

## **Wilmington Water & Sewer Department**

121 Glen Road, Wilmington Massachusetts 01887 Public Water Supply #3342000

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Office of the Director 115 Andover Street Wilmington, MA 01887

## Where Does My Water Come From?

The Wilmington Water Department provides drinking water to 99 percent of all the residents and businesses in Wilmington. The source of the water is groundwater, which is pumped from four wells located throughout Wilmington. From the wells, the source water is pumped to one of two water treatment plants. There, the water is treated using filtration and disinfection to remove or reduce any harmful contaminants. From the treatment plants, the water is pumped to one of three storage tanks and to the homes and businesses throughout Wilmington. To provide the highest protection for the source water, Wilmington has established Zoning, Inhabitant and Board of Health bylaws, which include groundwater protection, floor drain regulations, and water use restrictions. In times of high demand, MWRA water is used to supplement the Town's supply. Wilmington also maintains interconnections and agreements with North Reading, Burlington, and Woburn.

## **How Is My Water Treated & Purified?**

Aeration: The treatment process begins with aeration, which reduces carbon dioxide levels to lower treatment costs and also improves taste.

<u>Alum</u>: Next, aluminum sulfate (alum) is added to the water before it passes into the flocculation basins. The alum prompts small particles to coagulate, or stick together, forming floc particles and removing color from the water. The floc particles continue to grow and stick together, becoming heavier before moving into the settling basins.

<u>Potassium Permanganate</u>: Potassium permanganate is added to oxidize iron and manganese in solution. The iron and manganese can then be removed, because they may cause undesirable color, taste, and odor in water.

<u>Settling Basins</u>: In the settling basins, the floc particles settle to the bottom forming a layer of solids, which is removed by a siphon device and discharged to lagoons for disposal. The clear water at the top of the settling basin flows into the filter basins.

<u>Filter Basins</u>: The filter basins consist of four feet of granular activated carbon (GAC) to remove any remaining fine particles. The GAC filter also removes any remaining taste and odor, volatile organic compounds, and aids in polishing the water.

<u>Chloramination</u>: Chloramine is a form of chlorine that is created by combining ammonium sulfate and chlorine. We have invested in the use of ammonium sulfate, a food-grade substance that safely transforms chlorine to chloramines. Like chlorine, chloramine also keeps the water safe by protecting against biological growth throughout the distribution system and with a benefit of producing less disinfection by-products.

The finished water is pumped into Wilmington's distribution system, which includes service lines, 126 miles of pipe, 1200 fire hydrants and three water storage tanks. Our top priority is to provide safe, good-tasting, high-quality drinking water for the residents of the Town of Wilmington.

Mandatory Outdoor Water Restrictions ~ NO Outdoor Watering between the hours of 9:00 AM and 5:00 PM.

Sprinkler Systems: Both above ground or installed underground, can be used once per week, subject to the restrictions above. VIOLATION OF THESE WATER USE RESTRICTIONS WILL RESULT IN A MINIMUM \$50.00 PER DAY FINE! The Water Department could institute a full outdoor watering ban in the future. Please watch for future notices on WCTV and your local newspaper. Thank you for your cooperation.

**Water & Sewer Commission Meetings** ~ The Water & Sewer Commission meets the 3rd Thursday of each month, beginning at 5 p.m. at the Town Hall, 121 Glen Road, Wilmington, MA, unless otherwise posted. Please call in advance if you have a specific issue you would like to discuss, and we will be sure to include your topic on our agenda.

If you would like to see a copy of our Source Water Assessment Program (SWAP) report, it is available at the Wilmington Water Department and online at <a href="https://www.mass.gov/dep/water/drinking/3342000.pdf">www.mass.gov/dep/water/drinking/3342000.pdf</a>. For more information call the Wilmington Water Department at (978) 658-4711.

SUBSTANCE (Contaminant)	HIGHEST LEVEL DETECTED	RANGE OF DETECTION	HIGHEST LEVEL ALLOWED	IDEAL GOALS	SOURCES OF CONTAMINANT
Nitrate (ppm)	1.1	0.2-1.1	10	10	Natural deposits, fertilizer
Nitrite (ppm)	0.38	ND-0.38	1	1	Natural deposits, fertilizer
Total Trihalomethanes (ppb)	42.1	0-99	80	NA	Disinfection byproducts
Haloacetic Acids (ppb)	22.5	0-57	60	NA	Disinfection byproducts
Sodium (ppm)	53	53	NA	NA	Common mineral in nature

## LEAD AND COPPER

SUBSTANCE	90TH PERCENTILE	# OF SAMPLES EXCEED-	ACTION LEVEL	MAXIMUM CONTAMINANT LEVEL
(Contaminant)		ING ACTION LEVEL	(AL)	GOAL (MCLG)
Lead (ppb)-2010 Copper (ppm)-2010	2 0.07	0 0	15 ppb 1.3 ppm	0 0

Michael J. Woods, DPW Director

Water & Sewer Director