

## Portland Utility Board

October 17, 2019, 11:00am  
1900 SW Fourth Avenue, 1900 Building, 2500C  
Subcommittee meeting: Bull Run Filtration Project

### **Attendees:**

*PUB Members:*

- Ana Brophy, ex-officio
- Brian Laurent, ex-officio
- Dory Robinson, co-chair
- Heidi Bullock, co-chair
- Kaliska Day (arrived ~11:05)
- Karen Y. Spencer
- Karen Williams (arrived ~11:05)
- Mia Sabanovic
- Micah Meskel
- Robert Martineau
- Sara Petrocine, ex-officio (arrived ~11:05)
- Ted Labbe (arrived ~11:30am)

### *Absent:*

Gabriela Saldaña-López\*

\*Notice of absence provided prior to meeting

### *Staff:*

Commissioner Fritz, Commissioner-in-Charge of the Portland Water Bureau  
Bonita Oswald, Senior Communications Specialist, Portland Water Bureau  
Amy Archer-Masters, Portland Utility Board Analyst, City Budget Office  
Cecelia Huynh, Director of Finance and Support Services, Portland Water Bureau  
Cristina Nieves, Senior Policy Advisor, Commissioner Fritz's Office  
Eliza Lindsay, Portland Utility Board Coordinator, City Budget Office  
Gabriel Solmer, Deputy Director, Portland Water Bureau  
Jaymee Cuti, Public Information Officer, Portland Water Bureau  
Jeff Winner, Capital Improvement Program Planning Supervisor, Portland Water Bureau  
Michael Stuhr, Director of Portland Water Bureau  
Yung Ouyang, Senior Financial Analyst, City Budget Office  
Jon Holland, Program Manager, Brown and Caldwell

### *Public:*

In total there were about 14 members of the public in attendance. Those who signed in by name include:

Carol Cushman, League of Women Voters

Dean Walter, Citizens for Peaceful Rural Living  
Dee White  
Doug Stilton, Citizens for Peaceful Rural Living  
Pat Meyer, Citizens for Peaceful Rural Living  
Robin Castro, PSU student

### **Synopsis, Action Items, Decisions**

In these notes the acronym, PUB, stands for the Portland Utility Board; BES for the Bureau of Environmental Services, and PWB for the Portland Water Bureau.

The subcommittee continued the discussion of the Bull Run Filtration Project begun at the October 1 full PUB meeting. Commissioner Fritz, the Commissioner-in-Charge of the PWB, joined the discussion for the first half of the meeting. No decisions were made, other than to continue the discussion at the November 5<sup>th</sup>, 2019 full PUB meeting.

**ACTION ITEM** PUB staff to get link to video of components of filtration plant.

**ACTION ITEM** PWB to share further information on the low-income assistance program and how it connects with or might be impacted by the filtration project.

**ACTION ITEM** Draft Resolution to PUB as soon as it is available. Hopefully before the November 5<sup>th</sup> meeting.

**ACTION ITEM** PUB staff to share some basic information around the original PUB decision to go with filtration.

#### **I. Call to Order**

The co-chair called the meeting to order at approximately 11:00am.

#### **II. Public Comment**

The co-chair invited public comment, noting a limit of 3 minutes per person and a total of 15 minutes of public comment during the meeting. She also explained that prior to any vote there would be an opportunity for public comment.

Verbal comments covered a variety of concerns about the impacts of the filtration project. Those commenting include: Paul Willis, Brent Leathers, and Lauren Courter.

Staff circulated written comment which had been submitted for the meeting. The written comment is included in Addendum A.

#### **III. Disclosure of Communications**

Rob attended both meetings of the Bull Run Filtration Site Advisory Group at Sandy High School.

Ana attended the most recent meeting of the Bull Run Filtration Site Advisory Group at Sandy High School.

Micah attended the first meeting of the Bull Run Filtration Site Advisory Group at Sandy High School and had conversations with Bureau of Planning and Sustainability and Urban Forestry on unrelated matters.

Brian had conversation with BES Portland Harbor Team.

Dory and Heidi met with Commissioner Fish on October 3 to get to know each other, to communicate PUB goals and deliverables and to establish a transparent relationship with the Commissioner. On behalf of PUB they also requested written response from Council when PUB makes written communication with Council.

#### **IV. Discussion with Commissioner Fritz on the Bull Run Filtration Project**

##### **Introductory remarks**

Commissioner Fritz provided some background regarding the Bull Run Filtration Project. PWB has a mandate to get the treatment plant operable by 2028. Council chose filtration because it has benefits beyond treating cryptosporidium while ultraviolet has none. There are decisions that still need to be made, e.g., about the different components to include, who designs it, how it is designed, where the different components are located. Because it has not been designed yet, cost elements are still unknown.

The Commissioner shared that the mood of the site advisory group was: if this has to be done, do it all at once, so you don't have to come back. They are developing a good neighbor agreement.

PWB was invited to apply for a low interest, federally backed loan through the Water Infrastructure and Innovation Act (WIFIA). They will know in the next 9-12 months if they will receive the loan. It will make a difference to rate payers because PWB will be able to spread the payback over a longer period.

The Commissioner asked for PUB's thoughts and input on balancing the values that are the guiding this work. She said she didn't need unanimous consensus; just PUB's thoughts.

##### **Questions and discussion with Commissioner Fritz**

A variety of topics were covered and include:

##### **WIFIA loan and other methods of offsetting costs**

Commissioner Fritz explained that the WIFIA loan is not a grant. It is a low interest loan for up to 49% of the total project cost.

PWB has started the conversation of where can the bureau do things differently, more efficiently. Commissioner Fritz plans to have a conversation with the Mayor about if they get the WIFIA loan can it be used to meet the Mayor's budget guidelines since it will lower the impact to the rate payers.

##### **Ultraviolet, Ozone, and Filtration**

- **Ultraviolet and Filtration**

Commissioner Fritz explained that she felt paying 100 million for ultraviolet is a waste when ultraviolet doesn't do anything but treat for cryptosporidium and there is not much of a cryptosporidium issue, given Bull Run protections. Filtration provides multiple benefits. She said at the time of the original 2017 decision there was already a significant estimated cost difference between ultraviolet (~100 million) and filtration (~500 million). She toured a plant in Bend where the plant cost about 32 million and the pipes cost about 40 million. It is not

that unusual to have that price difference/breakdown. She will be having conversations with other Commissioners on if the cost is some value X (possible values for x mentioned were a billion and double above what was before) will that change their minds.

The Director of PWB added that filtration is what most folks use because it is more flexible and responsive to evolving regulations from the EPA. If the EPA passes new regulations, ultraviolet won't be able to meet them. The City would have poured the money to build ultraviolet treatment down the drain.

- **Ozone – How did ozone end up being considered, then set aside, and now back in the options? What are its benefits?**

The Director of PWB said that ozone handles cryptosporidium and moderates some organics but not much else. It also has a challenge with cold water.

The Brown and Caldwell program manager explained that ozone is good at oxidizing organics and is insurance if algal toxins become an issue. The everyday benefits of ozone are that it improves the ability to remove more turbidity in the filters and it makes organics more bio-available and degradable so there is a lesser amount to disinfect. Its qualitative day-to-day benefit is to improve the quality of the water. Ozone comes with a cost. It takes energy to produce ozone. It also saves some costs in other elements of the plant, e.g., it extends the life of the filter media and helps it to work better. It also has some (complicated) positive impacts in water chemistry in that ozone makes the biostability in the distribution system better.

**Now that there is more data on the cost of piping for this is PWB going to look at other locations for cost considerations?**

Commissioner Fritz said they are not considering other locations — to do so would cause them to miss their deadline. There are multiple reasons to go with this site.

**Minimizing impact to neighbors**

It was mentioned that it seems hard to minimize impacts to neighbors. The Commissioner's staff said they are working on a good neighbor agreement and there are lots of ways to minimize impact.

**Resiliency**

There were general questions and concern around resiliency.

Commissioner Fritz said the goal is to have a resilient system throughout which is why they are spending a lot of money for the pipe under the Willamette and the Washington Park reservoir.

It was explained that two pipes build in resiliency, especially if there is a break in summer in one of the pipes because during the summer groundwater cannot meet the demand.

There was concern about the value of a second pipe, if the rest of the infrastructure is broken.

A PUB member asked how does one balance cost effectiveness of building to be 80% redundant and be able to meet basic water needs with a margin of safety versus designing to be fully redundant and meet all peak needs?

The Director of PWB spoke on resiliency. He said, "how much is enough", is a great question. He said they are building the plant for the worst expected earthquake in the watershed.

PWB knows pipes will break but don't know where. With a gravity fed system you put it back together starting from the top (east in our case) and work your way downhill (west). But you need to

have water to push through the system. Thus, PWB is building the plant with as much resilience as possible. It is a moral obligation.

PWB is seismically hardening the backbone of the system. The most important parts are custom-built, not sitting on a shelf. Just as with Hurricane Katrina, if an event happens, all impacted communities will be competing to order these custom-built parts. If we build an earthquake resilient plant this is one less thing to worry about. And, PWB can continue replacing the infrastructure as they have been around the city.

**Will this project bump resiliency-related projects downstream from the plant off the list?**

PUB member said likely some projects will be delayed, especially given the Mayor's budget directives.

The Director of PWB added that every year, given the budget, there might be a delay. Some things probably will be delayed. Hopefully, we're smart enough not to delay things like the big pipe. All the choices are bad, we have to make the less bad choices.

**What happens if you don't meet the mandate given by Oregon Health Authority (OHA) and EPA?**

Commissioner Fritz said OHA would take over the water system.

**Wholesale customers**

- **How does this project impact wholesale customers? Are wholesale customers leaving?**

PWB explained that under the current contracts, wholesale customers will start paying for the use of the new plant once it is completed. The contracts expire in July 2021 and at that time they can continue with PWB or give 5 years notice. PWB has understood that wholesale customers want a different contract going forward. PWB expects all of this to be part of the contract conversation.

Like Lake Oswego, Tualatin Valley Water District is leaving PWB but wants to keep PWB as a backup. PWB is not aware of others planning to leave. There are no wholesale customers signing up as of yet.

- **Is there anything in the design that makes it appealing to wholesale customers that would attract them and allow the cost burden to be shared more broadly?**

The Director of PWB said that in the area there is nothing comparable to PWB. Portland is a city of ~650,000 and PWB provides to about one million. For many of them there isn't an alternative water source.

**Discussion of the boil water study**

The boil water study only looked at impact within City of Portland limits. The impact would be much farther reaching given PWB's customer base. A PUB member mentioned that it seems in terms of economic costs it would not take very many events before the increased costs of building the filtration plant/system were met.

The Director of PWB mentioned that it is much more expensive to wait for an emergency/disaster to build/fix than to build now. In emergency circles the numbers floated used to be something like 6 to 1 now they are something like 9 to 1.

**V. Continued Discussion with PWB staff and PUB**

## **Contract design and potential Council Resolution**

The Deputy Director of PWB explained that they are discussing whether it would be helpful to bring a forward a Resolution at the same time as the design contract. This would be in early November. A Resolution would allow Council to vote on where they are at. It would also be an opportunity for Council to take in PUB's feedback. Drafts of the Resolution will be shared with the PUB.

## **Discussion amongst PUB of where they are at**

- A more targeted conversation rather than blending the different facets/topics could be beneficial.
- Some folks leaning to full implementation; some for full implementation but not sure about two pipes.
- Others shared that they are not in a place to make a decision yet.
- Others shared that with the new information, they are stuck at the four foundational decisions again and curious if others are also interested in stepping back.
- It was noted that in some sense, it is always a phased approach, it's just if we're planning for additional phases now. Even the full implementation does not ensure there is water in a big event disaster.
- Others expressed that they did not feel qualified to pick an option because they are not an engineer. They could see communicating expectations the PUB has for the project and things for PWB to consider, e.g., giving recommendations on things like mitigation measures, the good neighbor agreement, including check-points in the project, things to consider/value, etc.
- It was noted that a lot of costs in the construction industry are coming in 20-30% above estimates. There are ways to manage that through design and check-points throughout process to refine costs and consider where you are at in terms of initial decisions.
- A PUB member shared that they liked the idea of not having to write a letter that says PUB recommends option a, b, or c.

## **Additional topics discussed**

### **Pipes**

There were several comments about two pipes versus one and how to justify two pipes when there is another source of water.

PWB staff and contractor clarified that the cost of the pipes is not just whether two or one, but also their length. Replacing aging conduit adds resiliency because you are replacing aging pipe with seismically hardened pipe, but because the pipes are longer, it is more expensive.

They also explained that the two pipes would have independent alignments/different paths, for seismic resiliency.

### **Is there a reciprocity agreement between water jurisdictions? Can we get water from other jurisdictions?**

PWB staff said currently there is not an agreement in place.

A PUB member mentioned that an earthquake is going to impact everyone. A reciprocity agreement won't help with that. A reciprocity agreement will help if you have to shut the plant for a day and so for those reasons a reciprocity agreement should be negotiated.

### **Foundational Decisions**

PUB members stated there doesn't seem to be an opportunity to weigh in on type, location, or capacity, but one foundational decision that may still be open is the decision to go with a CMGC (Construction Manager General Contractor) method. The previous board was comfortable with that, but we could weigh in.

The Commissioner's staff clarified that the Commissioner is not having conversations with other Commissioners regarding the four foundational decisions. They have already been made. The conversations are just about the options within the spectrum.

PUB member said the PUB made an informed decision last time to go with full filtration. Are there other changes or triggers, besides cost estimates, since we made the original decision? If PUB backs away from the PUB's original decisions, PUB needs to explain why.

### **Concerns about affordability/impacts to ratepayers**

PUB member mentioned that the PUB has not focused much on the value of affordability and cost/impact to ratepayers and want to make sure the PUB does get to this. Others concurred.

PUB member mentioned that the bureau has mechanisms to help people and PUB could recommend work to expand the reach of low-income assistance programs.

**ACTION ITEM** PWB to share further information on the low-income assistance program and how it connects with or might be impacted by the filtration project.

### **PUB Input Timeline and Council Resolution**

PWB staff explained that Council will only be voting on the design contract on November 13<sup>th</sup>, not the options. A Resolution would allow Council to give the bureau some direction on what to consider and constraints. PUB can give input/direction with the Resolution. PUB input could talk about options or expectations. It would be appropriate to give feedback on things like transparency, outreach, when budget updates should be made. PUB can also give feedback to Council and the bureau at any time. The designer is likely to start in January so input then is another opportunity. There will be many opportunities to weigh in as this goes forward.

PUB staff said the Resolution may include some decision points from Council. It is not the only opportunity to give input, but if PUB decides to respond to the Resolution, then the basic decisions need to be made at the November 5<sup>th</sup> meeting.

PUB staff requested that if PUB members have thoughts about what they would want the recommendation to include send that to PUB staff ahead of time, so staff can start collating that information for the next meeting.

**ACTION ITEM** Draft Resolution to PUB as soon as it is available. Hopefully before the November 5<sup>th</sup> meeting.

**ACTION ITEM** PUB staff to share some basic information around the original PUB decision to go with filtration.

### **VI. Wrap-up and next meeting**

It was suggested that some work ahead of time on the topics would help with the next meeting.

Karen Y Spencer volunteered to work with PUB staff to help prep for the meeting.

The next full PUB meeting will continue the discussion of the Bull Run Filtration Project.

Tuesday, November 5<sup>th</sup>, 2019, 3:30pm -6:30pm, 1900 SW 4<sup>th</sup> Avenue, Room 2500C

The meeting adjourned at approximately 1:10pm.

## Addendum A: Public Comment

Addendum A includes:

- Written comments from Ian and Lauren Courter to accompany verbal testimony given by Lauren Courter.
- Written comments from Amanda Rolen, emailed to PUB staff to submit to PUB.

Note: Individual comments are separated by a blank page.



October 17, 2019

Voting members of the Portland Utility Board,

It is now apparent that PWB has been using the OHA compliance schedule for *Cryptosporidium* treatment as a means to push a filtration facility that has another purpose. We were led to believe there is a human health issue that needs to be addressed and federal rule compliance requirements. However, according to Commissioner Amanda Fritz, the primary purpose of the proposed filtration facility is to address concerns about turbidity. Commissioner Fritz said as much at Sandy High School on October 3, 2019 and then again on October 14, 2019 during a KATU news investigation. Phone calls to OHA also corroborate Portland Water Bureau's agenda. Therefore, most of the expense of this facility (>90%) is earmarked to address an issue unrelated to *Cryptosporidium*. I find this type of dishonesty with the public very concerning. Turbidity is not an eminent threat to Portland's water supply and good forest management would be a much more cost-effective means of protecting Bull Run Reservoir from a large catastrophic fire.

Furthermore, because the proposed filtration facility is not necessary to address *Cryptosporidium*, there is no public health impetus to expedite and move forward with hasty design and building of this plant. Doing so will likely result in large over-expenditures and poor design/construction. For example, haste on the part of PWB has led to selection of a building site that will cost approximately twice as much as all other alternatives due to the need to redirect pipelines. Please consider the costs ratepayers you will be burdened with. I believe that the PUB and City Council should reevaluate site location and treatment facility options in light of the new cost estimates for a filtration plant at the Carpenter Lane property. Finally, if the most urgent need is to comply with federal drinking water rules, UV treatment is a much less expensive option with a smaller building footprint and more prudent building site options (e.g. headworks or Lusted Hill).

Respectfully,

Ian and Lauren Courter  
503-421-8459

Treatment for the purposes of *Cryptosporidium* and other contaminants

	Carpenter Ln. (now)	Lusted Hill (postpone)	UV at Headworks
Filtration + Ozonation Plant	\$ 500M	\$ 500M	--
UV	--	--	\$ 105M
Pipes + Conduit	\$ 350M – 800M	?	
Eminent Domain, Purchase of additional easements	?	?	--
Land Purchasing	\$ 800K <sup>a</sup>	?	--
Design <sup>b</sup>	\$ 16M	\$ 16M	\$ 16M <sup>c</sup>
EPA Fines	\$ 0 <sup>d</sup>	\$ 1.1M <sup>e</sup>	--
<b>TOTAL</b>	<b>\$ 867 - 1.316B</b>	<b>\$ 517M</b>	<b>\$ 105M</b>

<sup>a</sup> To-date

<sup>b</sup> Assumption: \$16M, based on UV design. M. Stuhr stated the design has yet to be “on board” with the budget (September 2019 presentation to City Council)

<sup>c</sup> UV design plans completed

<sup>d</sup> Assumption: Filtration plant is fully operational in 2027

<sup>e</sup> Assume 3 years to get through EFU designation land use with EPA fine of \$1,000 per day for every day beyond 2027.



Hello, my name is Amanda Rolan. My property and home, is 850ft from the proposed Portland Water Treatment Facility located in Boring OR.

As a citizen directly affected by your decisions, I am here today to tell you that I foresee many harmful and negative impacts on the local community and all of Portland Water Customers, rate payers and you the board.

In case you haven't been out to the proposed site. The area surrounding it is rural. Even the land where the plant would go, is leased out a farm, and nursery today. Some of the families in Boring have lived there for decades. We all choose to live there to be away from the city. Rural life is not like city life. There are no sidewalks, or streetlights, our roads don't even have painted lines. The traffic is minimal, and includes horses and tractors. It is serenely quiet. The only sirens we hear are for a rare fire or ambulance. When we sit outside at night, we hear frogs, crickets, and sometimes occasional laughter of a faraway gathering by the fire in our backyard. Star gazing is at it's best out there. I am pretty sure you can see the whole galaxy from my backyard..... During a question & answer session the PWB put on, I asked what they were going to do to minimize the impact on my rural community. Including the farm animals and nurseries. They only stated they had not thought about this sort of impact and would need to look into it, and get back with us. Please understand, the construction process alone, not including the tremendous increase in traffic and the noise will be unbearable in this rural community. Not to mention the impact of putting a guarded and lighted treatment plant in the middle of a farm. The PWB intention is to use hazardous chemicals at this facility. Possibly Gaseous Chlorine, sodium hydroxide and ammonia are on possibility list. Now imagine this same rural community I described, and add schools, and daycares right next to the proposed location. What if there is a spill? Or an explosion from the hazardous chemicals. I don't even want to think about the consequences of that.

The first I had heard about the project was this year in June by neighbors in the community. This was after the initial Council Meeting in 2017, when the members approved the funding at \$350-\$500 Million. A rate cost increase to it's customers estimated at around 20%. In September of this year, PWB told Council Members that they did not include the cost of pipes in their initial estimate. The new estimate would now be \$850 million, up to potentially 1.25 Billion..... IS that a typo? That is a 70% increase. There were numerous opportunities for the planners at PWB to disclose this information. Yet they waited until 2 years later to do so. How do you trust anything they are saying to you? The financial impact to customers and citizens is not known as of yet. Once you consider removing some of the wholesale customers (City of Troutdale, Sandy, and Gresham) from the cost increase prediction, the amount to rate payers has to be more than what is already projected. What do you think each individual's rate will increase to then? The financial impact becomes a huge burden on each and every rate and tax payer. Many customers already struggle to pay their water bills now. The majority of them do not qualify for financial assistance because they do not meet the minimum criteria. How are you able justify this gross financial estimate when there are other options? What about Lusted Hill? Too small they say? What about the PWB purchase of property right next to it? This location would not require as much piping-and there is already a facility at this location. So another facility would not need to be built. So many options...what about UV solution to kill the parasites? This option was already partially paid for....Oh yes, the PWB told you this was not the most cost effective. The same planners who did not include the cost pipes to deliver the water to and from in their first cost proposal. You should just trust them right?

I appreciate your time, and hope you consider not approving the PWB newly proposed budget for the facility to be placed in my rural community.