



Town of Needham

DEPARTMENT OF PUBLIC WORKS

Public Water Supply
3199000

About Needham Water...

The original water works in Needham was started in 1876. The Needham Water Works Company was incorporated in 1881, and was succeeded by the Newport Water Corporation in 1929. Since 1936, the Town of Needham has owned and operated the system. The Town's legal authority to own and operate the system is stated in the Town Charter and was established through MA/GL_46-13-12.1. The Needham Water Division (NWD) is a division within the Town of Needham Department of Public Works and is responsible for the operation and maintenance of the system. The NWD operates as an enterprise fund and is independent of the overall Town's General budget. The NWD is regulated by the Massachusetts Public Utilities Commission.

Needham Water Supply

Needham Water draws water from two separate sources. The primary source is its own wells located on Charles River Street near Winding River Road. This wellfield has been the major source of water since the 1930's. The Town's secondary source is from the Massachusetts Water Resources Authority (MWRA). The MWRA supply enters through a 36" diameter pipe that runs from the MWRA's Metro West Tunnel in Weston to a booster station on Central Avenue at St. Mary Street. This connection was constructed in the mid-1950's. The combined capacity of the Water Treatment Plant and MWRA is 10 million gallons of treated water per day. In addition, Needham has emergency connections to provide and receive water from the the town's of Wellesley and Dedham.

Needham's Distribution System

Needham's Water distribution system consists of 135 miles of water mains of various size, material and age which carry water throughout the Town and to each individual customer. To maintain pressure and ensure enough water for fighting fires the town has (2) Water Storage Tanks, 4 millions gallons of capacity, St. Mary's pumping station, approximately 10,700 services, 3,300 valves and 1,000 hydrants.

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 Quality

Needham collected more than 500 water samples analyzing for over 100 potential contaminants in 2010. We are proud to report that our drinking water met or exceeded all state and federal water quality standards established by the EPA. The last round of lead and copper "at the tap" sampling was completed in August 2010. The 90th percentile for Needham was 2 ppb which is below the action level of 15 ppb. Needham next round of sampling will be in 2012, due to a waiver granted by (DEP).

If Needham residents have any questions about Needham's water quality, please contact Stephen Cusick, Water Treatment plant interim manager, at 781-416-4071.