



City of Newton  
DEPARTMENT OF PUBLIC WORKS UTILITIES DIVISION

Public Water Supply  
# 3207000

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Setti D. Warren, Mayor

#### WATER MAIN REHABILITATION & REPLACEMENT

Water main replacement is performed where the main is undersized or has corroded to such an extent that it is not structurally sound. The City of Newton is spending approximately 2.5 million dollars a year for at least the next 4 years to rehabilitate the water infrastructure, in conjunction with the MWRA. To keep construction costs at a minimum, water main rehabilitation is targeted on roads scheduled for resurfacing. There are about 200 miles of water main that require rehabilitation to improve water quality and quantity. Major water lines have been rehabilitated in the past few years in several neighborhoods. Last year's construction included installation of new water mains on Sharon Ave., Auburn Ter., Grove St, Cornell St., Neal St., Moulton St., Normandy Rd., and Richfield Rd. Water mains on Crescent St., Robinhood St., Commonwealth Ave. and Weir St. were cleaned and lined. The City has completed installation of a new 12" water main along Commonwealth Ave. from College Road to the Boston City Line to increase fire flows in the Boston College area.

#### WHAT NEWTON IS DOING TO IMPROVE WATER QUALITY

In addition to the actions taken by MWRA outlined in this report, the Newton Department of Public Works has taken steps to improve the quality of drinking water provided to Newton residents. The City's distribution system was evaluated in the early 1990s, resulting in an ongoing program of pipeline replacement, cleaning and lining of water mains, elimination of dead ends, and water main flushing. Typical of older distribution systems, the City of Newton's water pipes develop a layer of sediment and encrusted material known as tuberculation. This can affect taste, odor and color. During rehabilitation, interior walls of pipes are restored, eliminating the tuberculation upon which bacteria can grow.

#### LEAK DETECTION

The City performs an annual water leak detection survey, where correlation technology is used to find leaks in the water distribution system. The leaks are documented for ongoing repairs by the Utilities Division.

#### FLUSHING PROGRAM

The Department of Public Works has implemented an ongoing comprehensive flushing program designed to remove tuberculation and sediments from water mains. The program involves closing water gates and forcing water flow in two directions of high velocities, which scours the water mains.

#### WATER TANK UPGRADES

Improvements to the Waban Hill reservoir including rehabilitation of the central core and roof are planned this year.

#### METER REPLACEMENT PROGRAM

In an effort to enhance meter reading productivity and customer service, in addition to reducing the unaccounted-for water loss in the distribution system, the City has begun a citywide meter replacement program. This initiative will replace all residential and commercial water meters, which average more than 20 years old, and also introduce a fixed network automated meter reading system for the City's 24,800 accounts.

#### BACKFLOW PREVENTION

The City of Newton has a Cross Connection Control and Prevention Program (CCCP) to protect the water distribution system from contamination. The Certified Backflow Inspectors/Testers survey sites, test the devices, and review and approve new devices prior to installation. The City operates under the state DEP regulation 310 CMR 22.22.

#### LEAD AND COPPER

Many homes in Newton are known to have lead pipes and plumbing fixtures. Lead in drinking water is variable in the sample test results for some homes, but generally meets EPA Action Levels. Therefore the City recommends that flushing the tap water before drinking, and not using water from the hot water tap for cooking and drinking, is the best way to reduce the potential for lead exposure. The City continues to investigate for existing lead service pipes, and will replace them when discovered. Laboratory services are available from an independent firm, which will test for lead and copper. Interested residents should contact the water office in room 105 at City Hall. For sampling instructions call 617-796-1040.

	RANGE	90% VALUE	(TARGET) ACTION LEVEL
Lead	1.2-10.7 ppb	5.76 ppb	15 ppb
Copper	0.017-0.158	0.144 ppm	1.3 ppm

The Department of Public Works is committed to providing the best possible water quality to its customers. For more information contact the Public Works Utilities Division at 617-796-1640 or visit our web site at [www.newtonma.gov](http://www.newtonma.gov).

Thomas E. Daley, PE  
Commissioner of Public Works

Frederick W. Russell  
PE, Director of Utilities