

WATER UTILITIES DEPARTMENT
564 Nashua Street, Milford, NH 03055 (603)-249-0660
2014 Annual Report

Please remember to contact the Water Utilities Department at 249-0667 prior to scheduling in-ground excavation on your property, as the responsibility lies with each property owner to request water/sewer service markings. **DIGSAFE** does not automatically notify the Water Utilities Department.

During 2014, the **Water Department personnel** installed/upgraded 16 two inch and 12 one-and-a-half inch water meters. They repaired five water breaks. Inspections continued on a routine basis at the Brookview and Ledgewood booster stations. The goal to upgrade 900 feet of 4 inch water main pipe to 8 inch, provide temporary water services to 10 properties, and temporarily resurface Olive, Linden and a portion of Shepard Street was achieved on-time and under budget. No problems or issues were identified during the NH DES drinking water sanitary survey inspection. Water maps for the entire town were updated. The exterior of the Mayflower water storage tank was power washed, and the interior of the Dram Cup water storage tank has been rehabilitated. The Curtis Wells continue to serve Milford's water needs well. Water is purchased from Nashua's Pennichuck Water Works on an as-needed basis such as when the Curtis Well pumps should be relaxed and when water demand exceeds what can be safely pumped.

Throughout 2014, the **Collection System crew** inspected and cleaned approximately 53,000' of sewer main and inspected approximately 320 manholes in the east section of Milford. There are 2,683 sewer connections. Cure-in-place epoxy liners were installed: 300 feet along Souhegan Street's 8" clay pipe, originally installed in 1896, and 700 feet along Beech Street's 8" clay pipe originally installed in 1906. Sewer maps for the entire town were updated. Efficient operations and inspections continued on a weekly basis at the Patch Hill and Emerson Road pump stations as well as on a monthly basis at the siphon chambers at four river crossings. Odor control filters were installed on all siphon chamber vents. Sewer easements were maintained along Rt. 101, from the Water Utilities Department to the Wilton border. The collection system crew readjusted castings along Beech and Smith Streets in conjunction with the Water Department's water main replacement project, as well as provided assistance during the Olive Street water main replacement.

To reduce wastewater treatment expenses associated with treating "clean" water that erroneously enters the sanitary sewer system, the three man collection system staff continued to focus on proactively investigating potential sources of unsolicited discharges. Appropriate parties were notified and follow-up contact occurred to ensure the illicit connections had been disconnected. A ground water leak into a manhole on Patch Hill Lane was identified and repaired, resolving approximately 600,000 annual gallons of erroneous water.

The in-house **Wastewater Operations** staff responsibly coordinated and completed the following projects:

- Replaced the belt press sludge pump
- Replaced 22 foot catwalk at secondary clarifiers
- Sandblasted and painted the F-350 dump body
- Rebuilt 15 plug valves for the primary and secondary sludge pumps
- Rebuilt three gear reducers for the 4,500 gallon magnesium hydroxide system
- Installed a new manifold for four chemical totes (storing a total of 1,053 gallons)
- Removed/reinstalled two main pump motors after contractors rewired same for high efficiency
- Installed safety grab bars on three rooftops

2014 outsourced wastewater projects include:

- Replaced 53 tubes in boiler unit
- Replaced the variable frequency drive on main pump #2
- Replaced four SCADA control switches in secondary clarifiers
- Repaved the main entrance, parking areas and treatment facility roadways
- Replaced windows in the laboratory, cafeteria and operations room

For the EPA-mandated **Industrial Pretreatment Program**, the following was accomplished:

- Re-issued five industrial discharge permits
- Inspected seven industrial users
- Sampled wastewater discharges at five industrial users

Operational tours may be scheduled during regular business hours, 7:00 a.m. – 3:30 p.m., Monday through Friday by calling 249-0662.

Respectfully submitted,

David L. Boucher
Director

WATER DEPARTMENT

2014 ANNUAL SUMMARY OF OPERATIONS

Curtis Well	306,327,000 Gallons
Pennichuck Water	17,189,000 Gallons
Total Water Pumped	323,516,000 Gallons
Average Demand	886,345 Gallons/Day
Over 1 Million Gallons*	80 Days
Annual Rainfall	47.97 Inches

*Number of days that the Town pumped 1 million gallons or more of water.

WASTEWATER FACILITY

2014 ANNUAL SUMMARY OF OPERATIONS

Milford Flow Treated	435,349,194 Gallons
Wilton Flow Treated**	56,124,800 Gallons
Septage Treated	2,836,006 Gallons
Total Flow Treated	494,310,000 Gallons
Average Flow Treated	1,354,274 Gallons/Day
Design Flow	2,150,000 Gallons/Day
Daily Average Hydraulic Load	63 % of Design
Annual Rainfall	47.97 Inches

** Wilton contributed 11.35% of the avg. daily flow