

Our water: Safe and abundant for generations to come

Bull Run Filtration Project

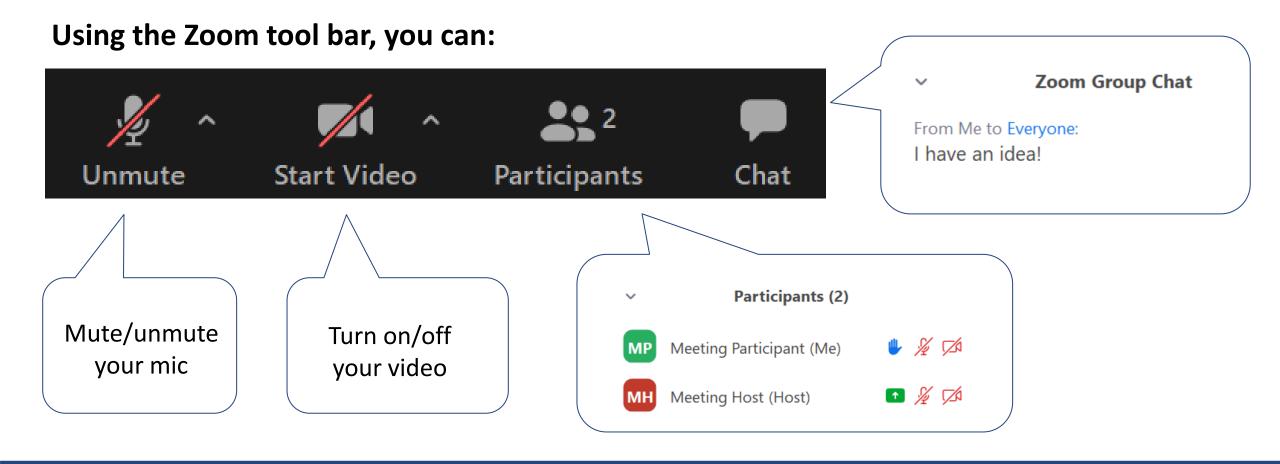
# Site Advisory Group Pipeline Planning Progress

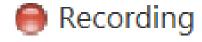


### **Agenda**

- 1. Introductions
- 2. Project Update
- 3. Pipeline Planning Progress
- 4. Site Advisor Discussion
- Next Meeting

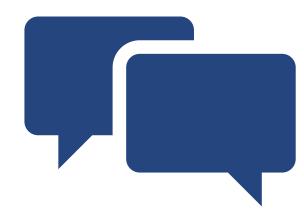
### **Conference call meeting tips**





✓ We'll post the meeting recording on the website with a summary

### Who's on the line?



- Introduce yourself
- How long have you lived in the area?

### **Project Update**

- Council action for improved corrosion control project
- Negotiating WIFIA loan agreement
- Filtration predesign activities:
  - Incorporating your feedback in these conversations
  - Working toward Basis of Design Report in November
- Interview of pipe designers and filtration contractors

# Meeting Recap: Ranked preferences for architectural styles and entry and fencing design concepts



Site Advisor and community input included preferences for:

- Agrarian or Pacific Northwest architectural style
- Use of natural materials
- Integration with landscape elements
- Setting the entry back from the perimeter and screening the approach
- Use of multiple fencing styles such as wire or wrought iron
- Making the facility as unobtrusive as possible

### **Site Advisory Group meeting roadmap**

	Advisors	Community	Total
Traffic – May 14, Dec 10	14	18	32
Light and Noise – April 9, Oct 8	11	11	22
Chemicals – Nov 12	10	12	22
Wildlife and Environment – Aug 13	11	7	18
Facility Size and Appearance – June 11	12	2	14
Landscaping – April 9	7	2	9
Communications – ongoing	3	2	5
Property and Infrastructure	1	2	3

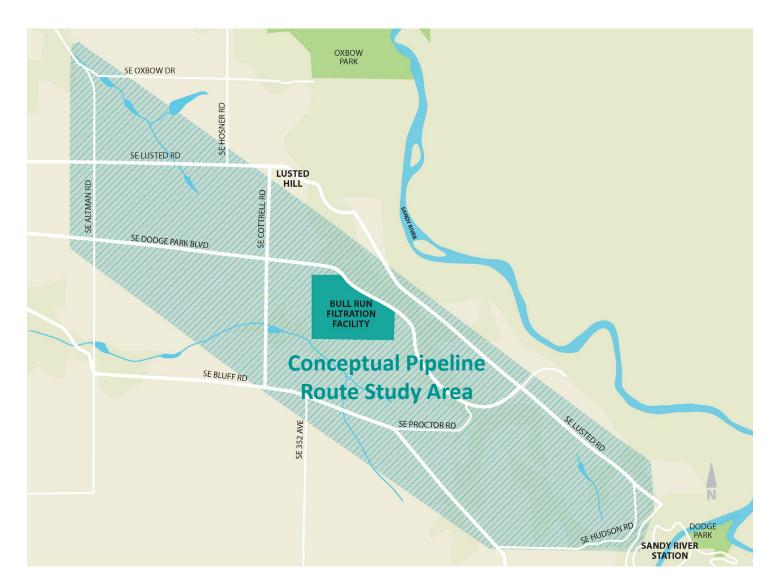
### **Pipeline Planning Progress**

Ken Ackerman

## New pipelines are needed to connect the filtration facility with the existing water system



✓ Set direction for two pipes to carry water to and from the filtration facility



## New pipes will improve overall system resilience and allow nearby pipe segments to be retired

- ✓ Portland has been operating pipelines in the area for more than 100 years
- ✓ New pipelines will be built to modern seismic standards to better withstand an emergency like a major earthquake
- ✓ Having two pipelines will increase system reliability and allow future maintenance to occur without disrupting service



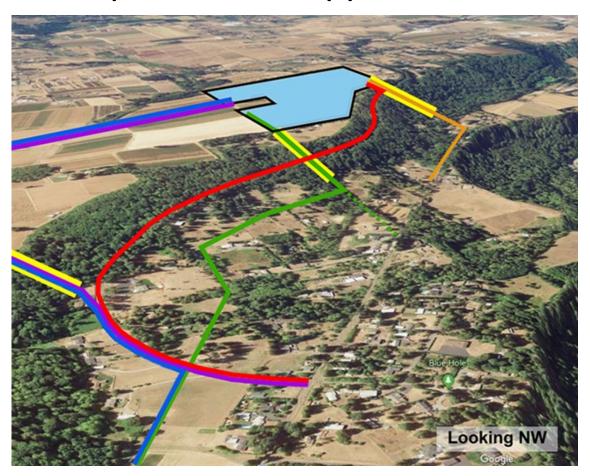


## Pipeline planning is underway, design is anticipated to begin in 2021 and construction is scheduled to start in 2023

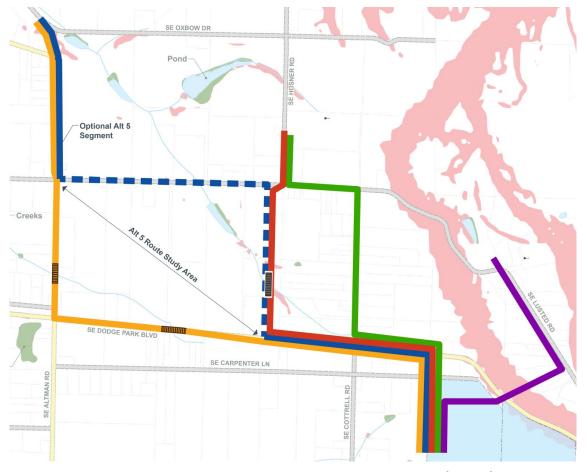
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Bilateral Compliance Agreement	Dec.										
Facility Planning											
Pilot Study to OHA*				Nov.							
<b>Pipeline Planning</b>											
Facility Design											
Design to OHA						Oct.					
Pipeline Design											
Facility Construction											
<b>Pipeline Construction</b>											
Required completion OHA											Sep.

# Planning identified possible raw and finished water pipeline alternatives in the study area

Initial possible raw water pipeline alternatives



Initial possible finished water pipeline alternatives



## Planning is using results of engineering and field work to assess feasibility of initial alternatives

- Outreach to neighbors
- Surveying
- Geotechnical evaluations
- Environmental studies
- ✓ Cultural resources assessments
- Accessing easements



Spring 2020 field investigations

#### How will routes be selected?

- Evaluation of remaining feasible pipeline alternatives is ongoing using values criteria
- Alternatives currently under consideration are shown in the following slides



# Pipes will be roughly 66 to 96 inches in diameter and installed generally with 5 to 12 feet of cover





# Most new pipe will be installed using open cut trenching, which is completed in segments





# Some segments may be installed using other construction methods like tunneling



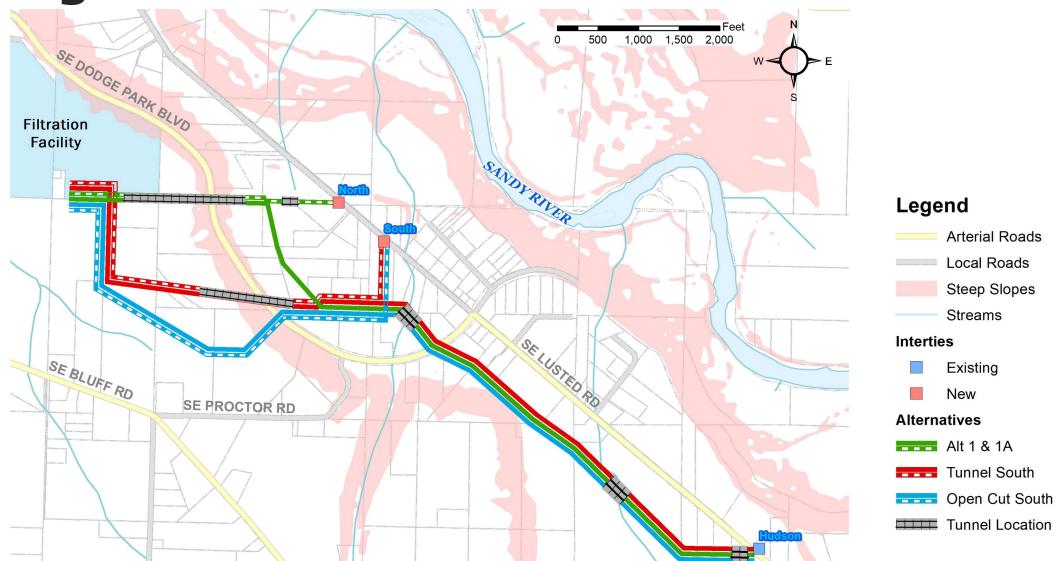


## Excavated soil is used as backfill or removed, and road surfaces & property along routes is restored





Raw water pipeline alternatives currently being considered



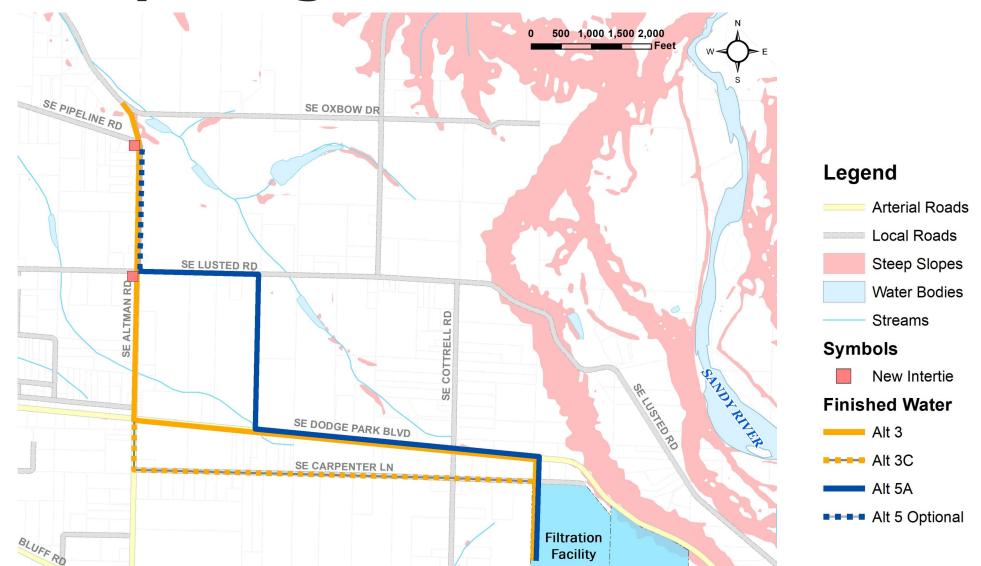
## Site Advisor Input: Safety and Traffic Considerations for Raw Water Alternatives

- Least disruptive to current normal daily traffic levels. Local access is important for the community. How is the tunneling going to affect traffic on Dodge Park and up and down our driveway?
- Improve supporting road alternatives in the event of closure to support traffic and community (Proctor and Lusted). Quick viable access especially for emergency vehicles. Station 76 on 302nd and Dodge Park is primary response station at this time.
- The **slide zone**? Tunneling under Dodge Park with a steep bank on both sides appears to open up a **landside issue**.
- How are you going to deal with the spoils (150 to 200 thousand yards)?
- My concern is not so much traffic and safety -- more the impact on property owners.
- How much will this affect property values?
- How does dewatering while tunneling affect local residential wells?

## Additional Site Advisor Comments: Raw Water Alternatives

- You noted Bear and Beaver Creek locations.
- You will encounter mostly **Alder and Maple** in the Tunnel South and Open Cut South and more of the same with **older growth Cedar** in Alt 1 & 1A.
- It appears the blue pipeline would be less disruptive because it travels along the existing pipeline; however, it is longer which could be more expensive.
- The **red pipelines would run through new properties** causing more disruption for more property owners.
- Has each property owner been interviewed? Is there a record of these interviews?
- Will they be paid for their inconvenience and use of land? If so, how much?
- You should stay off private land! You are causing more hardship on landowners.

# Finished water pipeline alternatives currently being considered



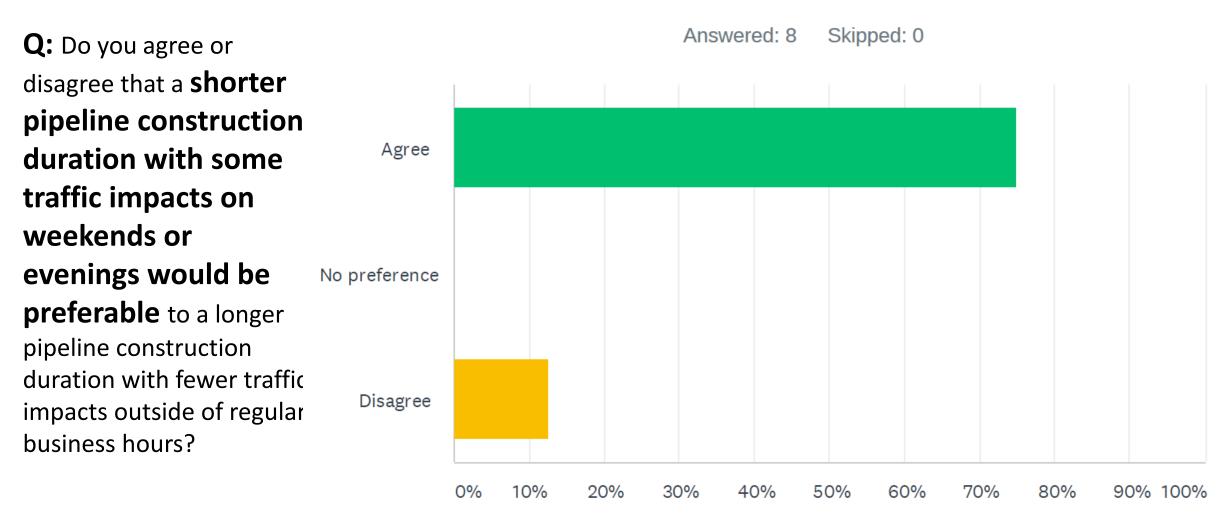
## Site Advisor Input: Safety and Traffic Considerations for Finished Water Alternatives

- Local access is important for the community. Altman Rd is a major north/south connection.
- Will this be a rolling install or are you shutting down large sections of road at a time?
- What are the sizes of pipes needed (one pipe or two)?
- Carpenter Ln is a narrow road and your construction would impact traffic and make it difficult for people to access their homes.
- Will you be putting curbs and sidewalks along the roadways (Carpenter Ln)?
- **Alt 3C** disrupts **more landowners** and will NOT be popular. While Alt 3C seems simplest (**less bends, avoids main roadways**), I feel citizens on Carpenter Ln would be highly disrupted during the installation. With Alt 3c you have to deal with **gas, water and power** lines.
- Alt 5A would impact fewer homes and traffic. Go for that one.
- The final decision might be related to "disaster preparedness." If both lines follow Dodge Park Rd which is nearly a berm or dike-like configuration... you may want to use Carpenter Ln. It would depend on stability of soils.

## Additional Site Advisor Comments: Finished Water Alternatives

- **Communication of project timelines** will allow residents and businesses to adapt to temporary conditions.
- It wouldn't hurt to start on both north/south portions and then move work to
  east/west allowing Cottrell, Carpenter and the Altman intersection with Dodge Park to
  be free for traffic detours... then continue with either Carpenter or Dodge Park, but NOT
  both at the same time.
- After viewing the picture of the trench, pipe and truck, I have serious concerns of traffic safety along any of the roads.
- Is it better to bring pipelines along right of ways or bring new ones across private land?

# Site Advisor Input: Preferences on Pipeline Construction Traffic Strategies



# Site Advisor Comments: Preferences on Pipeline Construction Traffic Strategies

- Defining "shorter" if you are talking weeks or months as compared to years....
   otherwise the neighborhood would probably like some peace and quiet on weekends.
- What do the nurseries say? School bus drivers? Commuters? No matter when you do it, you are going to cause traffic delays and inconvenience. How long will it take to install the pipeline using the shorter duration? How long using the longer duration?
- We agree with shorter pipeline construction duration. Get it over with as soon as possible.
- Not on Sunday. No more than 10 hours a day.

# As work progresses, we will continue to share information and update FAQs



### **Planning**

✓ Evaluating and selecting preferred pipeline alternatives



### Design

- ✓ Details such as depth and construction method of pipeline segments
- ✓ Traffic control plans



#### Construction

- ✓ Information about type and timing of construction activities
- ✓ Construction
  management plan
  that includes ways to
  minimize noise, dust,
  and other community
  concerns

### Discussion format feedback?



What went well?

What could have gone better?

What suggestions do you have for next time?

### What's next?



#### **Facility Layout and Environment**

Thursday August 13 6-7:30 pm

**Online Open House** 

September 2020





## Thank you!