

**A MESSAGE FROM PUBLIC WORKS ON
DRINKING WATER**

A notice of noncompliance regarding the town's drinking water was published in local papers and mailed to citizens and businesses this week. The Department of Public Works maintains the water distribution system for the town including sampling and testing to ensure water quality standards are met. This notice is required by The Department of Environmental Protection since the Town operates a Public Water Supply System. This past July two of the test samples indicated the presence of coliform bacteria; subsequent test samples for the same locations taken the next day came back clear. It is important to understand that coliforms are bacteria that are naturally present in the environment and are monitored because their presence in the water is an indicator of potential issues within the water distribution system. The summer months are usually the time when coliform may appear since elevated water temperatures can facilitate bacteria growth. The coliform itself are generally not considered harmful and no harmful bacteria were identified in the sample tests. Therefore the water coming from the distribution system meets all standards set forth by DEP and is safe to drink.

Last summer the town had received numerous samples indicating coliform at various sites and began correcting the issues within the distribution system. The Department of Public Works, DEP, the Massachusetts Water Resource Authority which provides the water for the distribution system and the Town's water system and consulting engineers all worked together to alleviate the issue. Since that time an accelerated plan has been underway to significantly improve the infrastructure for the distribution system. The impact has been seen immediately as only two isolated samples have come back so far this summer indicating coliform whereas last year there were multiple scattered throughout the system. It is the expectation that these short term positive results will lend themselves to a long term solution at the conclusion of improvements next year.

There has been quite an abundance of work improving the distribution system since last year including cleaning/lining project, water tank cleaning and computer system upgrades. Over the past year the Town has been cleaning and relining the interior of water main lines that serve as the primary route from the Town's connection to the Lexington water system. This process includes scraping off deposits within the pipe. Once the interior walls of the water main are cleaned a cement lining is put in place which creates a new interior surface and prohibits future growth of rust. Work has been underway this summer on The Great Road and is expected to be concluded by the end of September. In addition a new water main pipe is being laid in the portion of The Great Road from Shawsheen Road to Lexington where the Town receives its water from the MWRA through Lexington. Engineering and planning is currently underway for next year's cleaning/lining project on Shawsheen Road and Page Road expected to start in the spring.

The Town has three water tanks used for storage, fire protection, and to maintain pressure throughout the system. The Pine Hill Road tank was cleaned and a mixer added that helps reduce water stratification. The Reeves Road tank which is half the size of the Pine Hill Road tank was also cleaned.

Work will begin during the last week of August on the Crosby Drive tank which includes adding a mixer. Exterior painting of the Crosby Water tank will be completed next year. The computer controlling the water system was reprogrammed to ensure that more water is moving in and out of the tanks on a daily basis to maintain fresh water.

Water flushing has been underway during the summer to maintain the water quality in the system. Certain areas of the distribution system have had running hydrants to ensure fresh water reaches the ends of the system. The town regularly flushes hydrants each spring and fall which helps remove any rust and/or loose sediments in the system.

Also during this past April the connection to the Town of Lexington delivering MWRA water to Bedford was shut off and the connection to the Town of Burlington system was opened. This allowed elevated levels of chlorine from the Town of Burlington system to act as a deterrent to bacteria growth in Bedford's water system. The Burlington water system is self-sustaining and uses straight chlorine for water disinfection whereas the MWRA utilizes a combination of chlorine and ammonia in its treatment system for the water provided to its member communities. This process lasted over four weeks and helped improve current conditions existing in the system by burning off any bio-film that may have developed over time in the pipes. The Town anticipates repeating this process in the spring of 2014.

The department has been working diligently over the past year to make improvements to the water distribution system and will continue to review any areas of concern to ensure a distribution system that provides clean water. The hard work over the past year combined with the efforts this year have shown significant results as testing has indicated minimal water problems as compared with last summer.

Please feel free to call the Department of Public Works should you have any concerns or questions: 781-275-7605.

Thank You
Roy E. Sorenson
Director of Public Works