Your Community



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 is from the Town's three gravel packed wells located on the western side of town. This well field has been the major source of water supply since the 1930's. 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. The combined capacity of the Town's water treatment facility and MWRA is 10 million gallons of treated water per day. In addition to Needham's normal supply of drinking water, the Town also has emergency connections to provide and receive water from the Towns of Wellesley and Dedham.

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 consumers with the safest and most reliable supply of drinking water. A separate report will be produced outlining these specific projects.

Needham's Distribution System

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 10,136 service pipes 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 consumptive use but is also maintained for fire protection as well as preventing contamination from entering into the distribution system.

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 potassium permanganate 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 kill any pathogens (germs) that may be present in the water, fluoridation which prevents tooth decay and cavities and finally injection of polyphosphate to minimize calcium from 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 analyze water samples regularly to ensure the Town's drinking water meets or exceeds EPA drinking water quality standards. In 2012, 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 July of 2012, the Massachusetts Department of Environmental Protection agency (MassDEP) issued a Notice of Non Compliance (NON) to the Town for failure to implement restrictions on non-essential outdoor water use. The restrictions are as per regulations 310 CMR 36.00 and the Town's Water Management Act (WMA) permit. Special Condition 7 of the WMA permit (#9P3-3-20-199.02) requires the Town to implement restrictions on non-essential outdoor water use based either on streamflow of the Charles River or by enforcing mandatory restrictions from May 1st through September 30th.

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.