File # T3-2022-16220 Comments
8/3/23
Cottrell CPO
cottrellcpo@gmail.com

To Whom it May Concern:

We at Cottrell CPO and Pleasant Home Community Association wish to rebut and provide clarifying information for the following two statements in the PWB Treatment Plant record. Bolding is added for emphasis:

1)

Exhibit H.3 Pre-Hearing Statement by the Applicant, Page 10:

*"Given the **essential nature of this project for protecting the safety of our water supply and our regional economy,** the Water Bureau asks that you take the feedback from the community and convert it to appropriate conditions of approval to the extent you believe necessary to meet approval criteria"*

2)

Portland Water Bureau Treatment Plant Hearing Recording (June 30, 2023), 4:57:55
Quote from Hearings Officer Alan Rappleyea:

*"I want to thank the applicant for their professional and excellent work on this. It is an enormous project and I recognize this is an important issue for the million people who drink City of Portland water, **it is not something that the City of Portland wanted to do it was something that was forced upon them**. **And I understand some of the locational issues associated with the water coming from Bull Run."***

We will be rebutting and clarifying specifically that:

1. the treatment plant was "forced upon" the City of Portland

2. the treatment plant is “essential” to the safety of Portland’s public water supply

3. “locational issues” dictated that a treatment plant be placed at the Carpenter Lane site under consideration.

———-

1. The treatment plant was not “forced upon” the City of Portland. While it is true that the city is legally required to treat cryptosporidium, it has actively chosen filtration as its treatment method, leading stakeholders to believe it is the only method they can use.

It is a fact that the Environmental Protection Agency (EPA) requires cryptosporidium (crypto) to be treated in drinking water supplies. According to the EPA, there are at least three methods for disinfection and removal of cryptosporidium - ozonation, UV, and filtration.[1]

The City of Portland / PWB as early as 2004 was actively attempting to avoid treating for crypto at all, as the Bull Run water source was relatively pure despite some detection of crypto. In 2012, the City requested and was granted a variance to not treat for crypto by the Oregon Health Authority (OHA) who is acting as an administrator for the EPA rule. The variance was intended to last until 2022 but was terminated by OHA in 2017 after crypto was detected again.

PWB actively weighed different methods for treating for crypto:

- In 2011, PWB designed a low-cost UV treatment plant that met the federal requirement to treat for crypto.

- The all-volunteer Portland Utility Board in a July 27, 2017 letter (Appendix A) was weighing filtration vs. UV and was asking for more time to make a decision on treatment options.

In response to the 2017 variance termination, PWB and OHA entered into a bilateral agreement (BCA) in December 2018, dismissing the UV design and choosing filtration as the treatment method.

It is important to note that the bilateral agreement between PWB and OHA can be modified at any time now or in the future, and another treatment method for crypto can be chosen to meet the EPA requirement:

Kari Salis, Technical Manager for OHA Drinking Water Services stated in an email to Lori McFarlane (Appendix B) *"You are correct that EPA does not specifically require filtration…As for modifying the BCA, since the agreement is bi-lateral, if both parties agree to modifications, the BCA can be modified..."*

In other words, the filtration plant was not "forced upon" the PWB, as Mr. Rappleyea's quote suggests. It was an active choice made in partnership with OHA in 2018, and can be modified at any time.

In addition, PWB officials continuously lead the public and city of Portland officials to believe that the filtration plant itself is "federally mandated".

For example, PWB director Gabriel Solmer in a 3/14/23 Portland Tribune article states, "Portland Water Bureau has been actively engaging with the community…since the inception of the **federally mandated filtration project**."[2] (bolding added for emphasis)

In another example, On May 24, 2023, at a Portland City Council meeting, Solmer again seemed to suggest that filtration itself is required.[3] Here is a transcript:

Commissioner Mapps: "I think one of the questions that is out there that it would be helpful to have a clear answer to… Is it possible for the Water Bureau to get out of building this filtration plant, or are the feds making us do this?"

Director Solmer: "The very short and very direct answer is we have to do this, absolutely."

To be clear, the filtration project is not "federally mandated" as Solmer is saying in the Tribune article. Neither are the "feds making" the city build it as Solmer stated to Commissioner Mapps. The only federal mandate is to treat crypto. Crypto can be treated with alternate methods, such as UV. OHA and PWB can agree at any moment to meet the federal requirement with a different method. No one is "forcing" the PWB to specifically build a filtration plant.

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2. The treatment plant is not "essential" to the safety of Portland's public water supply, as PWB's preheating statement states.

Since the detection of crypto in 2004, despite a vigorous testing/reporting program, availability of Bull Run water has continued without interruption, boil orders, or reported illness for almost 20 years.

In addition, Portland has an ample and long-tested backup water source in the Columbia South Shore Well Field (CSSWF).

David Peters, program director for Bull Run filtration improvements with the Portland Water Bureau, stated in a 7/12/23 interview with KGW 8 that *"Filtration allows us to provide a greater level of resiliency in our water, to protect us now and into the future from things like turbidity events. When we have rain storms and we get mud into the water, we'll be able to take that out, whereas now we might have to turn our system off."* [4]

In fact, as documented on PWB's webpage "When Groundwater has been used", the CSSWF already amply stepped in to provide for all of PWB customers' water needs in turbidity events on 11/5/22, 2/23/12, 1/21/12, 1/16/11, 11/13/08, 11/7/06, 1/29/04, 11/25/99, 1/28/98, 2/7/96, and 2/25/86.[5]

In addition, turbidity is listed on this same webpage as one of the three "common reasons we use groundwater".

In other words, there has been no need to "turn" the "system off" as Mr. Peters states, in the events of turbidity over the last 35+ years.

To sum up, the treatment plant is not "essential" to the "safety" of Portland's public water supply. Despite its presence for 20 years, crypto has caused no safety concerns for Portland's customers, and the CSSWF is a 35 year time-tested, ample water source as a backup in turbidity events.

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3. PWB selected the Carpenter lane site currently in question only partially based on "locational issues". Political considerations played as great of a role. Powell Butte met all the technical requirements and was initially the site selected, but PWB's fear of delays due to land use battles caused it to move on to Carpenter Lane.

Furthermore, the costly filtration project has caused PWB to lose the overwhelming majority of East County customers, making East county less of a fit for a plant that will not serve surrounding residents.

A 2018 memorandum[6] (Appendix C) that reported on the evaluation process for 6 potential sites noted that Powell Butte (owned by the PWB) had initially been recommended in 2001 as the future filtration plant site due to its “suitable elevation, location within the urban growth boundary, greater opportunities for public education and community recreation facilities and the presence of an existing reservoir- thought to offer significant cost savings.”

In fact, Powell Butte met all the criteria: hydraulic grade line factors, proximity, tax lot size, slopes and geologic hazards. However, the report noted the more vigorous land use and environmental regulations within the City limits and concluded “it would be the most difficult to secure land use approvals for development.”

“The Zoning and Land Use Review Analysis for Bull Run Water Treatment Plant Siting TM concluded that larger Powell Butte land use reviews…in the past have been appealed to LUBA by the neighborhood association and other public members, creating additional monetary costs, approval delays, and political scrutiny for the project and for PWB.”

Consequently, due to political considerations and not “locational issues”, Powell Butte did not pass the “schedule” criterion and was not selected as the site. The PWB moved on to Carpenter Lane as a second choice.

Because of the costs of the filtration plant, in 2021 the large wholesale customers of Gresham and Rockwood in East County, serving 127,477 people, decided not to renew their 20 year contract with PWB and instead drill their own wells.[7, 8]

Mr. Rappleyea stated at the hearing that PWB is serving “1 million” people. However, with wholesale water customers in Tualatin, Gresham and Rockwood water districts committed to exit PWB’s customer base by 2026, a more accurate number of customers that this plant will serve once it would be online will be around 680,000 people.[8]

The departure of the large Eastern wholesale customers of Gresham and Rockwood means that a plant at Carpenter Lane will be located far to the east of Portland but not serve very many East County customers. In fact the only PWB customers left will be Lusted water district, Pleasant Home, and Sandy, which added together total 6463 customers, or a tiny .95% of PWB’s total customers. (Appendix D). Any claims of a plant located in East County serving a “regional” customer base could be considered misleading.

To recap, the “locational issues” that motivated PWB to choose Carpenter Lane over Powell Butte were political, not technical. And the departure of East County PWB decreases to less than 1% the amount of neighboring customers that an East county sited filtration plant at Carpenter Lane would actually serve.

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In conclusion, to rebut the statements listed in the beginning of this document, filtration has not been “forced” on PWB, it was an active treatment choice that can be chosen differently at any time. Nor is filtration “essential” to the safety of Portland’s public water supply, as crypto has not caused health issues for almost 20 years, and there has been ample back up systems for turbidity events for 35. And the choice to site the plant at Carpenter lane was politically motivated based on fears of land use battles at initially selected Powell Butte. Plus, East County customers at an East County-sited filtration plant would make up less than 1% of the final customer base, due to mass exit of wholesale customers in Gresham and Rockwood.

Mr Rappleyea, in a response to a community member’s testimony at 2:42:06 in the hearing, stated “I don’t think it’s my job here to decide what is the best treatment option I mean I am just doing the land use not deciding whether they should use UV or the other method…”

We implore Mr. Rappleyea to hold true to this statement and evaluate this plant wholly and completely based on the land use criteria.

Please do not consider PWB’s request in their statement above to “take the feedback from the community and convert it to appropriate conditions of approval to the extent you believe necessary to meet approval criteria” because of any notion of a plant at Carpenter Lane being “forced” “mandated” “necessary” or “essential to the safety of the water supply”. It is none of those things.

FOOTNOTES

1. United States Environmental Protection Agency, Office of Water, March 2001, Cryptosporidium: Drinking Water Health Advisory, EPA-822-R-01-009. https://www.epa.gov/sites/default/files/2015-10/documents/cryptosporidium-report.pdf

2. Redden, Jim. "Controversy continues over Portland Bull Run Filtration Plant Location." Portland Tribune, 14 March 2023, https://www.portlandtribune.com/business/controversy-continues-over-portland-bull-run-filtration-plant-location/article_047c19d0-be10-11ed-937a-9b22cbf5e22f.html

3. eGov PDX, Portland City Council Meeting PM Session 05/24/23. YouTube 1:43:30. https://www.youtube.com/live/D2HLktpus1A?feature=share&t=6209

4. Williams, Kale. "On a deadline, Portland water filtration plant project hits community resistance and skyrocketing costs." KGW 8, 12 July 2023. https://www.kgw.com/article/tech/science/environment/portland-water-filtration-plant-bull-run-multnomah/283-f3c7e132-bec2-41f8-99d9-55615eca3970

5. City of Portland. "When Groundwater has been used" https://www.portland.gov/water/about-portlands-water-system/groundwater-use. Accessed 8/2/2023

6. Speicher, Dan. Jacobs. Portland Water Bureau. 5 September 2018. "Technical Memo - Bull Run Filtration Project Decision Framework, Values Hierarchy, Decision Model - Bull Run Filtration Project 699275.01.03." https://www.portland.gov/sites/default/files/2020-07/brt-final-with-supporting-docs-compressed-8-31-18.pdf

7. Thomas, Keaton. "Gresham decides tapping own water supply less expensive than staying with Portland." KATU, 3 May 2021, https://katu.com/news/following-the-money/gresham-decides-tapping-own-water-supply-less-expensive-than-staying-with-portland

8 - City of Portland. "City of Portland Wholesale Customers Statistics” June 30 2021. https://www.portland.gov/sites/default/files/2021/fy-2020-21-dispatch-page-2-wholesale-data.pdf

APPENDIX A

PORTLAND UTILITY BOARD

Staff Contact:

Melissa Merrell

(503) 823-1810
Melissa.Merrell@portlandoregon.gov
City Budget Office
1120 SW 5th Ave, Ste 1300
Portland, Oregon 97204-1912

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.

APPENDIX B

From: **Lauren Courter** lauren.courter@gmail.com
Subject: Fwd: OHA Agreement: : Portland Water Bureau and mis-characterizing the federal requirement for cryptosporidium compliance (LT2)
Date: August 2, 2023 at 4:14 PM
To: Laura Belson lauratov@gmail.com

LC

Laura,

The email chain can be a little crazy to navigate. I pulled the quote directly out of Salis' email to my friend Lori:

"You are correct that EPA does not specifically require filtration, but since PWB is currently under a compliance agreement with OHA to install filtration by September 30, 2027, filtration is specifically required by OHA.

As for modifying the BCA, since the agreement is bi-lateral, if both parties agree to modifications, the BCA can be modified..."

-Lauren

From: Lauren Courter <lauren.courter@gmail.com>
Date: Tuesday, June 13, 2023 at 10:03 PM
To: willisteam <willisteam@msn.com>
Subject: Fwd: Portland Water Bureau and mis-characterizing the federal requirement for cryptosporidium compliance (LT2)

Begin forwarded message:

> **From:** L J <lorjmcfarlane@gmail.com>
> **Date:** June 12, 2023 at 9:13:56 AM PDT
> **To:** Dee <deewhite1@mindspring.com>, lauren.courter@gmail.com
> **Subject: Fwd: Portland Water Bureau and mis-characterizing the federal requirement for cryptosporidium compliance (LT2)**
>
> ---------- Forwarded message ---------
> From: **Kari Salis** <KARYL.L.SALIS@oha.oregon.gov>
> Date: Mon, Jun 12, 2023 at 8:26 AM
> Subject: RE: Portland Water Bureau and mis-characterizing the federal requirement for cryptosporidium compliance (LT2)
> To: L J <lorjmcfarlane@gmail.com>
> CC: Baden David <DAVID.BADEN@oha.oregon.gov>, Governor.Kotek@oregon.gov <Governor.Kotek@oregon.gov>, Ourso Andre <ANDRE.OURSO@oha.oregon.gov>
>
> Hi Lori-
>
> You are correct that EPA does not specifically require filtration, but since PWB is currently under a compliance agreement with OHA to install filtration by September 30, 2027, filtration is specifically required by OHA.
>
> As for modifying the BCA, since the agreement is bi-lateral, if both parties agree to modifications, the BCA can be modified. However, OHA, as the primacy agency in Oregon for enforcing the Safe Drinking Water Act, has the authority to unilaterally require actions be taken within a specified timeframe to protect public health if an agreement cannot be reached.

Also note that we have been informed that the city council meeting has been moved to June 28th.

Sincerely,

Kari Salis, PE

Technical Manager

OHA Drinking Water Services

Cell: 503-385-7158

From: L J <lorjmcfarlane@gmail.com>
Sent: Thursday, June 8, 2023 3:27 PM
To: Kari Salis <KARYL.L.SALIS@oha.oregon.gov>
Cc: Baden David <DAVID.BADEN@oha.oregon.gov>; Governor.Kotek@oregon.gov
Subject: Re: Portland Water Bureau and mis-characterizing the federal requirement for cryptosporidium compliance (LT2)

Dear Ms Salis,

To be brief, EPA does *not* require filtration.

- **Is there absolutely no possible way for PWB to modify the bilateral agreement to change the treatment method to meet the EPA requirements?**

This question is time-sensitive since Commissioners based their "YES" utility rate hike/PWB budget upon Ms Solmer's 5/24/23 specious argument - that $1.483B filtration is required.

The City adopts their 2023-24 budget this coming Wednesday 6/14/23.

Therefore, I appreciate an answer as expeditiously as possible.

~L

for your convenience and reference

on May 24, 2023, PWB persuaded 5 Commissioners to approve utility rate hikes based on:
-- "filtration is required" (Mapps & Solmer)
-- low-income customer need (Messier)

https://www.youtube.com/live/D2HLktpus1A?feature=share&t=6209 :
Commissioner Mapps:
"Is it possible for the Water Bureau to get out of building this filtration plant? Are the feds making us do this?
Director Solmer:
"The very short and very direct answer is yes."

https://www.youtube.com/watch?v=D2HLktpus1A&t=6882s
WQ info staff Messier links white supremacy as rationale for low-income assistance and apprenticeship programs

Neither Mapps, Solmer, or Messier addressed more significant and salient reasons(eg):
--large wholesale customers will be leaving PWB in 2026 (due to filtration costs)
--failed capital projects like $90M WRX
--ICCT that has not "significantly lower those levels of lead" as promised since 2017.
--removing service lines, pipes, and lead-bearing infrastructure they are only just admitting is in the distribution system.
thanks

On Mon, Jun 5, 2023 at 5:10 PM Kari Salis <KARYL.L.SALIS@oha.oregon.gov> wrote:

> Hi Lori-
>
> I apologize, but I just sent a reply that was intended as a response to this email, not the other sent by you today. I'm sorry for any confusion this may have caused.
>
> Hi Lori-
>
> It is true that the federal Safe Drinking Water Act and state rules broadly require that any unfiltered public water system must treat for cryptosporidium. In 2012, OHA approved Portland Water Bureau's (PWB's) request for a variance from this requirement. OHA revoked this variance in 2017 due to cryptosporidium detections. The same year, OHA entered into a Bi-lateral compliance agreement with PWB, with the stipulation that PWB install filtration by September 30, 2027. Therefore, PWB is required to install filtration as treatment for cryptosporidium.
>
> I sent a request for clarification on your earlier email, and will respond more fully after I hear back. Please let me know if you have any additional questions.
>
> Kari
>
> Kari Salis, PE
>
> Technical Manager
>
> OHA Drinking Water Services
>
> Cell: 503-385-7158
>
> ---
>
> **From:** L J <lorjmcfarlane@gmail.com>
> **Sent:** Monday, June 5, 2023 12:08 PM
> **To:** karyl.l.salis@state.or.us
> **Cc:** Baden David <DAVID.BADEN@oha.oregon.gov>; Governor.Kotek@oregon.gov
> **Subject:** Portland Water Bureau and mis-characterizing the federal requirement for cryptosporidium compliance (LT2)
>
>

Dear Ms Salis,

Please confirm:

- **"Filtration" is NOT federally mandated for cryptosporidium compliance; a "treatment technology" is.**

  As you'll recall, 3 different treatment technologies were available to PWB; **UV, ozone, or filtration.** In 2017, Filtration was the treatment *option* Portland officials approved to remove low-level cryptosporidium to comply with EPA's LT2 regulation. Volunteer PUB members made a decision they were uncomfortable with after feeling pressure** to advise City Commissioners to approve filtration. Costs quickly skyrocketed. Ratepayers will now bear the unnecessary $1.483 Billion burden. Further, according to PUB, PWB never genuinely engaged the public in deliberation and decision making **to determine whether UV, ozone, or filtration is the optimal long-term option, and, where the optimal location.** OPB diligently and accurately covered this story in its nascent stages.

on May 24, 2023, PWB persuaded 5 Commissioners to approve utility rate hikes based on:

-- "filtration is required" (Mapps & Solmer)

-- low-income customer need (Messier)

https://www.youtube.com/live/D2HLktpus1A?feature=share&t=6209 :

Commissioner Mapps:

"Is it possible for the Water Bureau to get out of building this filtration plant? Are the feds making us do this?

Director Solmer*:*

"The very short and very direct answer is yes."

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WQ info staff Messier links white supremacy as rationale for low-income assistance and apprenticeship programs

Neither Mapps, Solmer, or Messier addressed more significant and salient reasons(eg):

--large wholesale customers will be leaving PWB in 2026 (due to filtration costs)

--failed capital projects like $90M WRX

--ICCT that has not "significantly lower those levels of lead" as promised since 2017.

--removing service lines, pipes, and lead-bearing infrastructure they are only just admitting is in the distribution system.

thanks.

**"The number of crypto is

sounding off alarm bells!"

"1 strike, we're out."

“PUB may forfeit its ability to weigh in at all.”

-- Water Commissioner Nick Fish and now-Director Gabe Solmer, to volunteer PUB advisory board, July 18, 2017

filtration technology as well as later design choices. However, the lowest installed capacity that the PWB would accept is 145 mgd. This decision of a desired capacity and hard lower limit provides adequate direction at this early phase of the project and reflects PWB's current understanding of projected PDD, while providing flexibility during treatment plant design in the coming years.

Filtration Plant Site Alternatives

Based on previous studies, six sites were evaluated for their ability to host a filtration-type treatment facility: Carpenter Lane, Lusted Hill (with expansion), Headworks, Larson's Ranch, Powell Butte, and Roslyn Lake (see Figure 1). These sites were selected on their anticipated ability to meet essential criteria.

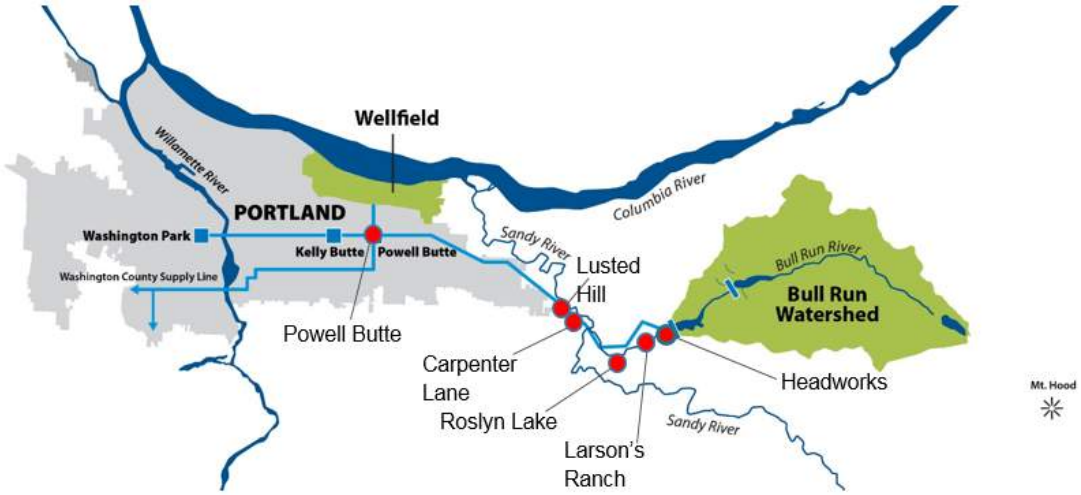

Figure 1: Approximate locations of the six potential filtration sites reviewed.

The location decision was likely the most difficult decision to make. Although the decision framework was used, the final two sites were essentially equal in their value scores. Compounding this was the added difficulty of anticipating how the Bull Run supply transmission system may change in the future. HDR coordinated closely with PWB and their other consultants, Jacobs and Barney & Worth, to develop the criteria and performance scales that drove the location decision. The site was selected after a plant capacity was identified, (see Filtration Plant Capacity Alternatives), but before the filtration technology was determined.

Several major considerations exist that affected site choice such as cost/benefit impacts, meeting future needs, and regulatory compliance. The team developed specific siting criteria that supported these broader values. The criteria used in the evaluation were: maximizing gravity flow, site proximity to existing and future conduit rights-of-ways (ROWs), site size, site slopes and geologic conditions, and impacts to the compliance schedule.

The six potential filtration facility sites were evaluated for their ability to meet these essential criteria. Sites needed to meet all essential criteria or else were considered to have a fatal flaw. Table 2 summarizes each sites' ability to meet the essential criteria (using a pass/fail scoring). Four of the sites failed to meet all essential criteria. Only two sites, Carpenter Lane and Lusted Hill, passed all essential criteria and were therefore evaluated further using the decision framework.

Table 2. Pass/Fail Results of How Well Each Initial Site Met the Essential Criteria.

Site	Hydraulic Grade Line	Proximity to Conduits	Tax Lot Size	Slopes and Geologic Hazards	Schedule
Carpenter Lane	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Headworks	Fail	Pass	Fail	Fail	Pass
Larson's Ranch	Fail	Pass	Pass	Pass	Pass
Lusted Hill	**Pass**	**Pass**	**Pass (with site expansion)**	**Pass**	**Pass**
Powell Butte	Pass	Pass	Pass	Pass	Fail
Roslyn Lake	Fail	Pass	Pass	Pass	Pass

The results from the decision model were discussed at length by the project team and the Executive Committee. The scores for both the alternatives were very close in all three weighting scenarios and the filtration team and the Executive Committee were split between the two sites. A major concern with expanding Lusted Hill was related to part of the area being zoned as Exclusive Farm Use (EFU), although the site had other benefits. Receiving a conditional land use approval on EFU zoned land was identified as a significant hurdle. Team members with more extensive knowledge of state land use decisions felt an approval was unlikely to be granted. Others felt that even if an approval could eventually be granted, the approval process would be drawn out to the point where it would likely prevent PWB from meeting the compliance deadline.

The team was very concerned about the risk to the schedule of siting the facility within an EFU zone. To be better informed about this risk, the Executive Committee consulted with the City Attorney. The City Attorney's opinion was that, in this situation, attempting to build on EFU land would be an unacceptable risk to the schedule. Therefore, Carpenter Lane was selected by the Executive Committee as the preferred filtration plant site.

Filtration Plant Filtration Technology

The filtration technology decision was made with the assistance of the decision framework and is captured in the Filtration Plant Technology Assessment (Document 4). Jacobs coordinated closely with PWB and their other consultants, HDR and Barney & Worth, to identify the criteria and performance scales that PWB staff used as part of the decision-making process to identify the filtration plant technology. The performance scales applied to the technology decision were considered after capacity and location were determined because these may have impacted the technology decision.

The Environmental Protection Agency (EPA) recognizes several filtration strategies for compliance with the Surface Water Treatment Rules, including the latest Long-term 2 Enhanced Surface Water Treatment Rule that sets out treatment requirements for *Cryptosporidium* removal and inactivation. These technologies include granular media filtration, membrane filtration, slow sand filtration, cartridge and bag filtration, and diatomaceous filtration. Of these filtration technologies, there are no known large (greater than 50 mgd) cartridge, bag, or diatomaceous earth filtration facilities. Therefore, the team proposed to focus the evaluation on the remaining three technologies.

(and is anticipated to be the longer of the two acquisition processes). Worst case scenario, condemnation and permitting could take approximately two years. This timeline would be accelerated if the owners are willing to sell, if the appeals process is faster or if any of the phases can overlap. Thoughtful planning and project management would be essential to accommodate land acquisition and approval and still allow the project to meet the compliance schedule. Lusted Hill passed the schedule criterion.

5.5 Powell Butte

In 2001, the Panel recommended Powell Butte as a future treatment facility site due to its suitable elevation, location within the urban growth boundary, greater opportunities for public education and community recreation facilities, and the presence of an existing reservoir – thought to offer significant cost savings.

A facility at Powell Butte could be placed close to, or just below, the HGL, maximizing gravity flow to the facility (see Figure 7). However, pumping would be required to send water back up to retail and wholesale customers connected to the conduits between Headworks and Powell Butte, including the existing 16-inch Lusted Road Distribution Main connected to Conduits 2 and 4 at Lusted Hill. This would involve not only a pump station, but new pump mains to deliver water approximately 18–20 miles back east, at a significant cost and effort. Although Powell Butte passed the HGL criterion, it has significant drawbacks related to pumping filtered water back upstream (east) to customers.

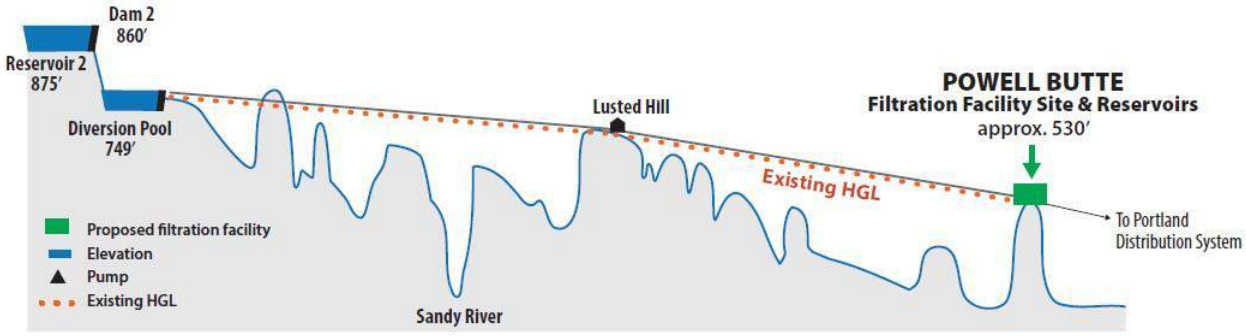

Figure 7. Illustration showing a filtration facility located at Powell Butte relative to the HGL. Note the facility is very close to the HGL and would have gravity flow.

Powell Butte is very close to existing piping infrastructure, with additional piping estimated to be less than most of the other sites, at approximately 2,000 feet. Since Powell Butte is within two miles of the existing and future conduit ROW, it passed the proximity criterion.

Powell Butte includes multiple taxlots, four of which are quite large and total over 530 acres, and therefore is large enough for a filtration facility. Powell Butte is encircled by areas of moderate to high landslide hazard. However, low landslide susceptibility exists near where a potential treatment facility would likely be sited on the butte's interior area. Considering slopes, geologic

hazards, and existing facilities, it is estimated that the buildable area is 60 acres. Powell Butte passed the taxlot size, slopes, and geologic hazards criterion.

Powell Butte is located in Multnomah County, within the city of Portland, and is zoned as Open Space, low density residential, and multi-dwelling residential. In 2001, it was recognized that siting a facility at Powell Butte would have significant impacts on the park and surrounding neighborhoods (as the Panel was completing its work, some citizens expressed concerns about the social and environmental impacts of a facility at Powell Butte). Because of uncertainties of siting a treatment facility at Powell Butte, the Panel recommended a second site (Lusted Hill) remain under active consideration should neighborhood, environmental, or other issues render Powell Butte an inappropriate location.

More recently, Powell Butte Reservoir 2 was constructed at Powell Butte. Insight and experience from this project confirmed that neighborhood, environmental, or other difficulties would be significant if PWB were to construct a filtration facility at Powell Butte. It is also anticipated that Powell Butte would be the most difficult to secure land use approvals for development. This is because the land use process would require a Major Amendment to the Bureau's Powell Butte Conditional Use Master Plan (CUMP) and would trigger a subset of other land use reviews including conditional use, environmental, and likely an adjustment review to accommodate the impacts of development in the park and to the surrounding area. The Zoning and Land Use Review Analysis for Bull Run Water Treatment Plant Siting TM concluded that larger Powell Butte land use reviews (such as Reservoir 2 and CUMP) in the past have been appealed to LUBA by the neighborhood association and other public members, creating additional monetary costs, approval delays, and political scrutiny for the project and for PWB. These risks could significantly delay site approval, permitting, and facility construction by years. Therefore, Powell Butte did not pass the schedule criterion.

5.6 Roslyn Lake

In 2008, the large area known as Roslyn Lake was drained, making it available to develop, and therefore it was included in the 2009 TM. This former reservoir was part of the Bull Run Hydroelectric project. This land is not owned by the City or PWB but was for sale as of winter 2017/2018.

Of all six sites, Roslyn Lake deviates the farthest from the HGL (it is below the HGL) and year-round pumping would be required downstream of a facility to lift water back up to the HGL and over Lusted Hill (see Figure 8). Therefore, Roslyn Lake did not pass the HGL criterion.

APPENDIX D

City of Portland Wholesale Customers Statistics

As of June 30, 2021

Distributor	Consumption in 100 cubic feet (a)	Revenue (a)	Active Services (b)	Service Population (c) Served by Portland	Service Population (c) Served by Other Sources	Contract Expires
Burlington Water District	16,076	$ 36,721	118	289	-	2026
Gresham, City of	2,889,437	3,030,027	17,530	65,959	8,033	2026
Lake Grove Water District	192,196	440,105	1,367	3,258	-	2026
Lusted Water District	72,957	106,028	407	1,083	-	2026
Palatine Hill Water District	190,515	407,782	611	1,655	-	2027
Pleasant Home Water District	78,920	118,509	550	1,655	-	2026
Raleigh Water District	263,865	378,168	1,022	4,359	-	2026
Rockwood Water PUD	3,130,116	3,113,709	13,618	61,518	4,611	2026
Sandy, City of	249,305	174,333	4,022	3,725	8,577	2028
Tigard, City of (e)	-	-	-	-	-	2016
Tualatin, City of	2,297,945	2,622,337	7,056	27,735	-	2026
Tualatin Valley Water District	7,975,101	8,838,056	60,374	164,471	57,768	2026
Valley View Water District	76,931	163,186	385	1,038	-	2026
West Slope Water District	617,346	1,213,558	3,279	10,558	-	2026
Total - large users	18,050,710	$ 20,642,520	110,339	347,303	78,989	
GNR Water Company	2,835	$ 3,940	25	48	-	2026
Green Valley Water Company	66	695	3	7	-	2026
Hideaway Hills Water Company	1,584	2,474	14	18	-	2026
Lorna Water Company	10,575	13,011	94	261	-	2026
Skyview Acres Water Company (d)	277	942	85	1	34	2026
Two Rivers Water Association	839	1,601	4	8	-	2026
Small water companies	16,176	$ 22,663	225	343	34	
Total wholesale customers	18,066,886	$ 20,665,184	110,564	347,646	79,023	

Notes
(a) Consumption and revenue figures are adjusted for water sold to City customers.
(b) Number of active services as of June 30, 2021 provided by wholesale customers.
(c) Service Population estimates are based on PSU Service Population forecasts. Population split is based on share of water purchased from Portland and other water sources as of June 30, 2021.
(d) Skyview Acres Water Company is currently purchasing water directly from City of Sandy.
(e) City of Tigard's Water Sales Agreement ended on June 30, 2016.

LUP Comments <lup-comments@multco.us>

File T3-2022-16220 - Comments - Rebuttal H.3.

1 message

Cottrell CPO <cottrellcpo@gmail.com> Mon, Aug 7, 2023 at 9:54 AM
To: lup-comments@multco.us

Please accept the attached testimony into the record. Thank you.

Rebuttal H.3. Essential, Mandated Nature of Project Final.pdf
1115K