2018

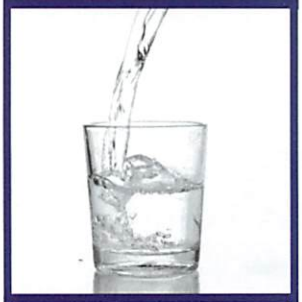
# WATERLINES

## A Bangor Water Publication

### Inside This Issue:



### Want to know more about your tap water?



Our Water Quality Report will tell you where your water comes from and how safe it is. See the insert for Bangor Water's Report for 2017.

## Investment in Infrastructure Continues

Bangor Water continues to increase its investment in infrastructure, with an ultimate goal of replacing two miles of pipe each year.

The two miles would result in a "sustainable water system," based on 200 miles of pipe in the ground with a life expectancy of 100 years.

Bangor Water's system dates back to 1875, and 60 miles of pipe are already more than 100 years old.

The choice of which pipes to replace involves many variables—the age and leak history of the water line, available funding, other planned utility work in the area for cost-sharing, critical facilities served, water quality, and fire hydrant flow rates.

Additional information on pages 2—3 provide an overview of planned and completed projects, which include both pipe replacement and other components of the water system.


**THE WORK BEGINS**—State Street at French Street, fall 2017. Plans for 2018 include work on lower State Street, French Street, and Exchange Street.

## Building Rates for Ongoing Infrastructure Needs

Our request for additional funds this year is another step in addressing infrastructure needs. If approved, a rate increase for all customers would take effect on July 1.

Part of our job is to balance the needs of an aging water system against sustainable rates for our customers. Even with the proposed increase, our water rates would be the 20th lowest out of 152 Maine water utilities— and that includes our planned 2018 infrastructure investment of just over $8 million dollars.

### New Water Rates for Residential Customers

**Your Water Bill if Calculated Monthly**

| | Current Cost | New Cost |
|---|---|---|
| Minimum Bill | $12.70 | $13.90 |
| Average Bill | $20.34 | $22.27 |

*Customers are billed quarterly*

**This is an increase of $1.20 per month (4¢ per day) for our minimum users,**

**and**

**$1.92 per month (6¢ per day) for our average residential users.**

# Upgrades of Facilities Among Items on Drawing Board

We're planning upgrades for two significant Bangor Water facilities.

**Water treatment:** Water drawn from Flood Pond in Otis is treated with ozone and chloramines and ultra-violet light for disinfection, soda ash for pH adjustment to reduce the corrosiveness of the water, and fluoride for dental health.

Our ozone plant—built in 1995—is now more than 20 years old, and we've begun design work to upgrade the facility. Newer equipment improves reliability and reduces operating and maintenance costs.

Our consulting engineer has helped us determine which type of equipment would be best for us, and once design work is complete, the project will go to bid. (A temporary disinfection system will be housed nearby while work is done. The system can be used in the future during maintenance work or in emergencies.)

**Perry Road Pump Station:** As part of upgrading service to Hampden Water District (our second largest customer after the PERC plant), the pump station at Perry Road will be overhauled to include new upsized piping, new flow meters, and installation of permanent back-up power for electrical outages.

**Park Street (behind Bangor City Hall):** Some projects are unexpected. After the City of Bangor reconstructed the Park Street retaining wall, this project now includes water (and City sewer and stormwater) replacement work before Park Street is resurfaced.

**WHAT YOU DON'T SEE—** Pipe and valves during installation on Hammond St. Part of the pipe is wrapped in plastic for protection against corrosive soils.

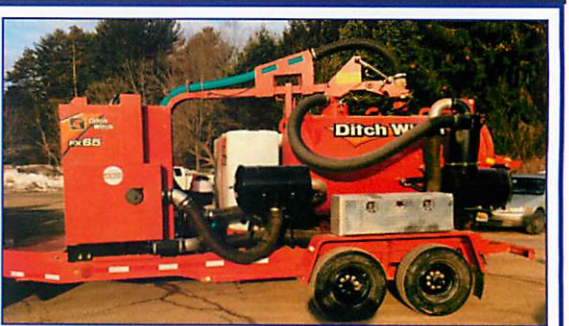
# Bangor Water's Anticipated 2018 Pipe Work

| WHERE | WHY | WHAT | ESTIMATE |
|---|---|---|---|
| State, Exchange, and French Streets | Joint project with City sewer/storm-water work and road reconstruction. | Replace c. 1903, 1910, 1912 pipe with 2470' of new pipe | $920,700 |
| Hammond Street (Union to Fifth Street) | Joint project with City sewer work. Area of two significant water leaks. | Replace c. 1915 8" pipe with 1100' of new 12" pipe | $425,000 |
| Union Street (Hammond to West Broadway) | Joint project with City sewer work. Area of significant water leaks. | Replace c. 1920 6" pipe with 1700' of new 12" pipe | $846,400 |
| Main Street (Dutton to Hampden town line) | Improve primary feed to Hampden. Road scheduled for repaving in 2020. | Replace c. 1910 6" and 8" pipe with 3600' of 16" pipe | $1,811,000 |

# Investment in New Technology Helps Reduce Repair Costs

Have you seen our vacuum "excavator" in your area?

This new machine is trailer-mounted, and allows us to excavate using a vacuum instead of the traditional "dig" or "open trench" method.



It's used for repairing various valves in our system, and we're able to repair twice as many valves in one day at one-tenth the cost. As a bonus, the excavation area for the repair is six times smaller, so less repaving is needed—further reducing the cost.

There are about 4,600 valves in the system, of which 238 have known problems—not surprising, given that more than 25 percent of the system is over 100 years old. And not all can be repaired without traditional digging, but the vacuum approach is a good place to start.

# Our Investment Goes Beyond Pipes and Hydrants

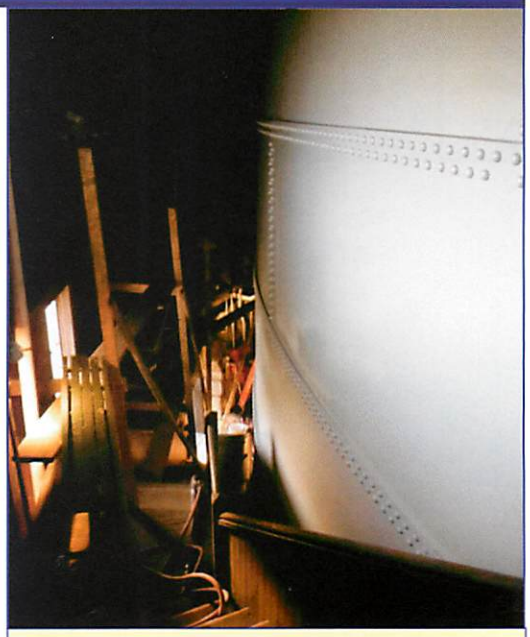
We invested in more than pipes and valves in 2017. For instance, work including painting took place at three of our standpipes.

- Thomas Hill Standpipe—the exterior of the metal tank (last painted in 2003) was repaired and repainted.
- Hermon Standpipe—bolts damaged by water seepage were repaired and sealed, and coating reapplied.
- Hammond Street Standpipe— the tank floor was repaired.

The two buildings at Floods Pond in Otis received some major attention.

- Butler Ozone Treatment Plant—the 20-year-old roof was replaced, including critical drainage work.
- Johnston Pump Station—the original doors and windows from 1950's construction were replaced. (Replacement of the heating system in 2018 will complete a multi-year major plant upgrade focusing on energy efficiency and system reliability.)

At our State Street facility, we worked to mitigate the effects of flooding in the lower levels of the Hawkes Building during heavy rain or snow melt. Exterior walls were sealed, underdrains were installed, and the area was landscaped to provide better flow directly to a catch basin.



**THOMAS HILL STANDPIPE**—scaffolding in place for repainting of metal tank.

# Bangor Water Marks Progress in 2017

| WHERE | WHAT | COST |
|---|---|---|
| Broadway (State to Cumberland) | Replaced 1650' of c. 1910 6" pipe with 12" line. Joint project ahead of MDOT and City of Bangor surface restoration | $641,000 |
| Hammond (Maine Ave and Odlin Road) | Replaced 2150' of c. 1903-1910 pipe with 12" and 16" pipe. Joint project ahead of MDOT and City of Bangor surface restoration | $667,000 |
| Hammond (State St bridge to Ohio St) | Replaced 1205' of c. 1875 and 1912 pipe. Joint project with City of Bangor sewer/stormwater | $524,000 |
| Columbia Street | Completed transfer of service lines from 6" 1927 line to 16" 1980's line already in place. This project was coordinated with City of Bangor, other utilities, and involved planned road reconstruction. | $192,000 |

## Thomas Hill Standpipe Tours

May 9 (Wed) 3—6 p.m.
July 25 (Wed) 4—8 p.m.
Oct. 10 (Wed) 3—6 p.m.
Dec. 7 (Fri) 12 noon to 3 p.m.

## Board of Trustees

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Meets 3rd Tuesday of each month at 3:45 p.m.

## It Pays to Plan Ahead

Last October's wind storm and resulting damages had many people rechecking their insurance policies. Likewise, our customers should check their policies regarding water pipes and water damage.

Will your insurance cover repairs to your portion of the exterior water line to your building? Are you covered for damages caused by broken water mains? Do you need additional "riders" on your policy for these items?

The time to check is NOW.

Incidentally the Floods Pond facilities were without electricity for six days following the storm. Fuel-powered generators allowed us to pump and treat water without missing a beat. Smaller portable generators supported facilities in town as needed.

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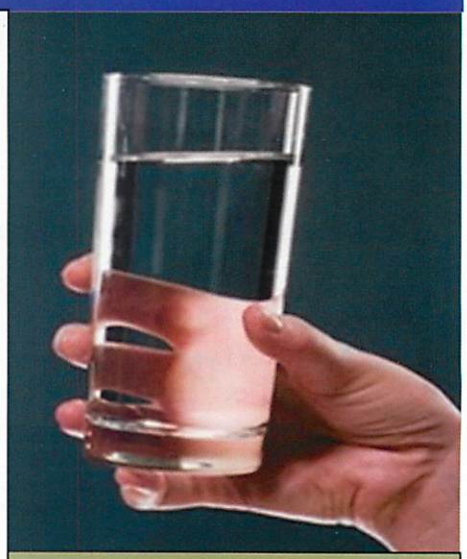
# Cost Comparison: Bottled Water vs. Bangor Tap Water

**1**
**Bottle**

How much water can you drink for

**$1.50?**

based on 16 oz



**3,600**
**Glasses**