



City of Newton

DEPARTMENT OF PUBLIC WORKS UTILITIES DIVISION

Public Water Supply
3207000

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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.

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 at high velocities, which scours the water mains.

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 proposing to spend approximately 4.0 million dollars per year for at least the next 10 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. Last year's construction included installation of new water mains on Clyde Street, Commonwealth Avenue, Lowell Avenue, Oak Street, Walnut Street, Watertown Street, Prescott Street, Prince Street, Pulsifer Street and Roosevelt Road.

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 is nearing completion of 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. To date approximately 24,760 of the City's 24,910 total meters have been replaced.

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.

Miscellaneous Upgrades

The City of Newton has completed a distribution system prioritization

planning project, in order to make better decisions on relining and replacement (R&R). Newton needs to integrate their existing tools for infrastructure management (GIS, hydraulic modeling, CMMS, etc.) with long-term, risk-based distribution planning software. This will provide better and more defensible answers to questions about the quantity and type (material, age, etc.) of pipe which should be replaced or rehabilitated now and in the future and the impact that different renewal scenarios will have on budgets and rates.

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.

Total Coliform

The City of Newton and MWRA test over 20 samples each week for total coliform. The EPA requires that no more than 5% of samples in a month may be positive. Newton had 1.0% positive results in July 2013. All follow-up samples were clear, and this was not a concern.

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 flushing the tap water before drinking, and not using water from the hot water tap for cooking and drinking, as the best ways 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.

September 2013 Lead & Copper Results			
	Range	90% Value	(Target) Action Level
Lead	0.237-10.60 ppb	2.11 ppb	15 ppb
Copper	7.4-5.99 ppb	70.8 ppb	1300 ppb

The Department of Public Works is committed to providing the best possible water quality to its customers. For more information including meetings, contact the Public Works Utilities Division at [617-796-1640](tel:6177961640) or visit our web site at www.newton.ma.gov.

David Turocy
Commissioner of Public Works