

# Port Hadlock Wastewater Value Engineering Public Briefing

## Summary

April 18, 2019, 1:00 - 3:00pm

Jefferson County Public Works

<i>Action Items</i>	<i>Persons Responsible</i>
Confirm the life span of the MicroBLOX membrane.	Kevin Dour
Develop a set of bulleted talking points for Commissioner Dean's presentation to the Chamber of Commerce on May 6 <sup>th</sup> .	Tetra Tech/consultant team
Contact the school about involvement in a community advisory committee (CAC).	Jason Wood, Philip Morley, and Monte Reinders
Contact OlyCap about involvement in a CAC.	Ron Marlow and Philip Morley
Contact Peninsula Housing Authority about involvement in a CAC.	Philip Morley
Contact Library Director about involvement in a CAC.	Monte Reinders
Contact QFC/Reeds about involvement in a CAC.	Ron Marlow and Craig Durgan
Contact the hardware store about involvement in a CAC.	Ron Marlow and Craig Durgan
Contact the mobile home park about involvement in a CAC.	Craig Durgan
Meeting participants should contact Thomas Christian ( <a href="mailto:tchristian@triangleassociates.com">tchristian@triangleassociates.com</a> ) and Monte Reindeers ( <a href="mailto:mreinders@co.jefferson.wa.us">mreinders@co.jefferson.wa.us</a> ) regarding the interest level and contact information of the other organizations suggested for participation in the CAC.	Meeting Participants
Schedule a CAC follow up meeting before May 31st	Consultant Team/Monte Reinders

### Background and Purpose

Kevin Dour, TetraTech reviewed the planning history of the proposed Port Hadlock sewer.

- *2008 Facility Plan* included a sewer connection for the Port Hadlock Core Area, Alcohol Plant, and Rhody neighborhood. The intent was to provide sewer connection to the Urban Growth Area (UGA) over a 20-year planning period, as required under the Growth Management Act (GMA) at that time.
- *2013 Design Estimate* included the Core Area and Rhody neighborhood, but not the Alcohol Plant. The Design Estimate was based on 100 percent design of the treatment facility using a Membrane Bioreactor (MBR) system and 10 percent design of the collection system. The proposal was to use a gravity collection system.
- The sewer system has not yet been constructed because initial costs were high and grant sources could not be found that would bring remaining costs down for the property owners.

### Purpose of Wastewater System Value Engineering Review

Kevin explained that the purpose of the 2018 Value Engineering (VE) Review was to perform a feasibility study of a more affordable sewer alternative for Port Hadlock. This was in response to a 2018 petition led by Craig Durgan and Duke Shold, which showed strong support for the project by the owners of a majority of the land in the Core area.

Key changes since the 2013 Design Estimate include the following.

- Ovivo has brought to market a new MBR (MicroBLOX) system with modular units which could lower start-up costs;
- The Washington State Legislature has relaxed some of the planning requirements with regard to the number of sewer hookups required in the UGA over the 20-year planning period.

#### *VE Alternative Key Elements*

- Focused only on the Core Area.
- Evaluated winter water use data from Jefferson County PUD for the review.
- Adjusted assumed annual growth to 1.49% per the Jefferson County Comprehensive Plan.
- Start-up with one Ovivo MBR modular unit. As the system grows, more modular units could be added.
- Uses a grinder pump pressurized sewer collection system, which has a lower start-up cost but potentially a higher overall 20-year lifecycle cost than a gravity collection system.
- Grinder pumps would be required on each property for the pressurized system and would require private ownership of each pump.

Kevin explained that the VE Alternative would have a lower startup cost even though the 20-year lifecycle cost could be higher than the 2013 Design Estimate which used a gravity collection system and traditional MBR plant. The advantages of the VE alternative diminish as more and more users connect. Pressurized systems are typical of small systems (like the Core Area) that are not expected to grow. Gravity systems are typical of municipal (City) systems which usually have more users on densely developed land. The VE alternative may be a good option to get this project “off the ground”; however, the 2008 Sewer Facility Plan was looking at the best option for the build out scenario of the entire UGA which drove it towards the gravity system with a traditional MBR treatment plant.

Monte Reinders, Jefferson County added that the VE Alternative includes large enough piping to accommodate buildout to the full UGA.

#### *Discussion Period*

Participants discussed the Belfair sewer system and noted the financial difficulty that it has created for Mason County because growth has not matched the assumptions included in planning for that sewer.

Participants commented on the cost of building and maintaining septic systems in the Core Area. In response, Kevin explained that if current septic users hooked up to a sewer system, they would have more options for what they could do with their property because they would no longer be required to maintain an onsite septic tank and reserve field.

Kevin noted that power outages can be a limitation of the onsite grinder pumps, but that each pump has a warning system and some onsite storage, and water use typically drops during outages unless the property owner provides backup generator power.

In response to a question about the Ovivo MicroBLOX system, Kevin explained that Tetra Tech issued a Request for Proposals (RFP) in 2010 prior to working on the design for the MBR treatment plant.. Ovivo was selected at that time. Kevin also explained that the VE Review is a feasibility study, not a design document, and if the County selects this alternative it may be appropriate to consider other treatment systems in the sewer design.

**Action Item:** Kevin will confirm the life span of the MicroBLOX membrane.

#### **Key Metrics and Financial Summary**

Katy Isaksen, Katy Isaksen & Associates, reviewed the key metrics and financial analysis for the alternative. Initial capacity for the system is 446 Equivalent Residential Units (ERUs) and the February

2019 PUD water use data suggests a current need for 356 ERUs. A ERU is roughly equivalent to a single-family home or 4,000 gallons of water used per month.

Katy reviewed the costs of the alternative, including the costs for each ERU hook up, and alternative costs depending on the amount of money the County would receive in grants. See the VE Review document for these and additional financial metrics.

Katy and Kevin explained that the financial analysis is a model and would need to be adjusted based on the level of interest in the alternative. Katy also explained that the analysis assumes that the County would form a Local Improvement District (LID) and cover the debt service of the excess capacity in the system until additional ERUs are added.

Katy explained that securing grants from funders such as the Department of Ecology and U.S. Department of Agriculture – Rural Development would likely be necessary to make the VE alternative financially feasible. She also explained that the formation of a LID is likely a first step toward securing grants as it shows local financial support for the system.

#### *Discussion Period*

Participants explained that landowners should consider how much they currently pay for septic system maintenance when reviewing the alternative. Others expressed interest in UGA zoning for Port Hadlock, which would result from the construction of the sewer.

Several participants suggested including the Navy facility on Indian Island in the proposed sewer. Others felt this would make the project even more complex and possibly be more detrimental to progress in the end.

#### **Public Involvement Next Steps**

Thomas Christian, Triangle Associates, reviewed a list of proposed next steps, specifically with regard to public involvement.

- Formation of a Citizen Advisory Committee (CAC) or Sewer Working Group
- Community meetings
- Funders meeting
- Updates to the website

Participants discussed the CAC and Bob Wheeler, Triangle Associates, proposed that the CAC include about 10-12 participants with land in the Core Area. One of the CAC's key roles might be to work with the County on the formation of a LID. No meeting participants expressed concern regarding a proposed CAC.

Commissioner Kate Dean, Jefferson County, expressed interest in holding community meetings and a briefing with the media. Kate also explained that she can give a presentation to the Chamber of Commerce on May 6<sup>th</sup>.

**Action Items:** The Tetra Tech/consultant team should develop a set of bulleted talking points for Commissioner Dean's presentation to the Chamber of Commerce on May 6<sup>th</sup>.

#### *Citizen Advisory Committee*

Participants proposed the following people/organizations for the CAC and volunteered to contact the following organizations not present.

<i>Participants</i>	<i>Notes</i>
Craig Durgan	Volunteered
Duke Shold	Volunteered
Jason Woods	Volunteered

Ron Marlow	Volunteered
Bob Thurston	Volunteered
Jefferson County	Monte Reinders is the point of contact
School	Jason Wood, Philip Morley, and Monte Reinders will contact
Library	Monte Reinders
OlyCap	Ron Marlow and Philip Morley will contact
Peninsula Housing Authority	Philip Morley will contact
QFC/Reeds	Ron Marlow and Craig Durgan will contact
Hardware Store	Ron Marlow and Craig Durgan will contact
Mobile Home Park	Craig Durgan will contact
Navy – Indian Island	Unclear if the Navy should participate

**Action Items:** Meeting participants should contact Thomas Christian ([tchristian@triangleassociates.com](mailto:tchristian@triangleassociates.com)) and Monte Reinders ([mreinders@co.jefferson.wa.us](mailto:mreinders@co.jefferson.wa.us)) regarding the interest level and contact information of the other organizations suggested for participation in the CAC.

Participants discussed holding the first meeting before May 31<sup>st</sup> and holding monthly meetings throughout the summer, possibly at the Port Hadlock library. Suggested agenda items for the first meeting included the following.

- Background on the proposed sewer
- VE Alternative technical update
- VE Alternative financial update
- Public involvement planning
- Schedule and next steps
- Formation of a LID (Legal requirements and public involvement requirements)

*Funders Meeting*

The participants also discussed working toward a meeting with the funders including legislators/legislative staff and granting agencies, along with the CAC members. This meeting would likely be held sometime during the summer concurrent with the LID exploration/formation process. Monte emphasized the importance of creating a forum for the funders to hear from the public.

Bob summarized the action items and next steps, noting that a high-level summary of the meeting would be sent out to the participants.

The meeting adjourned at 3:45 pm.

**Attendees**

*Members of The Public*

- Craig Durgan
- Duke Shold
- Bob Thurston
- Jason Woods
- John Hamilton
- Ron Marlow

*Jefferson County*

- Kate Dean, Jefferson County Commissioner
- Monte Reinders, Jefferson County Public Works Director/County Engineer

- Philip Morley, Jefferson County Administrator

*Tetra Tech Consultant Team*

- Bob Wheeler, Public Involvement, Triangle Associates
- Jim Santroch, Wastewater Design Engineer, Tetra Tech
- Katy Isaksen, Funding / Finance Lead, Katy Isaksen & Associates
- Kevin Dour, Project Manager, Tetra Tech
- Thomas Christian, Public Involvement, Triangle Associates