

**Jefferson County Department of Community Development  
Port Hadlock Wastewater System Design**

**Sewer Advisory Group  
August 11, 2009, 1:30 PM – 4:30 PM**

**Location: Spruce Room – WSU Extension**

**Approved Meeting Summary**

**Welcome, Introductions, Review Meeting Agenda, and Meeting Summary Approval**

Meeting facilitator Bob Wheeler from Triangle Associates welcomed the Sewer Advisory Group (SAG) and provided some context for the formation of the SAG. SAG members, the Jefferson County Department of Community Development (DCD) and the Tetra Tech consultant team went around the table and made introductions (see Attachment 1 for a list of attendees).

Bob Wheeler reviewed the agenda and outlined the purpose of SAG, including its role in providing feedback to the consultant team and Jefferson County, to educate and inform the public, to provide recommendations for key sewer policies and ordinances, and to identify key factors for design standards. He reiterated that the presumption of the Advisory Group is that the wastewater system will be designed and built.

The Advisory Group reviewed the July 14, 2009 meeting summary. One SAG member noted that some of the statements made at the July meeting were accurate, but that further clarification was still necessary for him to better understand the policy issues. The Group agreed to cover some of those issues at today's meeting. No changes to the meeting summary were requested and it was approved by consensus.

**Updates**

Kevin Dour reported back on his discussions with the project hydrogeologist about how the U.S. Geological Survey (USGS) study. The hydrogeologist is aware of the work being conducted by USGS. The project findings and investigations conducted during the Facility Planning stage are preliminary (but are grounded in field work around the Port Hadlock/Irondale area). Future work conducted by the team's hydrogeologist will be coordinated with the work and findings of the ongoing USGS study.

Kevin Dour reported that a Request for Proposal (RFP) was issued for the membrane bioreactor (MBR) wastewater system design and the project team now is evaluating the three proposals received. The rationale for issuing the RFP early on in the design process was that MBR technologies differ enough as to impact how the wastewater treatment plant will be designed. Thus the RFP was issued now in order to appropriately design the treatment plant around the selected MBR technology.

Joel Peterson provided an update on the Western Washington Growth Management Hearings Board decision. He said that the parties to the June 2, 2009 hearing had expected a decision from the Hearings Board on July 17, but the County has not yet heard. Potential reasons for the delay could include the Board's busy schedule or because a second petition was submitted and the Board is taking additional care to make sure the first ruling is thorough and complete before addressing the second, relatively similar petition.

Questions/comments brought up during the update conversation included:

- In response to a question about how long the MBR contract would last, it was noted that the contract was good for 12-18 months and after a certain amount of time the contract could be modified.
- In response to a question regarding a potential new PUD #1 project, Kevin Dour said that the effluent of the wastewater system could theoretically be used for a reverse osmosis plant.
- In response to a question about whether it is necessary to develop an entirely new design for this wastewater system when other wastewater systems often use existing designs, Kevin Dour explained that for a plant size of one million gallons per day (the Port Hadlock system is expected to be this size at the end of the 20-year planning horizon), ready-made designs do not exist. Out of the box pre-designed systems usually process under 100,000 gallons per day.

Based on questions developed from the July meeting, Katy Isaksen addressed issues about recognizing the socio-economics of the Port Hadlock/Irondale area. She noted that the project team is seeking grants to reduce capital costs of the wastewater system. Following the July 14 SAG meeting Katy Isaksen spoke to ShoreBank Septic Loan Program Manager Terry Hull about the potential for a similar program to assist lower income households connect to the wastewater system. Mr. Hull noted that a loan program (to help out lower income households) for the wastewater system could be a great opportunity, but sees two challenges: (1) the current program prohibits connections to sewer systems, which would necessitate starting a new program separate from the existing septic program; and (2) new capital would need to be found. Mr. Hull explained that he was open to exploring new opportunities to help finance sewer connections for Port Hadlock residents.

Additionally Katy Isaksen reported out that:

- Joel Peterson had conducted research on how many properties within the service area receive property tax exemptions. In the Port Hadlock UGA, 109 households fall under this category.
- Currently funding opportunities on the federal level exist and Congressman Norm Dicks has included \$1 million grant funding for the Port Hadlock wastewater system in the current Department of Interior appropriations bill. The funding program is the State and Tribal Assistance Grant (STAG) program that the County applied for earlier this year.
- Based on the questions asked at the July 14 SAG meeting, other wastewater system examples were researched by the project team (Port Orchard, Belfair, and Carnation) to help provide more context for SAG members.
- Rate discount policies would be discussed at the September SAG meeting.

**Presentation, Discussion, and Recommendations on Policies/Ordinances**

Katy Isaksen reviewed the policies and ordinance issues that the SAG will be considering and making recommendations during the four-meeting process:

Policy and ordinance issue	SAG Meeting schedule
Connections to system	SAG Meetings #1 & 2
System management	SAG Meeting #2
Cost allocation	SAG Meeting #2
Sewer availability	Future SAG Meetings
Extension of system	Future SAG Meetings
Rate structure	Future SAG Meetings
Ancillary services/requirements	Future SAG Meetings

She then transitioned into the presentation and asked SAG members for advice on policies and ordinances. Four questions for the SAG to consider at the August 11 meeting included:

1. When is connection required? – Existing buildings

2. Side sewer policy – Where does public/private responsibility change?
3. System management – Should the County operate in-house or contract for services?
4. Cost allocation – General, local and private on-site costs; also connection charge vs. Utility Local Improvement Districts (ULID)

### **Connections to system**

Katy Isaksen then reviewed the content for SAG members to consider regarding “connections to system” (Please see the meeting PowerPoint presentation for a complete outline of her presentation, available at [www.porthadlocksewer.org/Advisory\\_Group.htm](http://www.porthadlocksewer.org/Advisory_Group.htm)). The central question that this policy sought to ask was “*how much time would businesses or households have to hookup for sewer service once the wastewater system has expanded to their area?*” Additionally, she outlined some factors to consider including considering the planned expansion/phasing of the wastewater system (in accordance with the Facility Plan), the funding requirements (what the granting or low interest loan agencies would require to ensure a successful and financially sound utility to make the best use of grants and be able to repay the amounts borrowed), and how to maintain utility financial stability while keeping the costs to customers low.

In other words, a significant amount of money will be borrowed, in addition to the grants received, and this debt will be repaid by new customers connecting to the sewer. If only a few connections are made, there will not be the revenue to the sewer utility to meet the debt payments. In addition, the operations and maintenance costs for the system will be paid by those connected to the sewer. More connections will help keep the cost per customer as low as possible.

### *Comments, questions dialogue, and responses on the policy discussion about “connections to system”*

- The project team explained that there could be variances between commercial and residential costs. SAG members discussed and compared the costs of hooking up to a wastewater system and building a septic system leachfield.
- The project team explained that the financing plan presented in the Facility Plan (including the cash flow analysis) has been designed so that costs would be spread evenly between the early wastewater system users and those signing up at a later date. However there will need to be a “cost of money” factor applied to ensure that the later users do indeed pay their share of the common/shared costs.
- The project team explained that the public health department will likely require an immediate connection upon failure of the septic system if located in an area where sewer service is available.
- One SAG member suggested that Jefferson County might want to take the lead on financing issues in order to spread the costs over the whole county (since the entire county will benefit from the wastewater system).
- The project team explained that because no established customer base exists at the outset of wastewater system design and construction, selling revenue bonds for funding the project is not possible. Using a utility local improvement district (ULID) method for funding the local collection system allows for the design, construction, and expansion of the wastewater system in phases and would be repaid by the specific properties benefited. General obligation bonds are always an option for the county to sell for financing the wastewater system but grants and low-interest loans typically are less costly.
- One SAG member noted that the level of funding available to help pay for connections would be an important factor to consider when evaluating whether to require an immediate system connection versus having the chance to connect at a later date.
- The project team explained that if a septic system were to fail prior to wastewater system service being available, there may be options to expand the system earlier if neighbors were willing to pursue a ULID option together, or if a nearby developer wanted to finance an expansion in order to connect earlier.

- One SAG member suggested that some variances should be built into any policy for connections to the system.

#### *Connection to System Recommendations*

Katy Isaksen then presented a set of potential recommendations (see the August 11 SAG meeting PowerPoint presentation available on the Port Hadlock website). For the recommendations and considerations that were examined and tentatively approved by SAG members, please see Attachment 2 of this meeting summary.

#### **Side Sewer Policy**

The SAG then considered the question of where along the side sewer pipeline the public/private responsibility would change. Kevin Dour outlined that two alternatives exist for where the responsibilities should end and begin: (1) at the property line or at right-of-way; or (2) at the sewer main. The SAG discussed some of the issues concerning where the sewer pipeline would be located (typically they are placed in the center of the roadways), stubs placement, and new sewer placement issues. In addition to the presentation provided by the consultant team, SAG member dialogue and discussion included:

- One SAG member noted that the questions would be influenced by right of way issues.
- A SAG member asked about what other entities (e.g., the Jefferson County Public Works Department and the Washington Department of Transportation) should be informed about this new utility that will be impacting the streets?
- One SAG member said that for initial installation, the sewer side policy should be up to the right of way.
- In response to concerns about how long households would have before needing to replace their side sewers, Kevin Dour noted that the assumed design life of side sewers is around 40 years (although they have been known to last longer in many instances).
- In response to a SAG member question about whether or not to place the sewer in the center of the roadway, it was noted that an alternative to locating the sewer down the center of the existing street is to put the sewer along one side of the street. This is an issue that would be addressed in the construction standards which would be developed by the new sewer utility. In general, locating sewers in the center of the roadway is a typical construction standard.

#### *Side Sewer Policy Recommendations*

A set of potential recommendations were presented to SAG members (see the August 11 SAG meeting PowerPoint presentation, available on the Port Hadlock Wastewater System website). For the recommendations and considerations that were examined and tentatively approved by SAG members, please see Attachment 2 of this meeting summary.

#### **System management**

Katy Isaksen then reviewed the content for SAG members to consider regarding management of the new wastewater system – specifically, should the County carry out all operations (treatment plant, pump stations, collection lines) and billings in house, contract separately for operations or billing, or contract the wastewater system services out to other public or private entities? She outlined several factors, which can be reviewed in the August 11 PowerPoint presentation at [www.porthadlocksewer.org/Advisory\\_Group.htm](http://www.porthadlocksewer.org/Advisory_Group.htm). In addition to the presentation notes, dialogue and discussion included:

- One SAG member discussed the importance of hiring a local business in Jefferson County for the contracting services.
- A SAG member noted that while keeping business in the County was important, so was cost effectiveness. He noted that if an outside contractor could make operating costs \$10 a month

cheaper than this would benefit rate payers and may be preferable, even if the cheaper company was located outside of Jefferson County.

- One SAG member suggested that the PUD could be a good manager for the wastewater system.
- A SAG member noted that coordination of both utilities' water and sewer with the PUD could be beneficial for the area's utilities management.
- In response to a question about whether system management would be put out to bid (if contracting services were used), it was noted that this would be done to encourage competition.

#### *System Management Policy Recommendations*

A set of potential recommendations were presented (see the August 11 SAG meeting PowerPoint presentation, available on the Port Hadlock Wastewater System website). For the recommendations and considerations that were examined and tentatively approved by SAG members, please see Attachment 2 of this meeting summary.

#### **Cost Allocation**

Katy Isaksen mentioned that having the utility being successful and equitable to its users was the goal and also a challenge for project financing. She described costs associated with constructing a sewer system as fitting into three major categories:

- Common and Shared – Those costs which all users share the use and benefit (e.g.) the treatment plant, main pump station, and oversized collection lines.
- Local Costs – Those costs which a local group share the use and benefit (e.g.) local collection lines and pump stations within a neighborhood.
- Private On-Site – Those costs which the private property owner has the sole use and benefit (e.g.) the side sewer connection on private property, a grinder pump system (may be required for some properties along the beach).

The discussion slides outlining the differences between these cost categories can be reviewed in the August 11 meeting PowerPoint presentation at [www.porthadlocksewer.org/Advisory\\_Group.htm](http://www.porthadlocksewer.org/Advisory_Group.htm).

#### *Comments, questions dialogue, and responses on the policy discussion about "cost allocation"*

- In response to one SAG member's question about when a grinder pump would be needed for the system, Kevin Dour noted that such a pump would be needed in a few locations along Port Townsend Bay.
- A SAG member wondered if Jefferson County intended to borrow the money for the cost of the entire sewer system and later charge UGA residents to pay the loan back. The consultant team explained that the system would be developed and financed in phases such that the system would expand, and the County would seek grants, low interest loans, and/or bonds to finance the expansion. The users would be charged their share to repay the amount borrowed in accordance with the cost allocation policies.
- The consultant team noted that the wastewater system would be built in phases to account for the area's expected growth.
- One SAG member noted the importance of having an equity component in the project.
- A SAG member inquired how this type of project could affect the expansion of low-income housing. They expressed a concern that some housing could be removed because of the costs required for the hookup and additional monthly fees.
- One SAG member asked if the total number of existing units accounted for in the funding analysis only incorporated existing housing stock or it took into account future housing growth. The project team explained that the funding analysis accounted for future growth of new equivalent units in accordance with the County's Comprehensive Plan.

### *Cost Allocation Policy Recommendations*

A set of potential recommendations were presented to SAG members (see the August 11 SAG meeting PowerPoint presentation, available on the Port Hadlock Wastewater System website). For the tentative recommendations and considerations that were examined and tentatively approved by SAG members, please see Attachment 2 of this meeting summary.

### **Technical Discussion**

Kevin Dour then presented an update on technical issues concerning the wastewater system design and the site evaluation process. He explained that the candidate parcels were identified and the project team had conducted field visits. Through the course of the site evaluation, the project team noticed the potential opportunity to eliminate or reduce the need of an influent pump station (which could lessen the overall capital, as well as operations and maintenance, costs), by instead relying on gravity flow for the treatment plant. Kevin Dour cautioned that this finding would have to be confirmed through future evaluations, but that it was an exciting piece of news. Next steps for project team included formulating a recommendation for how to move forward with site selection.

In addition to the MBR technology bidding process, Kevin Dour noted that additional design considerations will focus on the appearance of the facility and mitigation issues. He explained that the project team intends to design the wastewater system to be an amenity for the community.

Kevin Dour said that the project team is examining different strategies and options for acquiring grant and/or low interest loans to finance the design and construction phases. He outlined the team's current anticipated schedule for applying for funding from targeted funding programs and when those funds might be received if successful. He mentioned that at the construction phase, additional potential funding from programs such as the Public Works Trust Fund, the Department of Ecology and the US Dept. of Agriculture-Rural Development should be available. The project team is continuing to explore and identify new funding opportunities, particularly opportunities to aide low-income residents. In response to a question about what data exists about the number of low-income households, it was noted that considerable data does exist and the project team has incorporated that data into its evaluation of available programs as the team continues to seek additional project funding sources.

### **Wrap Up & Next Steps**

Bob Wheeler noted the dates for the two remaining SAG meetings:

- Wednesday, September 9 (Jefferson County Library)
- Tuesday, October 6 (Spruce Room – WSU Extension Offices)

He then mentioned next steps for the September 9 meeting, including discussing additional policy issues and reporting back to the SAG on future updates.

### **Adjourn**

Bob Wheeler thanked SAG members for their input and adjourned the meeting at 4:30 p.m.

**Attachment 1: Meeting Participants**

SAG Members

Name	Organization
Steve Brown	Chimacum School District
Larry Crockett	Port of Port Townsend
Ken Clow	City of Port Townsend
Crystal Hudson	Inn at Port Hadlock
Bill Mahler	Northwest School of Wooden Boatbuilding
Ken McMillan	Jefferson PUD #1
Bill Miller	Jefferson County Planning Commission
Jim Parker	Jefferson County PUD #1
Jody Reuther	Inn at Port Hadlock
Hank Rogers	Citizen
Chuck Russell	Valley Tavern
Ray Serebrin	Jefferson County Library
Shelby Smith	EDC Team Jefferson
deForest Walker	Olympic Community Action Programs (OlyCAP)

County Staff and Consultants

Name	Organization
Joel Peterson	Jefferson County Department of Community Development
Kevin Dour	Tetra Tech
Katy Isaksen	Katy Isaksen & Associates
Blake Trask	Triangle Associates
Bob Wheeler	Triangle Associates

## Attachment 2: A Tracking and Summary of SAG Recommendations

Topic	SAG Recommendation	Mtg. no.	Notes
Simple vs. Complex Rates	A balance between simple and complex, with a lean toward simple sounds appropriate	1	This is an initial decision pending further consideration of policies.
Simple vs. Complex Rates	It is reasonable to base rates on water usage	1	
Simple vs. Complex Rates	Potentially develop 4-5 categories of rates for households and commercial users	1	
Simple vs. Complex Rates	Predictable rates are preferable.	1	
General	To carefully consider unintended consequences to the extent possible as they evaluate policies and make recommendations.	1	
Connection to System	New development/major modification <ul style="list-style-type: none"> <li>As set by development regulations (connect when sewer phase is available, within 200 feet, or may install an interim on-site system and sign a no-protest agreement for potential local improvement districts that may be formed in the future.)</li> </ul>	2	
Connection to System	Interim on-site systems <ul style="list-style-type: none"> <li>As set by development regulations (connect within 1 year of availability)</li> </ul>	2	
Connection to System	Failed septic <ul style="list-style-type: none"> <li>As set by public health (connect when sewer is available)</li> </ul>	2	Should consider enforcement issues.

Connection to System	Existing Buildings <ul style="list-style-type: none"> <li>• Within [60] days of notice</li> <li>• County should seek financial assistance/programs for low-moderate income residents</li> </ul>	2	<ul style="list-style-type: none"> <li>•How to build incentives for people to want to connect earlier.</li> <li>•There should be a relationship to the cost and complexity to the time required to connect.</li> <li>•For existing buildings: Given that the buildout will occur over a number of years, a communications element should be implemented to give property owners advanced notice. This will avoid the first communication with property owners being only 30 days before the connection requirement. Working with individuals to give them advanced notice will be important. This could include education, finance options, etc. There needs to be some ability or option for the resident to be proactive. This will reduce the issue and may lessen the potential hardship of a 30 or 60 day notice.</li> <li>•The number of days notice requirement should be a function of how long it takes someone to get a loan. 60 days should be appropriate.</li> <li>•Concern about 60 days being okay for financing issues.</li> <li>•Make some provisions in the policy to incorporate variances – and some flexibility – into the system (possibly for extreme hardship cases or special circumstances).</li> </ul>
Side Sewer	Responsibility should change from public to private at the property line <ul style="list-style-type: none"> <li>• Require sewer permit for connecting building sewer to public sewer</li> <li>• Considers ability of property owners to connect to stub at property line</li> <li>• Require a stub or tee for utility maintenance access at property line</li> <li>• Keep integrity of sewer mains and service stub outs within the County right-of-way the responsibility of the utility</li> <li>• County should consider licensing side sewer contractors</li> </ul>	2	<ul style="list-style-type: none"> <li>•Find out from Jefferson County Public Works as well as WSDOT what their policies/rules for side sewers work (cuts in the Right-of-Way) would be.</li> <li>•Explore if there an allowance for private prop owners to do their own work?</li> </ul>
System Management	County will <i>own</i> the system.	2	<ul style="list-style-type: none"> <li>•This is in accordance with the Facility Plan.</li> <li>•Should consider other options, such as the PUD owning the system.</li> </ul>
System Management	Principles: <ul style="list-style-type: none"> <li>• Seek to protect County and customer investment</li> <li>• Seek efficiencies and savings in the cost of operations and administration</li> </ul>		
System Management	Contract billing services	2	

System Management	System operation and maintenance (contract or in-house)	2	County should consider contracting for services based upon best available price Consideration should be given to contractors who are resident (or their key employee's reside) within Jefferson County
Cost Allocation	<b>General costs</b> include those facilities serving the general system and benefits all customers: treatment and recharge system, influent pump station with force main, mainline sewer pipes greater than 8"	2	<ul style="list-style-type: none"> <li>• Make sure that those who pay at the start are not paying a higher cost than users connecting on to the system later.</li> <li>• The cost allocation system needs to be fair – concern about threatening low income housing starts.</li> </ul>
Cost Allocation	<b>Local costs</b> include those facilities serving and benefiting a local area: 8" collection pipe, local pump stations	2	<ul style="list-style-type: none"> <li>• 8" sewer pipes are the minimum size allowed according to DOE standards.</li> </ul>
Cost Allocation	<b>Private on-site costs</b> include those facilities serving and benefiting individual properties to be paid by private property owners	2	<ul style="list-style-type: none"> <li>• Low income issues need to be considered.</li> <li>• Seek opportunities to lessen the burden of on-site and connection costs to low income residents.</li> </ul>