

Portland Water Bureau Bull Run Water Filtration

Community Values Memorandum

June 22, 2018

OVERVIEW

Portland Water Bureau (PWB) engaged Barney & Worth, Inc. to conduct a three-step process to determine community values specific to the Bull Run Filtration Project.

The three steps are:

Review Past Public Opinion Research (December 2017; complete). B&W reviewed past public opinion research conducted by Portland Water Bureau (PWB) over the past 20 years, including values developed by the Bull Run Treatment Panel.

Stakeholder Interviews (January 2018; complete). B&W conducted interviews with 20 stakeholder groups familiar with PWB to understand community values around Bull Run Filtration. The discussion guide for stakeholder interviews was based on the review of past public opinion research conducted by PWB.

On-line Survey (February – June 2018; complete). A public on-line survey was developed based on input attained from the stakeholder interviews. The survey was posted on PWB's website as well as promoted through social media. As of June 21, over 1700 individuals had completed the survey.

The community values described in this summary supported the development of the Decision Framework for Bull Run Filtration Pre-Planning.

COMMUNITY VALUES

- ✓ The most important, shared community values are cost benefit and public health/water quality.
- ✓ Other values include resiliency/reliability, consistency, environmental impacts, minimizing treatment/chemicals, and meeting future needs.
- ✓ Top values in selecting the filtration plant site are keeping the project easy to implement and engaging the site neighbors.
- ✓ Stakeholders are interested in considering treatment technologies that go beyond *Cryptosporidium* removal, as long as the benefits are commensurate with costs.
- ✓ Plant capacity should plan for the future, but don't overbuild it – phase it, if possible.

OTHER KEY TAKEAWAYS

- ✓ Portland customers love their water.
- ✓ Many people in the community don't know a lot about the project and have questions about treatment methods, project timing and costs.
- ✓ Stakeholders who are knowledgeable about the project value communication and transparency – some see an opportunity to increase engagement with broader audiences such as small businesses, industry, and communities of color.

ATTACHMENTS

Attachment A – Stakeholder Interview Summary, February 22, 2018

Attachment B – Customer Survey Summary, April 18, 2018

Attachment A
Portland Water Bureau
Bull Run Water Filtration
Stakeholder Interview Summary

February 12, 2018

B&W conducted stakeholder interviews as part of a three-step process to develop community values specific to the Bull Run Filtration Project. Interviews were conducted with representatives from 20 stakeholder groups familiar with PWB, to understand community values around Bull Run Filtration. A list of interviewed stakeholders is attached.

The interviews and this report are organized into two main sections. The first section summarizes overall community values, for use in the decision model being developed by CH2M / Jacobs. The second section summarizes input on the four specific upcoming decisions: the treatment plant site, the treatment technology and the plant capacity. Preliminary stakeholder interview results were also used to develop a brief memorandum titled “*Community Values Input on Alternative Delivery Approach,*” included as an attachment.

This report reflects the advice, feelings and attitudes of the individuals interviewed. It is not intended to provide a statistically valid profile of the community as a whole. A list of interviewed stakeholders and the interview discussion guide are attached.

STAKEHOLDER VALUES

Stakeholders were asked an open-end question about which values should inform future treatment decisions. Their responses, summarized into seven values, are shown in the table on the following page. The responses are divided into two Tiers. Tier 1 issues, cost and public health / water quality, are top of mind issues that dominated the concerns of most stakeholders. Tier 2 issues are less consistent across the group and generally are not top of mind issues. Two exceptions are water quality consistency, which is very important to industrial customers, and reliability/resiliency, which is the top concern of highly informed stakeholders. Following are more details on the feedback.

- 1. The most important, “Tier 1,” values are cost benefit and public health/water quality.** Cost and public health/water quality are top of mind issues for almost all stakeholders. Many frame the treatment decisions as a cost benefit evaluation – weighing public health/water quality benefits against the costs of those benefits. Many are concerned about impacts to low income members of the community, but only one focuses on choosing the lowest cost option.
- 2. Tier 2 values are resiliency/reliability, consistency, environmental impacts, minimizing treatment/chemicals, and meeting future needs.** Tier 2 issues are

mentioned by around a quarter of stakeholders, lacking the clear consensus support for Tier 1 concerns.

- **For highly knowledgeable stakeholders – reliability is number one.** For those who know Portland’s system, resilience/reliability is their number one value. We know from other studies that resilience resonates highly with the Oregon public and this value may resonate with others if they understand the project provides a means to improve the system’s resilience. Stakeholders urge PWB to think beyond *Cryptosporidium* and look at broader benefits of filtration.
- **Consistent quality at the tap is a top concern of industrial customers.** Many industrial users further treat the water after it reaches their facilities. Their treatment systems are affected by changes in water quality.
- **Looking to future needs is important but means different things to different people.** Some focus on having a plant that is easily expandable, other focus on meeting future regulatory requirements. Others focus on high quality construction that will last a long time. PWB is urged to look beyond *Cryptosporidium* and focus on a 100-year solution.
- **Minimal environmental impacts and minimal treatment and chemicals are of moderate concern.** Interest in environmental impacts and minimizing treatment is not concentrated within a particular group of stakeholders—neither value was a top concern.

Value	Representative Comments
Tier 1 Values	
<i>Cost, cost benefit</i>	<p><i>“Consider doing things beyond minimum if it has more benefit and is still affordable.”</i></p> <p><i>“Cost = impact on low income people and communities of color.”</i></p> <p><i>“Cost is a concern – we are already some of the highest water rates in the nation.”</i></p>
<i>Public health / water quality</i>	<p><i>“Maximize the ‘safety’ of the system – if you’re going to do it, do it right.”</i></p> <p><i>“Pathogen-free water that is non-toxic.”</i></p> <p><i>“Consider what will lead to the safest water for users over the longest period of time.”</i></p> <p><i>“Money and cost is a lesser value than safety, reliability and taste.”</i></p>

Value	Representative Comments
Tier 2 Values	
<i>Reliability and resilience</i>	<p><i>“As we are doing it, we should try to maximize the resiliency and health benefits of filtration.”</i></p> <p><i>“We need to consider a turbidity event – we want treatment option to handle more than one immediate need.”</i></p>
<i>Consistent quality</i>	<p><i>“When our source gets switched to groundwater, it negatively affects us.”</i></p> <p><i>“We want a reliable system that’s not going to vary a whole lot through the year.”</i></p>
<i>Looking to future needs</i>	<p><i>“Versatile and expandable”</i></p> <p><i>“Think about future regulations – build to the future.”</i></p>
<i>Minimal environmental impact</i>	<p><i>“Small impact to the environment – think of the lifecycle of the materials.”</i></p> <p><i>“Use the most energy efficient technology”</i></p>
<i>Minimal chemicals/treatment</i>	<p><i>“Portland values are – do enough, but don’t go overboard in terms of treatment of the water.”</i></p> <p><i>“Chemicals scare people – they can’t pronounce them – keep the treatment as simple as possible.”</i></p>

- 3. Stakeholders are interested in the project and the decision process and would like to hear more from PWB.** Many community stakeholders know very little about the project and are curious to learn more. Some identify opportunities to increase engagement with broader audiences such as small businesses, industry, and communities of color.

“I’d be curious to know the process that is being used to examine and deliberate and arrive at a decision.”

“What do I value? Sincere, meaningful engagement that actually listens to input from technical experts, development experts and others, especially if the cost is going to be very high.”

“The key to engaging [with communities of color] is to be present – show up at different fairs and community events so that people can start to learn about what you do.”

STAKEHOLDER INPUT ON EARLY DECISIONS

Stakeholders were asked for their specific questions and thoughts on three upcoming decisions: the treatment plant site, the treatment technology and the plant capacity.

1. Treatment Plant Site

There is little interest in the treatment facility location and no concerns about locating the plant in rural Multnomah or Clackamas Counties. Questions and input on the treatment plant location generally falls under two categories:

Avoid factors that would make the project harder to implement or more expensive.

It's best if we already own the property, if utilities are nearby, and let's avoid zoning changes or any other controversies.

"Do we own the land?"

"What is the zoning and would it require a zone change?"

"Hope they will be careful about the site they choose – let's minimize controversy from here on in."

"I'm a huge advocate for progressive land use planning, but there is good reason to have it out where they are planning to build it."

"I don't care about the site, except cost implications."

Engage the treatment plant neighbors. We need to consider site neighbors – how will it affect them during construction and in the long term?

"Engage the affected community; think about road access, how it will impact them. I ride Bull Run all the time on my bike – there are a lot of economically distressed communities out there."

"Are there going to be a lot of people working there? Who is going to work out there and how will people get there? Is it close to transportation systems if there are employees?"

2. Treatment Technology

Stakeholders are curious about treatment technologies – though most feel very comfortable with others making the specific decisions. There is an interest in hearing more about the options and decisions, even if there isn't an opportunity for input. Key points of interest:

Think beyond *Cryptosporidium* to provide other benefits. System reliability is the number one priority of highly involved stakeholders.

"I think among the additional reasons to do filtration is to mitigate against other hazards besides crypto, including severe rainfall, forest fire and earthquakes. All other things being equal, we would want it to be as robust as possible for all those hazards."

"Look at multiple issues not just crypto. You want to have a lifespan of 30-40 years. Need to think about future regulations and think more broadly than just crypto. Build to the future"

"Think having a system that is versatile enough to handle changing water quality conditions, whether generated from turbidity (landslides, rainfall, erosion) or being able to handle catastrophic events such as a fire. Want a treatment train so that potable water can come out of Bull Run, not if, but when, a catastrophic event occurs."

“At the end of the day would love to get off chloramine for treatment, that would help with our corrosion issues.”

“It gives me peace of mind as a water customer that if there was some type of an event – like the Eagle Creek fire – that we wouldn’t get kicked off Bull Run water.”

Balance benefits with costs. The selected technology should provide the best value – balancing benefits (based on science) and costs.

“When we look at treatment technologies, it will be interesting to know what is their cost relative to what they are capable of treating for.”

“Cost is important – what is it going to do to our rates and how would they be affected in an equitable manner.”

“We are doing it for the sake of safety, but also need to consider cost – what is the balance.”

Use a robust process and explain the process and your choices to the public.

Stakeholders acknowledge this may be an engineering decision and not appropriate for direct public input. But they still want information: what process is being used to make the decision? What are our options and how much do they cost? What is the basis for the water bureau’s decision?

“I don’t personally have questions, but I have seen residents get really into the science of treatment. So, the more transparent they can be, the better.”

“I am interested to know about the different types of treatment, not because I want to have input into the decision (I imagine there are water engineers and scientists that will guide the decision) but because I am curious. I would like to know about the cost, type of treatment, and length of time.”

Additional individual comments address energy efficiency, avoiding undesirable side effects and using a proven technology.

3. Treatment Plant Capacity

Stakeholders are mixed in their thoughts on treatment plant capacity. Those within the water industry worry about building it too big; others want to make sure we prepare for planned growth. Most are not aware of the groundwater system or do not care; the exceptions are industrial customers who strongly prefer the Bull Run supply. Everyone supports phasing.

Plan for future growth but don’t overbuild – phase it! This region is growing and we need reliable water supplies to support that growth. Those aware of decreases in per capita water demand caution PWB to not overbuild. Everyone supports phasing –the best of both worlds.

“Building to existing peak demand should be approached cautiously. We are seeing falling demand, whether change in habit, efficiency of fixtures in multi-family and high-tech businesses.”

“I think these are very long-term capital projects and we should spread the cost out as far as possible.”

“Certainly, we need to take into account future needs and growth – the Portland area is growing. I know water use has been decreasing, but we need to ensure we can accommodate the next 50 to 75 years, not just the next 20.”

“Need to prepare for population growth – could double in the next 10 years. Groundwater is a summer time safety valve, want to make sure we don’t want to run out of water.”

“One thing I’m cognizant of is we tend to focus more on Portland and not wholesale accounts. As Portland water gets more expensive over time we are at risk of losing additional wholesale customers so I think we want a system that can cost effectively deliver filtration for the whole region and be able to serve wholesale customers beyond what we serve now.”

Portland Water Bureau
Bull Run Filtration
List of Interviewed Stakeholders

Wholesale Customers

Jeff Fuchs, City of Tualatin

Brian Stahl, Rockwood Public Utility District

Business/Institutional

Jennifer Burns, Darigold

Joe Casey, Widmer Brothers Brewery

Craig Lowe, Siltonic

Jerre High, Portland Public Schools

Residential

Paul Grove, Home Builders Association

Sylvia Bogert, SW Neighborhoods Inc.

Tom Griffin-Valade, North Portland Neighborhood Services

Public Health Interests

Paul Lewis, Multnomah County Public Health Officer

Maintenance Manager, Medical Facility

Minority Groups / Organizations

JoAnn Herrigel, Elders in Action

Vivian Satterfield, OPAL Environmental

Anita Yap, Asian Pacific American Network

Nkenge Harmon Johnson, Urban League

Portland Stakeholders

Carmen Merlo, Former Portland Bureau of Emergency Management

Hilda Stevens, Portland Utility Board and Small Business Owner

Ted Labbe, Portland Utility Board and DePave

Janice Thompson, Citizen Utility Board

Julia Pomeroy, Congressman Earl Blumenauer

Attachment B
Portland Water Bureau
Bull Run Water Filtration
Customer Survey

April 18, 2018

B&W conducted an on-line customer survey as part of a three-step process to develop community values specific to the Bull Run Filtration Project. The public on-line survey was developed based on input attained from stakeholder interviews. The survey was posted on PWB's website as well as promoted through social media. As of June 21, 2018, over 1,700 individuals had completed the survey.

Results of the on-line survey were presented at the April 28, 2018 Bull Run Filtration Pre-Planning Workshop. Results are summarized in the attached presentation. Additional responses between April and June 2018 did not substantively change conclusions from the survey.

Bull Run Filtration Customer Survey Results

Barney & Worth, Inc.
April 2018

Along with stakeholder interviews, customer survey results will be used to:

Ensure filtration decisions consider community values

&

Design an effective communications strategy

Who took the survey?

- 1,352 Surveys
- 93% Completion rate
- 97% PWB customers
- 12% Living in an apartment or multi-family residence
- 2% Not a customer—but drink the water
- 70% Lived in Portland more than 10 years
- 34 Customer zip codes

Engagement methods:

- ✓ Website
- ✓ The Water Blog
- ✓ PWB staff email
- ✓ Twitter
- ✓ Facebook / Facebook ad
- ✓ Nextdoor
- ✓ Neighborhood associations email

April 17, 2018

Take-aways

1. Water quality and cost remain the top of mind issues
2. Few customers question the need for the project
3. Customers have legitimate questions that can be answered

Survey Results

Customers love their water

Q: How satisfied are you with your drinking water on a scale of 1 (poor) to 7 (excellent)?

Weighted
average

1 Poor	2	3	4	5	6	7 Excellent
23	17	40	98	176	385	481

85% of survey takers rank water above 5

Top questions include impact to bills and changes to water

Q: What questions do you have about the filtration plant?

Tier 1

How will it impact my bill?	78%
Will I notice a change in my water?	70%

Tier 2

Will the filtration plant impact the Bull Run watershed?	51%
How does the treatment process work?	50%
When will the new filtration plant be operational?	48%
How are decisions being made?	47%

Tier 3

How will PWB keep me updated?	38%
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Other top questions—open ended

Water quality and taste

“How, exactly, will the quality of the water change?”

“In what ways will this make the water safer and healthier to drink?”

“Will the water taste change?”

Fluoride, chlorine and chemical questions

“Will you be adding chemicals to the water, and if yes, why?”

“Will my water (ever) have less chlorine? Please.”

“Can we add fluoride?”

“Will it also handle other contaminants like lead or potential additions from outside actors?”

Questions about why the project is needed

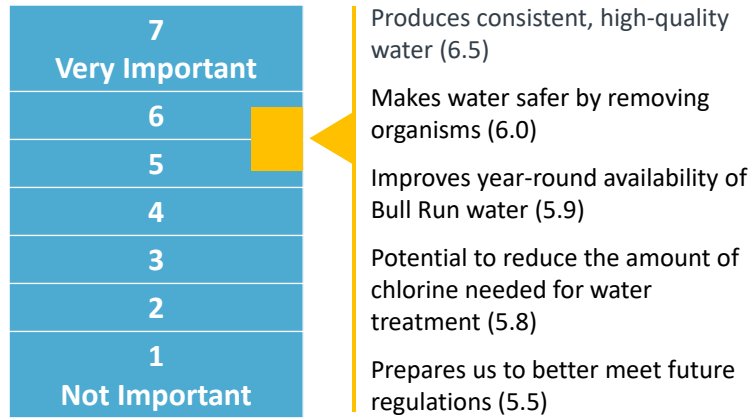
“Do you have to do it?”

“Why is it required?”

~30 comments each

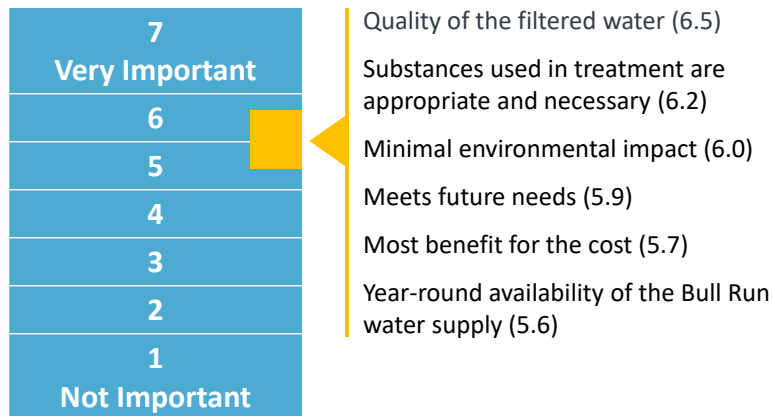
All benefits of the project are important

Q: On a scale of 1 (not important) to 7 (very important), how would you rate these benefits of Bull Run water filtration?



All factors are important for decision making

Q: On a scale of 1 (not important) to 7 (very important) how important are these factors for guiding decisions about the filtration plant?



Advice from customers

Cost (~70 comments)

"My bill is already ridiculously high; I fear the cost of water will go up to a point that it we cannot afford it."

"Reducing costs and greater transparency should be a huge priority beside water safety."

"Keep the water sustainable, delicious and affordable and I'll be happy."

Fluoride (~46 comments)

"Are they still planning to introduce fluoride to the water even after voters said we don't want it?"

"Can you or will you ever add fluoride to the drinking water to protect our children's teeth?"

Questions about need for project (~37 comments)

"This project sounds like a waste of money. They're filtering for a organism that was detected for which there are many species, most of which aren't dangerous to people at all."

"Isn't it already filtered? Is it the lead that is the impetus for this change?"

"I'm sorry you have to do this; I like our water the way it is and wish we had a continued waiver of the filtration requirements."

Advice from customers

Water quality and taste (~33 comments)

"Bull run water is so delicious. Please keep it that way."

"The consistency of healthy, good-flavored water is of the utmost importance."

"Efforts to improve its taste and odor would help a lot!"

"Increase the pH of our water so it isn't so corrosive anymore! It's gross like this and corrodes many metals!"

"If you could assure me that crypto was not in my water I'd be one heck of a lot happier."

Substances used in water treatment (~19 comments)

"Please keep as many chemicals out of the water as possible."

"pH and buffering should reduce or eliminate lead from pipes. Fluoride should be added."

"Use ozone as part of treatment so need fewer additional chemicals."

"Please use as few additives to the water as possible. The taste of our drinking water is extremely important to us."

Updated Community Values

Customer Values

- Public health & water quality
- Cost benefit & impact to individual bills
- Appropriate treatment & chemicals
- Minimal environmental impacts
- Look to future needs
- Reliability & resilience to earthquake and fires
- Consistent quality