segments of our work and organization. The first "trip" will be held at our offices located at 693 Massachusetts Avenue on July 18 at 9 AM to learn about the overall organization, who we are and what we do. Sign up is limited to the first 10 adults who email matt@actonwater.com with "Field Trip Friday" in the subject line, a wait list will be available and the number of participants may change depending on the topic and location.



Water Words Notice
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for all customers of the
Acton Water District

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Developing a Comprehensive Service Line Inventory

On December 22, 2020, the U.S. Environmental Protection Agency (EPA) finalized the first major update to the Lead and Copper Rule (LCR) in nearly 30 years. One key component of this update was the requirement for public water systems to develop an initial service line inventory by October 16, 2024. Establishing an inventory of service line materials and identifying the location of any lead components is a necessary foundation for removing lead and protecting public health.

A service line is the pipe that brings water from the water main in the street into a building, and generally consists of two parts; the “public” side, which runs from the main to the curb stop and the “private” side, which runs from the curb stop into the building. District staff began proactively developing our initial service line inventory in early 2022 by reviewing available records, consulting with current and former staff, and conducting field identifications during meter appointments. Shortly thereafter, the District began implementing strategies to determine unknown service line materials, including requesting customers to self-identify



the material used on the “private” side and conducting hydro vacuum excavations to enable physical inspections of the “public” side. Based on our review, copper and plastic are the most common service line materials.

Galvanized iron was used historically but represents a small percentage of the more than 6,500 service lines in our community. *There are no known lead service lines in our distribution system.*

While we submitted our initial inventory prior to the deadline in October 2024, data gaps remain. We were able to confirm that 3,799 of our service lines are “Non-Lead” while 2,855 were considered “Lead Status Unknown” at the time of inventory submission. This Spring, you may have seen our crews hard at work excavating portions of service lines throughout town to identify the material at some of these “Lead Status Unknown” locations. To help us fill in some of these gaps and make our inventory more robust, the District invites our customers to use the Mass Lead Service Line Identification (MA-LSLI) Web App. This web-based application was developed by the Massachusetts Department of Environmental Protection (MassDEP) for consumers to submit information on their service line material to their public water supplier. You can access the MA-LSLI Web App by scanning the QR code above or visiting the following link—<https://app.smartsheet.com/b/form/f9ee39b7972f-443ca63e8b936cd7f92b>. The app may be accessed on any mobile device, tablet or computer with internet access and does not require you to download anything. All you need to



do is take a photo of your service line, upload it to the app's website and answer a few basic questions. Be sure to select *Acton* as the City/Town and *Acton Water Supply District* as Your Water Supplier to ensure your submission is received.

If you are having difficulty identifying your service line material or navigating MassDEP's web app, you can schedule a service line identification appointment with a District staff member instead. To do so, please send an email to cory@actonwater.com with “Service Line ID Appointment” in the subject line and include your name and address in the body of the email.

We look forward to your interest and participation in this important water system inventory project!

How to Self-Identify Your Service Line



Galvanized: A dull, silver-gray color. Strong magnets will typically cling to galvanized pipes.



Copper: The color of a copper penny.



Plastic: Usually blue or black rigid pipe. Not magnetic.

1. Find your water meter, which is typically located in the basement.
2. Look for the pipe that comes through the outside wall of your home and connects to your water meter. (Note: You may need to wipe this pipe with a rag to remove dust, etc.)
3. Evaluate the color of this pipe. Does it appear to be plastic or metal?
4. If the pipe appears to be metal and you cannot determine the material by color alone, place a strong magnet on the pipe.
 - a. If the magnet sticks, your pipe is likely *galvanized steel*.
 - b. If the magnet does not stick, your pipe is likely *copper*.



EPA Service Line Identification Guide

Note: Please do not attempt to scratch your service line for identification purposes. Depending on the material, this may damage the pipe and result in a leak.

Report on Water Quality

SUMMER 2025 PWS 2002000

Acton Water District

Testing for Your Drinking Water

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) prescribe regulations that limit the amounts of certain contaminants in water provided by public water systems. In 2024, water supplied by the Acton Water District (AWD) met most 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 2024. 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.

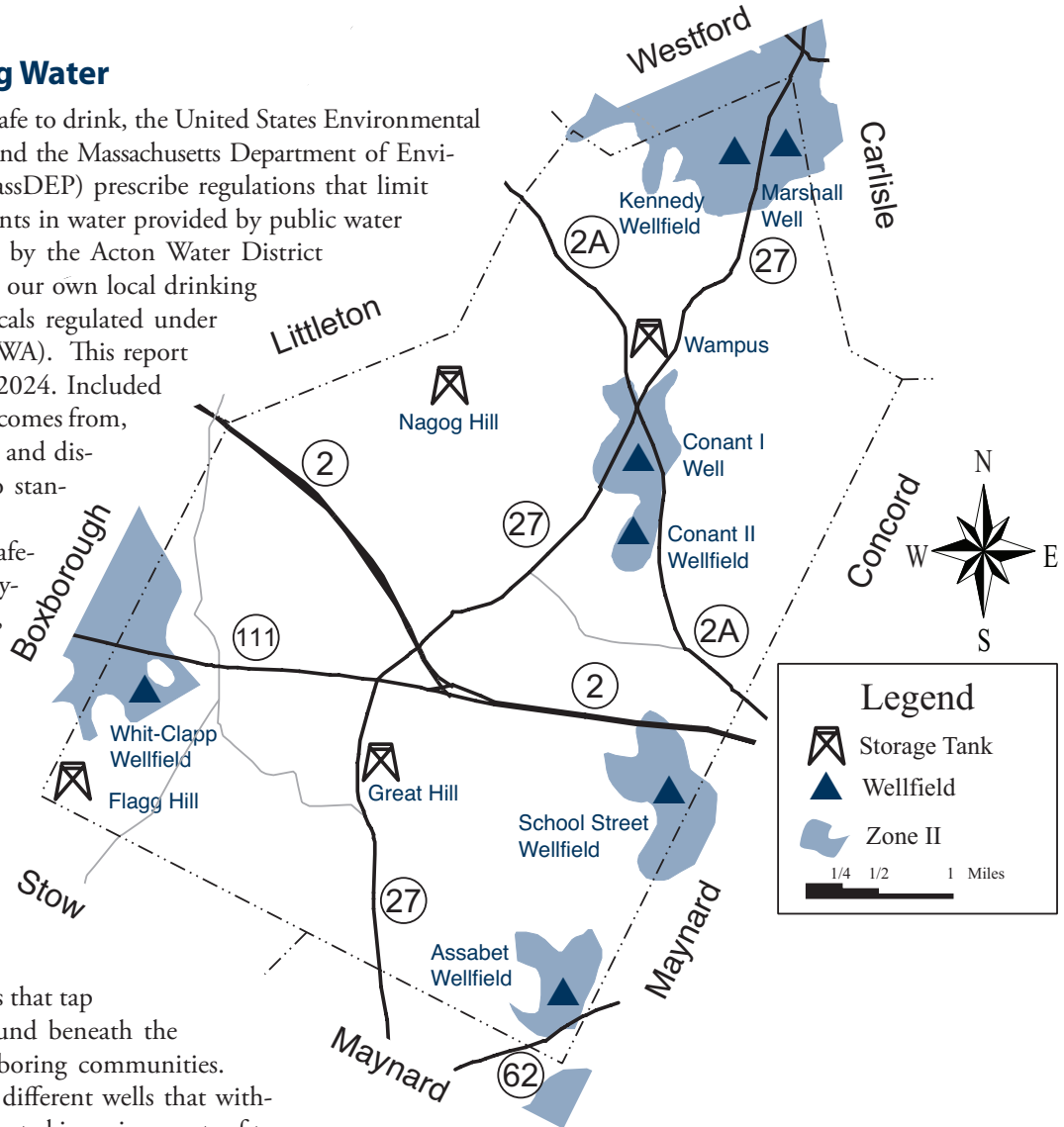
The AWD works diligently to safeguard your water supplies by employing multiple barriers for protection, including source water protection, distribution system protection, ongoing monitoring, and treatment. Last year, we collected more than 650 samples and tested them for more than 100 different potential 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 24 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 over 135 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 the 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 the 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 on page 9.
- 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 2024 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 across all wellfields.

Substance (units)	Range of Detects	Level Allowed (MCL)	Goal (MCLG)	Typical Source	Exceeds MCL?
Regulated Substances (MCL has been established)					
Barium (ppm)	0.017–0.021	2	2	Erosion of natural deposits	No
Chlorine (ppm)	0.01–0.86 Highest RAA: 0.24	4 (MRDL)	4 (MRDLG)	Water additive used to control microbes	No
Fluoride (ppm) *	0–0.9	4	4	Water additive which promotes strong teeth	No
Haloacetic Acid (ppb)	1.2–14 Highest LRAA: 10	60	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant	No
Nitrate (ppm)	0.21–1.94	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	No
PFAS6 (ppt)	5.0–20.7 Highest quarterly average: 17.8	20	No MCLG	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.	Yes
Trihalomethanes (ppb)	12–45 Highest LRAA: 27	80	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant	No
Turbidity (Nephelometric Turbidity Unit)	0.02–0.26 Lowest Monthly % Samples: 100	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)					
1,4-dioxane (ppt)	170–230	No MCL	No MCLG	Chemical solvent, lab reagent, stabilizer, adhesive, may be found in cosmetics, detergents, and shampoo.	Unregulated contaminants have no established MCL
Aluminum (ppb)	15–30	No MCL	No MCLG	Residue from water treatment process: erosion of natural deposits.	
Chloride (ppm)	38.5–104	No MCL	No MCLG	Runoff and leaching from natural deposits	
Chloroform (ppb)	1–23.8	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant.	
Chlorodibromomethane (ppb)	2.1–3.2	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant.	
Bromodichloromethane (ppb)	2.3–12.1	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant.	
Bromoform (ppb)	0.4–2.6	No MCL	No MCLG	Formed when natural organic material present in the water reacts with chlorine added as a disinfectant.	
Iron (ppm)	0.01–0.05	No MCL	No MCLG	Erosion of natural deposits.	
Perfluorobutanoic acid (PFBA) (ppt)	18.3	No MCL	No MCLG	Breakdown product of other PFAS that are used in stain-resistant fabrics, paper food packaging, and carpets; also historically used for manufacturing photographic film.	
Perfluorobutanesulfonic acid (PFBS) (ppt)	1–3.8 Average: 2.3	No MCL	No MCLG	Manmade chemical; used as a replacement for perfluorooctane sulfonic acid (PFOS); used in the manufacture of paints, cleaning agents, and water- and stain-repellent products and coatings, including carpeting, carpet cleaners, floor wax and food packaging.	
Perfluorohexanoic acid (PFHxA) (ppt)	1.2–6.7 Average: 4.1	No MCL	No MCLG	Manmade chemical; breakdown product of stain- and grease-proof coatings on food packaging and household products	
Perfluoropentanoic acid (PFPeA) (ppt)	4.9	No MCL	No MCLG	Manmade chemical; used in products to make them stain, grease, heat, and water resistant	
Sodium (ppm)	30.6–58.4	No MCL	No MCLG	Erosion of natural deposits, road salting.	
Sulfate (ppm)	11.6–29.2	No MCL	No MCLG	Natural Sources.	
Substance (units)	90th percentile	Action Level	# sites (# sites above Action Level)	Typical Source	Exceeds AL?
Lead and Copper (60+ sites sampled semi-annually: May–June and October–December 2024)					
Lead (ppb)	3.2	15	122 (0)	Corrosion of household plumbing systems; Erosion of natural deposits	No
Copper (ppm)	0.427	1.3	122 (0)	Erosion of natural deposits; Leaching; Corrosion of household plumbing systems; from wood preservatives	No

For terms and abbreviations, see page 9.

* Fluoride has a secondary contaminant level (SMCL) of 2 ppm to better protect human health.

Why Are Impurities in Your Drinking Water?

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **microbial** 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 potential health effects 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>							●
Carbon Filtration <i>PFAS removal</i>			●			●	
Membrane Filtration <i>mineral/color removal</i>			●	●	●	●	
GreensandPlus™ Pressure Filtration <i>iron/manganese 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.

NTU: Nephelometric Turbidity Units

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

pCi/L: picocuries per liter (a measure of radioactivity)

RAA (Running Annual Average): The average of four consecutive quarters of data.

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

90th Percentile: Out of every 10 homes sampled, nine were at or below this level. This number is compared to the action level to determine lead and copper compliance.

Discussion of Data Table Detections

1,4-DIOXANE: During 2024 we 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 1,4-dioxane at the WR Grace and Nuclear Metals, Inc. Superfund sites near our South Acton wells. 1,4-dioxane is not a federally regulated contaminant, and the MassDEP has not established a state MCL. The AWD is following the potential regulation of this contaminant and the effect it may have on our water system. Some people who drink water containing 1,4-dioxane at high concentrations for many years could experience chronic kidney and liver effects and liver cancer. More information is available at www.actonwater.com/water-quality/14-dioxane

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 optimal fluoride dose of 0.7 mg/L. We implemented this adjusted dose at all our treatment plants in 2015.

LEAD AND COPPER: 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 and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the AWD at 978-263-9107. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

PFAS6: Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers. The AWD began monitoring for PFAS in January 2020, before MassDEP required it. Results presented in the regulated table above are accepted samples from our treated water during the 2024 calendar year. Additional PFAS detects were reported in the unregulated table above. More information is available at www.actonwater.com/pfas

SODIUM: Although sodium does not have an MCL, MassDEP has 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 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.

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 is provided to our customers. For more information on our voluntary monitoring, please contact us.

VULNERABILITY: Some people may be more vulnerable to impurities 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 persons, 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 (1-800-426-4791).

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 our website: www.ActonWater.com.

The AWD has long recognized the susceptibility of its sources and has worked closely with both the Town of Acton and the state to maximize the protection of all its Zone IIs. For more information, please contact Corey Godfrey, AWD Deputy District Manager, by phone at 978-263-9107 or by email at corey@actonwater.com.



The Clapp/Whitcomb Treatment Plant underwent its last significant modification in 1999. Although it could supply up to 700,000 gallons per day, declining water quality, aging technology, and regulatory changes minimize our ability to rely on this facility.

Required Non-Compliance Information

In September 2022, the District was issued an Administrative Consent Order with Penalty (ACOP) by MassDEP. This ACOP is for the Clapp Whitcomb Water Treatment Plant backwash water. This is not a drinking water violation, but a violation of wastewater regulations, therefore public health was not immediately at risk. Although the treatment plant is operated in accordance with its original design, MassDEP's expectations for managing waste from facilities such as this have changed over the past 35 years. Our immediate response was to relegate this facility to emergency use only and provide a bag filter to remove some of the solids contained in the backwash water. Due to the age of the treatment equipment and declining water quality from the wells in West Acton, this facility should be replaced in the coming years; however, those plans have been deferred so we can focus on PFAS treatment upgrades at our newer facilities. By entering into the ACOP with MassDEP, the District is able to work with the regulators and our engineers to implement more permanent solutions that fit into our capital planning and improvement plans.

Do You Know About Cross Connections?

A cross connection is any actual or potential connection between a potable drinking water pipe and any potential source of pollution or contamination, such as a waste, soil, or sewer pipe; a drain; or any other unapproved source. If not properly protected or eliminated, a cross connection can cause health problems and spread disease if a backflow event were to occur.

There are two types of backflow conditions by which contamination can enter the drinking water: backpressure and backsiphonage. Backpressure occurs when the pressure in the property exceeds that of the drinking water distribution system. This can be caused by air conditioning units, boiler systems, and other pressure-building devices connected to the distribution system. Backsiphonage occurs when the drinking water pressure drops off and the resulting vacuum sucks the water from the building, causing it to flow backward into the distribution system. This can be caused by routine occurrences such as a fire department's use of water for fire suppression, water main breaks, and other heavy water demand.

Most cross connections are addressed by installing a backflow prevention device. 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 supply. 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 Acton Water District ensures that the water supplied down to the last free-flowing tap in every building is of the highest quality. All residential homes with irrigation systems are required to have backflow protection. You can learn more about cross connections by contacting Bob Murch, our Cross Connection Coordinator, at bobm@actonwater.com.

Hose bibbs or outdoor faucets should have a vacuum breaker integral to the fixture or added to prevent back siphonage.



Good to the Last Drop!

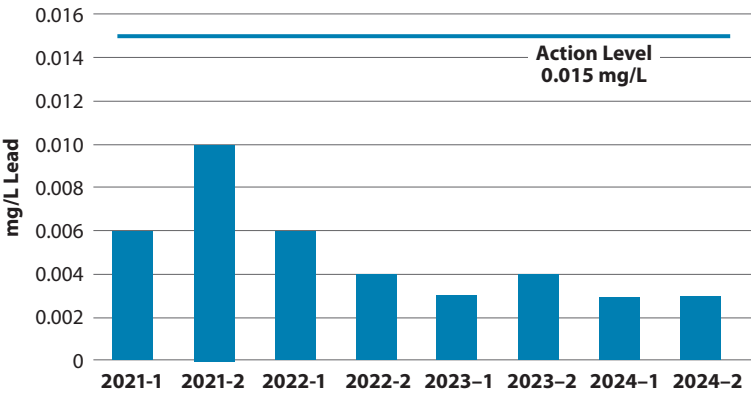
Since the early 2000's, the District has qualified for reduced lead and copper monitoring. Samples have historically been collected from 30 homes and two schools/childcare facilities in town once every three years to confirm the effectiveness of our corrosion control efforts. Aeration, primarily used for VOC removal, is often sufficient in raising the pH of our naturally corrosive water supplies from slightly acidic to neutral. As needed, further upward pH adjustment is achieved by adding potassium hydroxide. Upwardly adjusting the pH reduces the potential for metals like lead and copper to leach from building pipes and plumbing fixtures into the water carried through them.

Due to system improvements initiated in 2020, the District returned to semi-annual lead and copper monitoring at 60 homes and two schools/childcare facilities beginning in 2021. We anticipate semi-annual monitoring will continue through 2028 as the District finalizes the construction of PFAS treatment at the South and Central Acton WTPs and the construction of two bedrock wells in Acton Center. We thank our many customers who volunteer to participate in this program and allow us to meet our regulatory requirements.

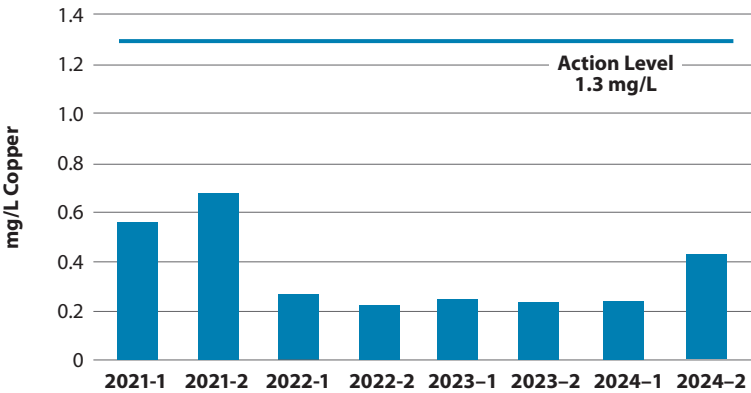
Lead levels in all of the residential samples collected in 2024 were below the Action Level (AL). All AL exceedances were reported to homeowners immediately and follow-up sampling was offered; when conducted, repeat sampling indicated low lead levels. Often, replacing old household plumbing fixtures that contained lead results in improved water quality. There were also no lead AL exceedances for any of the samples collected in schools/ childcare facilities as part of the 2024 program.

When your water has been sitting for several hours, like first thing in the morning or upon returning home from work, you can minimize your lead exposure by flushing your tap for up to two minutes or until the water becomes noticeably colder before using it for drinking, cooking, or preparing baby formula. Always use cold water for these activities, as lead dissolves faster in hot water than it does in cold. It's also important to note that boiling water does not decrease the level of lead; rather, it increases it. Additionally, the aerators on the end of your faucets should be removed at least every six months to rinse out any debris that may include particulate lead.

Lead Levels



Copper Levels



Lead and copper compliance data demonstrate effective corrosion control practices at our treatment plants, which reduce leaching of metals from building pipes and plumbing fixtures.

Do You Want to Get Involved?

The Board of Water Commissioners meetings are typically scheduled on the second and fourth Mondays of each month at 7:00 pm; meetings are open to the public. The beginning of each meeting is set aside for public comments that may not be on the agenda for discussion. If you wish to attend, please visit our website (<https://actonwater.com/meeting-schedules>) 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.

For more information, additional copies, or to comment on this report, please contact:

Acton Water District

Attn: Corey Godfrey, PO Box 953, 693 Massachusetts Ave., Acton, MA 01720
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