

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 in the Nixon Training Center at the general offices of the District, 225 Douglass Street, Portland, Maine, on Monday, September 8, 2025. In attendance from staff were D. Kane, S. Firmin, J. Wallace, K. Tibbets, G. Pellerin, C. Poulin, M. Archibald, K. Jacobson, R. Bourque, R. Erickson, and D. Katsiaficas.

President Lunt convened the workshop meeting at 6:40 p.m.

1. Progressive Design Build Method

Greg Pellerin, Engineering and Asset Management Services Manager, provided an update on the progressive design-build method, which is being used for a project at the East End Wastewater Treatment Facility.

He explained that the approach strengthens collaboration between design and build contractors, streamlines the process, and offers financial benefits. Greg also addressed trustee questions regarding cost advantages and ways to measure the method's success.

Traditional design-bid-build methods present challenges with long equipment lead times, cost inaccuracies, and difficulties coordinating multiple interrelated projects while maintaining plant operations.

Progressive Design-Build offers a more collaborative approach by engaging the contractor, engineer, and owner from early design through construction. This allows for early equipment procurement, streamlined scheduling, improved cost certainty, and better operation coordination.

Staff emphasized that while design-bid-build will remain appropriate for smaller projects, Progressive Design-Build provides efficiency and value for the District's upcoming large-scale infrastructure needs.

A copy of the presentation is attached as part of the minutes.

2. Overview of Water Main Leak Response

Ryan Bourque, Distribution System Manager - Water, provided a detailed presentation on PWD's response to the August 26th Broadway water main break in South Portland. He walked the Trustees through the full timeline of events, beginning with the 4:30 a.m. notification and initial crew response, through excavation, identification of the break, and the multiple complications encountered, including secondary leaks in the same trench and a subsequent rupture farther up the line later that evening.

Ryan noted that the repair required nearly 24 hours of continuous response, with multiple crews rotating under the 16-hour work rule, assistance from contractors such as Shaw Brothers and Coastal Road Repair, and traffic support from South Portland Police and New England Traffic Control.

To provide context, he explained how PWD uses asset management tools to assess the likelihood of failure. Using maps provided by engineering staff, he showed how different pipe segments are categorized by risk, and why the Broadway segment—despite its age—had been considered lower risk due to its length and limited leak history.

Ryan highlighted how factors such as pipe length, vintage, and leak frequency can skew the risk ratings, and stressed that engineering staff use these tools alongside field experience to guide capital planning.

Ryan also emphasized the unpredictable nature of main breaks, explaining that while the Broadway segment was generally good pipe with low leak history, failures still occur due to various factors, including possible water hammer events, unauthorized hydrant use, or customer-side infrastructure issues. He provided examples of past events to illustrate these risks and described PWD's ongoing coordination with large water users and local fire departments to help minimize such occurrences.

The presentation also addressed the costs of the response. Ryan reported that PWD incurred approximately \$19,095 in direct labor, equipment, and materials, with an additional cost of \$149,751 for contractor support, traffic control, and paving restoration. There is an estimated loss of over seven million gallons of water.

He noted that while such events cannot be planned for in advance, PWD makes every effort to restore roads to city standards to reduce the likelihood of costly rework.

Finally, Ryan highlighted the role of public interaction during these events. While disruptions are unavoidable, he emphasized that crews remain on site until service is restored and that residents frequently express appreciation for the effort. Trustees were able to see images of the break, its impacts on nearby property, and the crews' work under challenging conditions.

President Lunt shared his gratitude for all the work our crews put into handling the situation.

A copy of the presentation is attached as part of the minutes.

3. Other Business

Scott Firmin, General Manager, let the Trustees know that there will be a brief presentation on the AMI meter project at the next meeting.

4. Adjourn

The meeting was adjourned at 7:51 p.m.

Submitted by,

Donna M. Katsiaficas

Donna M. Katsiaficas
Clerk