

As voted by the Board of Trustees and in accordance with the notice of the meeting, the monthly Workshop Meeting of the Board of Trustees of the Portland Water District was held at the District, 225 Douglass Street, Portland, Maine on January 8, 2018. In attendance from staff were Messrs. Kane, Wallace, Firmin, Johnson, Bourque and Ms. Lewis, Demers and Katsiaficas.

All Trustees were present except Trustees Siviski and Beck.

President Lunt convened the meeting at 6:32 p.m.

1. Activities in Water Field.

James Wallace, Director of Water Services, provided an overview of the activities and annual programs performed by PWD staff to maintain transmission and distribution infrastructure.

Mr. Wallace began by describing the assets that staff must maintain on a regular basis. He provided information on where the transmission distribution employees spend their time and the tasks that they work on. Tasks include construction inspection, valve operation, seasonal mains and meters and other tasks. With respect to valves, 42% of the work is related to valve repair, 39% is related to operation of valves. With respect to water mains, 63% of the work is related to repairs, 37% related to project support and inspections.

The majority of work related to services is related to repair (93%). Mr. Wallace provided a general description as to how services are repaired. Trustee Cote asked about services that are raised 6-8 inches and if PWD sinks them. Mr. Wallace said that services are constantly moving, and that PWD does take care of sinking the services if the customer calls into the customer service department.

President Lunt asked if services were replaced in a main replacement project. Gordon Johnson said that services older than 5 years are generally replaced.

Trustee Garrison asked how many hydrant models PWD has. Mr. Wallace, after consulting with Ryan Bourque, said 7. Mr. Wallace said winter is not good for hydrants. Snow plows often hit them. The City does not pay for hydrants that they hit with a plow due to tort claim immunity statutes.

Trustee Libby asked if PWD puts flags on the hydrants. Mr. Wallace said yes, however if there is a lot of snow, the hydrant can be covered.

Seasonal mains are activated in April/May. Most communities have some. There are approximately 1,100 seasonal meters that are available.

The utility services group is active doing dig safes, construction inspections, hydrant inspections and meter services. Trustee Garrison asked how hydrants were inspected. Mr. Wallace explained the process of testing the hydrant, which includes operating the hydrant and pressure testing it. Checking hydrants is a year round effort. Public hydrants are checked twice a year. The color of the top of the hydrant tells the fire firefighters how many gallons a minute of flow can be expected from the hydrant. There are four different colors.

President Lunt asked about dechlorinating the water from the hydrant when it was tested. Mr. Wallace responded that PWD does not have to do it for the small amount required for the test.

Mr. Wallace then showed the Board a map indicating where the District has been flushing its water mains. The flushing program is a 3-year program.

Six hundred new meters were installed by PWD last year. This was considered a high number. Generally, PWD has 65 frozen meters per year. The customer pays the costs for a frozen meter. PWD will begin, in about 5 years, to plan to replace the ERTs that were installed between 2006-2008 in PWD's meter replacement project. The battery life at that time was expected to be 20 years.

Operations staff performs field asset checks as well.

2. Water Transmission Main Condition Assessment.

Ryan Bourque, Distribution System Supervisor, discussed the condition assessment performed on three of PWD's transmission mains during 2017.

Mr. Bourque explained that the District worked with Pure Technologies to perform the assessment. He explained that Sahara Technology was used, and provided a 3-minute video that explained how the Sahara assessment technology worked.

The first main assessed was on Cummings Road in South Portland/Scarborough. It was an area where PWD had experienced a significant leak. The pipe had a baseball size hole in it. The assessment found an 80-foot discrepancy between where the 16-inch main was actually located, and where PWD had records of where the main was located. The assessment found a possible build up on some joints, and increased turbidity, and possible sediment build up. There were no other leaks found in the pipe.

The second main was located on Winn Road. This was the area where Golf Traditions is located. Almost 3,300 feet of pipe was surveyed, using two insertions. No leaks or air pockets were found. The pipe was extremely clean. Staff has flushed that line for 4-6 weeks at one point, trying to flush out gravel and dirt that had been contaminating the golf course irrigation system. The assessment confirmed that the pipe is clean and was not contaminated. There was some build up around one of the butterfly valves.

The 30-inch cast iron pipe near Wards Hill was the last pipe to be assessed. PWD had experienced a leak on the pipe. The pipe is unlined cast iron. Over 18,000 feet of pipe was examined. The assessment showed a small amount of sediment and tuberculation. The assessment showed discrepancies in the location of the main versus where PWD thought the main was located in a couple of locations. This pipe took 6 days to assess.

Mr. Bourque reviewed the costs of the assessment, and provided a cost detail for the assessment. The total project cost was \$218,000 or about \$10.43 a foot for the pipe assessed.

Mr. Bourque reviewed the lessons learned by staff as a result of this project. There is \$100,000 in the 2018 budget to do main inspection; the pipes that will be assessed have not been chosen.

Trustee Grant asked if it would be beneficial to buy some of the assessment equipment for use by PWD. Mr. Bourque responded no, it would not be worthwhile.

Trustee Garrison pursued questions about testing of pipe and the technology used by the District.

3. Other Business

Ms. Lewis noted that she will tie up “loose ends” from last year’s meetings at the February workshop.

Ms. Lewis highlighted the Maine Water Utilities Association annual convention in February and invited the Trustees to attend.

4. Adjourn.

Meeting was adjourned at 7:45 p.m.

Submitted by,

Donna M. Katsiaficas
Clerk