To: Mayor Ted Wheeler  
Commissioner Nick Fish  
Commissioner Amanda Fritz  
Commissioner Chloe Eudaly  
Commissioner Dan Saltzman  
Auditor Mary Hull Caballero

Re: Recommendations for the Decision on Water Treatment

Date: July 27, 2017

The Portland Utility Board (PUB) was created by the Portland City Council to serve as the citizen advisory board for the Portland Water Bureau and the Bureau of Environmental Services. In this capacity, we strongly recommend the City of Portland commit to complying with the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2) to treat our water for cryptosporidium as ordered by the Oregon Health Authority (OHA). We also urge the City to request an extension through December 31, 2017 from OHA which would allow the City more time to determine a treatment technology that best meets the needs of the city.

The PUB firmly believes that some form of water treatment is necessary, both to comply with federal requirements, protect public health, and create a resilient water supply system. However, the PUB is concerned that the City has not had sufficient time to deliberate on treatment options and fully engage the public in this deliberation and decision-making. While we understand that a response to OHA is due soon, we urge the City Council to advocate for more time to more thoroughly research all available options. At this time, with our incomplete information, the PUB is unanimous in our belief that water filtration and not UV treatment best meets the City's needs.

The PUB urges the Mayor and the Commissioners to:

**Comply with Federal Regulation.**

The PUB unanimously supports the City’s compliance with federal regulations for the public health and safety of the residents of Portland.
and the communities that purchase Portland water.

**Request More Time to Decide Treatment Technology.**
This is a complex and very costly decision for the residents of the City and the City should not be forced into a rushed process. The PUB feels strongly that the City must commit to treat its water, but requests an extension through the end of the year. The City must take the necessary time to gather and analyze the data to come to an informed decision on which treatment technology it will use.

Additional time would allow the City to:

- Conduct public outreach to residents about the significant health and financial implications of the long-term water quality standards specified by OHA. There were serious concerns raised by members of the PUB that the current decision schedule hasn’t allowed for adequate public engagement or education to provide customers with enough information to support one treatment technology over another.

  Specifically, the Board recommends the Water Bureau spend the requested time extension educating residents as to the types of chemicals or additives that would be used, how they may affect the current treatment regimes, and the potential health and environmental safety impacts of the different treatment technologies.

- Consult with its wholesale water customers to determine extent and timing of their share of costs.

- Evaluate how the treatment costs will affect low-income residents.

- Understand how existing bill discounts that the City currently offers would be impacted and determine how the programs could be changed to address affordability concerns.

- Evaluate and communicate the carbon footprints, emission levels, and energy needs of the treatment technology options.

- Identify how the technologies would fit within the existing Capital Improvement Plans of the Water Bureau as to timing, cost, and priority compared to other items currently in the plans and identify any necessary adjustments. The City needs to make a choice on what items it can afford in the near future and what items need to be delayed.

- Review in greater detail the engineering plans and projected costs of an Ultra Violet (UV) facility that were completed over five years ago, allowing for an accurate assessment of the full cost of this option.
• Begin preliminary engineering assessments for alternative technologies such as filtration. This will, again, allow for more accurate budgeting projections and rate assessments, as well result in more accurate comparison between UV and filtration options.

This time would also allow for more thoughtful investigation of the filtration option, its benefits, and ideally a more finely-tuned estimate of costs. While filtration is the standard treatment option for most water providers, its primacy is largely due to the water source used (e.g., locally filtration is used for municipalities pulling water from the Clackamas and Willamette as their primary source). These sources are exposed to human contaminants and agricultural run-off. Neither is present in the Bull Run. More time would allow the Water Bureau to more thoroughly evaluate these conditions and determine whether UV or filtration is the optimal long-term option and where the optimal location is for either solution.

• Assess how either treatment technology fits the Bureau’s resiliency plan. If system resiliency is one of the desired benefits, filtration may be the best option, but might be better served in another location.

• Refine the risk assessment of the treatment options given the significant health and cost implications of this decision.

• Assess the budget implications and feasibility of building a UV treatment in the short term but planning and saving for filtration in the future.

• Assess the life cycle costs of building a UV facility in the near term, and the cost of closing that facility when supplanted by another technology, e.g., filtration, in the future.

• Determine the savings associated with choosing filtration over UV, including saving related to use of groundwater if filtration is used.

• Assess possible intergenerational equity concerns of collecting and saving rate funds from current residents in the near term for another technology plant to be built in the future.

**Require More Analysis Prior to Major Decision Points and Engage City Residents.**
Given the complexity and budgetary impact of this decision, residents expect a more robust presentation of analysis that could include rate impact analysis, risk analysis, cost benefit analysis, an equity assessment, etc. at the beginning of consideration. Regardless of the chosen treatment option, there needs to be more frequent and more complete public engagement process outside of the PUB.
Protect Bull Run Watershed.
If Council decides to build a filtration plant, there will theoretically no longer be a need for such strong environmental protections in the Bull Run Watershed. The current City Council and Water Bureau leadership have expressed commitment to retaining these protections, but there is uncertainty with future leadership. The City Council and the Water Bureau should take steps to memorialize these protections permanently and pledge to lobby our Federal Delegation to ensure that the U.S. Forest Service’s management of its land in the watershed is aligned with these values.

Commit to Ongoing Monitoring and Engagement in Partnership with the PUB.
Due to the complexity and uncertainty of the treatment technology options before Council, there will need to be Council, PUB, and Community engagement throughout the analysis, research, and implementation phases to oversee the expenditures and monitor progress.

Set Expectation that Bureaus Will Communicate Early and Often with PUB.
For the PUB to continue be of value to the City Council, we must be included in future processes much sooner and have access to quicker and better information. Complex issues such as the Biogas Project, Water Quality, Cryptosporidium, and the Hydroelectric Power contracts have all come to PUB within a couple of months at best of going to the Council for action, often it seems as a fait accompli. Given that we are a Board of volunteers and typically meet once a month, that is insufficient time to do adequate analysis of the information. At times, we have not received requested information until the day of our meetings, making it difficult, at best, to provide meaningful feedback. The Council created a board of willing and able volunteers to help vet difficult policy issues but we must be given adequate opportunity to deliberate in order to provide valuable input and aid Council’s decision-making.

Use a Value-Based Approach to Reach a Decision on Treatment Technology.
During deliberations, the board identified the following values that it recommends be used to decide on treatment technology.

First and foremost, Council’s decision should be made with the safety of the residents, protection of public health, and compliance with federal regulations in mind.

Second, the decision should be made with a long-term view of the needs of the City including long-term reliability and supply resiliency.

Third, the decision should balance long-term benefits relative to cost and the chosen technology should be implemented at a reasonable cost to customers with known and predictable rate impacts.

Fourth, with full knowledge that this decision will need to be made with imperfect and limited information, all available time should be taken to minimize uncertainty and risk.
of the technologies.

Fifth, this decision must be made in partnership with the residents of Portland and with a commitment to full engagement throughout the process.

Finally, the decision should demonstrate a commitment to watershed health and protection which is the best defense for ensuring water quality.

In closing, the PUB feels there is a compelling rationale to support a request to OHA for an extension until December 31, 2017, in order for the City to decide on a treatment technology to maintain compliance with LT2 regulations. The PUB also strongly feels it is in the interest of the City to take time to make the best decision. Should the extension be granted, the PUB would continue to be involved in further deliberations and public engagement.

However, if OHA were to deny the request for an extension, the PUB voted unanimously to recommend the City build a filtration plant based on the values it believes should guide this decision. A filtration plant would protect the health and public safety of the residents of Portland while meeting our regulatory obligations. Given the information currently available, the PUB believes a filtration plant is the best option to provide long-term reliability and system resiliency and offers the most long-term benefits relative to cost. The PUB will monitor the implementation of such a compliance option throughout the process to ensure that it is done at the most reasonable cost possible for customers and with known and predictable utility rates.