



Needham Water Division Department of Public Works

Public Water Supply
3199000

Needham Water Supply

Needham draws its drinking water from two separate sources. The primary source of the Town's drinking water comes from three gravel packed wells located here in town. This well field has been the major source of water supply since the 1930s. The Town's secondary source is from the Massachusetts Water Resources Authority (MWRA). The MWRA supply enters Needham's distribution system through a 36" diameter pipe that runs from the MWRA's Metro West Tunnel in Weston to a booster pumping station located in Needham. In addition to Needham's normal supply, the Town also has emergency connections to provide and receive water from the Towns of Wellesley and Dedham.

Needham used an average of 3.4 million gallons of water per day in 2013. 72% of this was supplied by town wells and the remaining 28% was from MWRA.

The MWRA has provided each of its service communities an opportunity to report on specific improvements that have an impact on the drinking water system. The DPW continues to undertake construction and maintenance projects designed to provide our customers with the safest and most reliable supply of drinking water. A separate report will be produced outlining these specific projects.

Needham Water Department Operations

Needham's water is conveyed through a distribution system that consists of 135 miles of water mains of various sizes throughout the Town. Also important to the distribution system are the 3,400 gate valves and 10,145 service connections that bring the water to each individual customer, 1,245 fire hydrants and two water storage tanks that provide a combined four million gallons of storage. Pressure in the system is primarily maintained for consumption use, but is also maintained for fire protection as well as preventing contamination from entering into the distribution system. We also maintain an aggressive Cross Connection Control Program, continuously inspecting facilities and testing devices to protect the water system from contamination.

Charles River Water Treatment Facility

To maintain compliance with federal and state drinking water regulations, Needham well water must be treated before it reaches consumers' taps. This treatment process is provided by the Charles River Water Treatment Facility located on the western side of town. Treatment processes include oxidation and removal of manganese with sodium hypochlorite via filtration, pH adjustment to raise the natural pH and alkalinity of Needham's water, thereby reducing the water's corrosiveness to household plumbing, disinfection via the addition of chlorine to inactivate any pathogens that may be present in the water, fluoridation which prevents tooth decay and cavities and finally injection of polyphosphate to minimize the potential calcium precipitating in homes. All components of the water treatment and distribution system are closely monitored by state certified operators through computerized Supervisory Control and Data Acquisition Systems (SCADA).

Water Analysis

Needham's Water and Sewer Division, along with the MWRA, analyzes water samples regularly to ensure the Town's drinking water meets or exceeds EPA drinking water quality standards. In 2013, the Water and Sewer Division collected more than 500 water samples analyzing over 100 potential contaminants and found these to be well below all state and federal regulations established by EPA. The last round of lead and copper "at the tap" sampling was completed in August 2012. The 90th percentile for Needham was eight parts per billion (ppb) which is below the action level of 15 ppb.

Notice of Non Compliance

In December 2013, the Massachusetts Department of Environmental Protection (MassDEP) issued a Notice of Non Compliance (NON) to the Town for failure to report the 3rd Quarter Volatile Organic Compounds (VOC'S) report. We have since taken the required samples and meet all drinking water standards.

Any concerns or questions about the quality of Needham's drinking water, please contact Vincent Roy, Superintendent at 781-455-7550, or Stephen Cusick, Water Treatment Plant Manager at 781-416-4071.