Upton 2024 Drinking Water Quality Consumer Confidence Report

Welcome to the 2024 Drinking Water Quality Consumer Confidence Report. We are pleased to report that water delivered to you met or exceeded all Federal and State drinking water standards. This report includes all the required testing results for the calendar year 2024, including the new PFAS regulations, and other valuable information about your drinking water.

The Water Division staff is dedicated to the planning, operations, and maintenance necessary for producing high quality drinking water for all household, commercial, and community needs. We strive to serve the community in a courteous, efficient, and environmentally sustainable manner. We are passionate about our work and try to instill our values of integrity, professionalism, and teamwork in everything we do.

While maintaining water quality is critical and our top priority, service reliability, adequacy of supply, preparing for future growth, protecting and conserving our water supply, and providing fair and stable water rates, are important priorities.

We encourage you to take the time to read this report. If you have any questions, or want additional copies, please contact the Department of Public Works office at 508-529-3067.

Dennis Westgate
Director of Public Works

Matt Kerr
Foreman

Where Your Water Comes From

Upton's water is considered ground water. The water is sourced from seven wells at three pump stations. The Glan Avenue pump station, which dates to the early 1900s, pumps water from three wells with a maximum depth of 56 feet. The West River pump station (1976) pumps water from one gravel-packed well with a depth of 90 feet. The Municipal Wellfield No. 3 pump station (2013) pumps water from three wells with a maximum depth of 30 feet. Water is treated at all three pump stations.

The water distribution system includes approximately 39 miles of water mains, and two water storage tanks - a 500,000-gallon tank on Pratt Hill and a 1,000,000-gallon tank off Pearl Street.

How Your Water is Treated

Chlorine, a highly efficient disinfectant, is added to kill disease-causing bacteria that water or pipes may contain. Chlorine levels are continuously monitored and controlled to ensure that the required levels are maintained at the pump stations and throughout the distribution system.

Potassium hydroxide is added for corrosion control. Upton's ground water is naturally corrosive and untreated water can dissolve copper from the pipes in homes and businesses. The potassium hydroxide raises the pH of the water to between 7.0 and 7.5.

All components of the water treatment and distribution system are closely monitored by State certified operators through a computerized Supervisory Control and Data Acquisition (SCADA) system.

Source Water Protection

In 2002 the Department of Environmental Protection (EPA) and the town completed a Source Water Assessment and Protection (SWAP) Report to support efforts to improve water supply protection. The report inventoried land uses within recharge areas of the town's wells, assessed the susceptibility of the drinking water sources to contamination from these land uses, and made recommendations as to how to protect our drinking water sources from contamination. Residents can help protect our drinking water sources by disposing hazardous household chemicals at hazardous waste collection events and by limiting the use of pesticides, herbicides and fertilizers. The SWAP report is available on the town's website at: www.uptonma.gov/DocumentCenter/View/4685/Source-Water-Assessment-and-Protection-Report

To ensure the supply of the highest quality drinking water for residents, the Town has also adopted by-laws and health regulations designed to protect and conserve existing and potential sources of drinking water supplies.

Protecting Drinking Water at Home

A "cross connection" is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home. For example, if you spray fertilizer on your lawn or garden by connecting a sprayer to a hose, the fertilizer may be sucked back into the drinking water pipes through the hose if the water pressure drops when the hose is connected to the fertilizer sprayer. It is easy to prevent cross connection issues like this by installing a Hose Bib Vacuum Breaker. These inexpensive and easy to install devices can be purchased at most hardware stores.

Finished Water Test Results

We are pleased to report that the water delivered to your home in 2024 complied with or exceeded all State and Federal drinking water regulations. The Town collected numerous water samples for over 100 potential contaminants. Federal and State regulations require tests for bacteria, PFAS, volatile organics, synthetic organics, total trihalomethanes, haloacetic acids, nitrates, and sodium. The table below contains only the contaminants that were detected. Although the substances are significantly below the Maximum Contaminant Level (MCL) set by the EPA, it is important for you to know what was detected and the amount present.

Tested After Treatment

Substance	Units	Highest Level Allowed (MCL or MRDL)	Highest Level Found	Range of Detections	Ideal Goal (MCLG or MRDLG)	Major Sources
Chlorine	ppm	4	0.64[1]	.20-.92	4	Water additive for disinfection
PFAS6[2]	ng/L	20 ng/L	2.5[2]	1.8-2.5	Not set	Chemicals from mills, firefighting foam
Nitrate	ppm	10	1.4	.94-1.4	10	Runoff from fertilizer use / Leaching from septic tanks

Note 1 - Highest level found is highest monthly average of samples tested.
Note 2 – Three of the PFAS6 were detected – PFOA, PFOS and PFHpA

In the Distribution System

Disinfection By-Products	Frequency Collected	Highest Level Allowed (MCL)	Highest Level Found	Range of Detections	Ideal Goal (MCLG)	Major Sources
Total Trihalomethanes	Annually	80 ppb	26	26	0	Byproducts of water chlorination
Haloacetic Acids	Annually	60 ppb	1.4	1.4	0	Byproducts of water chlorination

Microbiological Contaminant	Frequency Collected	MCL	Positive Samples			Major Sources
Total Coliform	Weekly	0	0			Naturally present in the environment

Follow up testing confirmed negative coliform at positive test sites.

Unregulated and Secondary Contaminants	Frequency Collected	Range of Detections	Highest Level Found	SMCL		Major Sources
Manganese	Annually	.0027-.14 ppb	.14 ppb	50		Natural corrosion of iron

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

Lead & Copper - "At the Tap" Sampling

Inorganic Contaminants	Date Collected	90th Percentile	Action Level (AL)	MCLG	Sites Sampled	Sites > AL	Major Sources
Lead * (ppb)	2024	0.0016	15	0	16	0	Corrosion of house plumbing
Copper* (ppm)	2024	0.24	1.3	1.3	16	0	Corrosion of house plumbing

* The next round of sampling will be in the summer of 2024.

Definitions & Acronyms

ppm **=** parts per million, **ppb** = parts per billion (1 ppm = 1000 ppb), **ng/L** = nanograms per liter, **ND** = not detected
Safe Drinking Water Act (SDWA) - The Federal Law that governs the regulation of public water supplies**.**
Environmental Protection Agency (EPA) - The federal agency responsible for developing SDWA regulations.
Department of Environmental Protection (MassDEP) - The Massachusetts regulatory agency responsible for implementing the SDWA.
Action Level (AL) - The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
MCL: Maximum Contaminant Level - The highest allowable level of a contaminant 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 Disinfection 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 Disinfection Level Goal – The level of 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.
ORSG: Massachusetts Office of Research and Standards Guideline - Guidance values developed by MassDEP ORS in absence of any other Federal standards or guidance.
SMCL: Secondary Maximum Contaminant Level - Concentration limit for a contaminant which may have aesthetic effects such as taste, odor or staining.

Contact Information

Maintenance
For issues with leaks, meters, hydrants or mains, call the Water Division office at 508-529-3993

Billing and General information
Call the Department of Public Works office at 508-529-3067

Emergencies
For emergency service outside of business hours (M-F 7:00 a.m. – 3:30 p.m.) call the Upton Police Department at 508-529-3200

Important Information from EPA and MA Department of Environmental Protection (MassDEP) about Sources of Drinking Water and Drinking Water Contaminants

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.

Contaminants that may be present in source water include:

- 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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants include synthetic and volatile organic chemicals (VOCs) that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, MassDEP and the U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contamination. The presence of contaminants does necessarily indicate that water poses a health risk. More information about potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons 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 from their healthcare providers. EPA/Center for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

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 Upton Water Division 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 the water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested for free. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at epa.gov/safewater/lead.

Notice of Noncompliance with EPA and MassDEP Testing Requirements

In the second quarter of 2024, MassDEP did not receive test results for the inorganic contaminants antimony, cadmium and fluoride for water sampled from the three wellfields. This appears to have been an oversight by the testing laboratory. The lab did not test for these contaminants as requested and that oversight went undiscovered as the practice at the time was for the lab to report test results exclusively to MassDEP.

In the third quarter of 2024, the Waster Division tested water for lead and copper from 16 of the 24 homes approved by MassDEP for lead and copper sampling. The Division is required to test the water from 20 of the 24 homes. The Division contacted all 24 homeowners and was able to arrange to get samples from 16. The test results from the 16 homes are shown in the table above.

How You Can Conserve Water

By using water more efficiently, you can preserve water supplies for future generations, protect the environment, and save money. Here are some water-saving tips for homeowners.

Indoors

- Install water-efficient plumbing fixtures and appliances
- Only run your dishwasher and washing machine when full
- Do not use toilets for trash disposal
- Fix running toilets and leaking faucets. A dripping faucet can waste 15-20 gallons a day. A toilet with an improperly seated flapper can waste up to 8,000 gallons a day.

Outdoor

- Water your lawn only as needed. Watering too frequently can weaken a lawn by encouraging shallow roots.
- Install a soil moisture sensor and a rain sensor on your irrigation system.
- Use shut-off nozzles on hoses and automatic shut-off devices on irrigation systems.
- Water your lawn in the early morning or late evening to avoid losing water to evaporation.
- Use mulch as a ground cover to reduce water evaporation and to keep roots cool and moist.
- Raise your lawn mower blades. Longer grass provides shade for the roots and reduces water loss.

Seasonal Water Use Restrictions

To comply with the town's Water Management Act permit with MassDEP, the town is required to implement restrictions on outdoor water use. The restrictions ensure an adequate supply of water for drinking and fire protection and protect the quality and quantity of water for aquatic habitats such as ponds, rivers and wetlands. Under the permit, irrigation of lawns using sprinklers or automatic irrigation systems is prohibited between 9:00 a.m. and 5:00 p.m. from May 1 to September 30 every year. Certain drought conditions will trigger more water use restrictions. More information about the water use restrictions can be found on the town's website.

Other Information

Service Line Ownership

Residents sometimes ask who is responsible for the operation and maintenance of the service line, which is the pipe from the shut-off valve to the house. The following information should be helpful:

- The Water Division is responsible for the water main in the street and the pipe from the main to the "shut off" valve, located in the curb box, which is usually near the property line. The Water Division also owns the water meter.
- The curb box and the pipe from the shut off valve into the building is owned and maintained by the property owner. The property owner is responsible for all other plumbing except for the water meter. The curb box should be maintained so that is accessible.
- The master water valve in your home, usually located where the water pipe comes into the home, should be marked with a tag or painted a bright color so that it can be located quickly in the event of a leak.

Lead Service Line Inventory

As part of an EPA effort to address lead in drinking water, water systems are required to inventory the materials used in water service lines. The service line is the pipe that runs from the shut-off valve at the edge of the property to the basement, and it can be made of copper, plastic, galvanized metal, or lead. The Division has created a service line materials inventory and is asking property owners that have not already done so to identify and report their service line material. Instructions for identifying the service line material and for reporting it to the Water Division can be found on the town's website by clicking "How to Identify and Report the Material in Your Water Service Line on the Water Division's page on the website. The Water Division page can be reached through the Department of Public Works page.

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The 2024 Drinking Water Consumer Confidence Report is a right-to-know report required to be sent to you in accordance with the Federal Safe Drinking Water Act Public Law 104-182, Section 1414(c)(4)