

**SUMMARY**  
**Stakeholder Workshop on Collection System Alternatives**  
**(Stakeholder Workshop #1)**

**March 16, 2006, 10 AM – 12 PM**  
**1820 Jefferson Street**  
**Port Townsend, WA 98368-0920**

In response to the 1990 Growth Management Act (GMA), Jefferson County pursued the designation of an Urban Growth Area (UGA) in the Irondale/Port Hadlock area. As part of the requirements for establishing a UGA, Jefferson County is conducting a study of alternatives for developing a sewer system. There are currently no sewer facilities in the area, and existing residences and businesses are served by on-site treatment and disposal (septic) systems.

The sewer study will enable the County to identify 1) the final preferred alternative or method of collection, treatment, and disposal of wastewater, 2) the service area, 3) the phasing of implementation of sewers throughout the service area, 4) the cost for individual connections to sewer, and 5) revenue sources. The goal of the study is to produce a comprehensive sewer plan that will help the County plan for growth in the area over the next 20 years; that will satisfy RCW 36.94 concerning County's sewerage, water, and drainage system responsibilities; and that will be approved by the Department of Ecology.

**Workshop Summary**

A stakeholder workshop was held at the Jefferson County Courthouse on Thursday, March 16 from 10:00 am to 12:00 pm. The workshop was open to the public.

The purpose of the workshop was to:

- Present collection system alternatives
- Review advantages and drawbacks of each alternative
- Take questions and comments
- Identify preferences for a collection system

Jefferson County Commissioners, County staff, local agency staff, and several key members of the public were invited to the workshop. The County had identified local agencies whose facilities might be sewerred and/or whose activities might be affected by the installation or operation of a sewer. The County also identified representatives of business and community organizations and citizens who had been active previously in the process to establish a UGA. These parties were contacted by telephone. A notice of the workshop was available on the County's website and in the Port Townsend Leader.

County Commissioner David Sullivan (District 2) and County Commissioner Pat Rodgers (District 3) attended the workshop. The consultants to the County were represented by Kevin

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Dour and Jim Santroch of TetraTech/KCM and Bob Wheeler and Ellen Blair of Triangle Associates. A complete list of workshop participants is attached to this summary.

### **Introductions & Workshop Overview**

Mr. Wheeler, workshop facilitator, opened the meeting at 10:10 am. He led introductions and explained the purpose of the workshop. He noted that the sewer study had just begun and that it was typical to start by identifying a collection system, because the collection system would help determine the appropriate treatment approach. He explained that sewer planning is a step-wise process, stressing that the project team understands that the cost component, which will be developed over the next few months, will be crucial to the community. He noted that the presentation on collection system alternatives would show general cost figures, but that detailed costs for each Equivalent Residential Unit (ERU) had not yet been developed.

Mr. Wheeler reviewed the agenda and requested that the County Commissioner have the first opportunity to ask questions or comment during the discussion portion of the workshop. He reviewed the steps that will lead to the selection of a complete sewer system, including public involvement opportunities, technical work, and the development of costs and funding options.

Mr. Wheeler explained that the project team had recently interviewed several local citizens and representatives of local agencies and community organizations to better understand what kind of public involvement was needed and what kind of information people wanted. He noted that a key theme that had been repeated in the interviews was that people did not want to participate in a lot of public process until new, substantive information, especially cost information, was available. People were interested in getting involved once the technical and financial information started to come together and they could tell how they might be impacted personally.

Mr. Wheeler said that this message led the project team to plan to hold public open houses later in the sewer study process, but he noted that the stakeholder workshops were intended as a way to get early input from the community to ensure that the resulting sewer plan would meet the community's needs.

### **Collection System Alternatives**

Mr. Dour, consultant team project manager, presented the collection system alternatives, reviewed the advantages and drawbacks of each alternative, and identified the short-list of alternatives still under consideration. His PowerPoint presentation is attached to this summary. Key points of the presentation are summarized below.

Mr. Dour began by reviewing the purpose of sewer planning for the Irondale and Port Hadlock area. The two main reasons are 1) to plan for expected growth in the area, and 2) to support economic vitality in the area. Mr. Dour explained that the County is preparing a sewer Facility Plan, as opposed to any other type of plan, for the following reasons:

- It is required by WAC 173-240 for constructing or modifying wastewater facilities,

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- It is a prescribed, methodical approach for planning sewer facilities,
- It meets federal funding requirements, and
- It involves the Department of Ecology, which must approve the plan, early in the process.

Mr. Dour used maps in the PowerPoint presentation (and posted on the wall) to show the 6-year and 20-year sewer planning boundaries that were established according to the Growth Management Act (GMA). He explained that the sewer would be constructed in phases during the 6-year and 20-year planning periods, beginning with the business core. He said that, since it seemed unreasonable to assume that the outlying areas would get built out all at once, the 20-year planning boundary had been divided into sub-planning areas for planning purposes. He noted that new developments would need to connect to the sewer.

Mr. Dour described the wastewater collection technologies that had been considered and noted the advantages and drawbacks of each one. He said the technologies had been analyzed and narrowed to a short-list. The short-list included:

1. Conventional gravity sewers
2. Pressure sewers
  - a. Septic tank effluent pumping (STEP) method in which solids settle out into an on-site septic tank and liquid is conveyed using a high-pressure pump for treatment (please note: existing septic tanks, which are not designed for use under these conditions, would most likely be replaced since they often cannot be retrofitted).
  - b. Grinder pump method in which solids in the raw wastewater are ground within a small pump chamber by a grinder pump so that the liquids and solids can be conveyed under pressure to a wastewater treatment plant.
3. A third collection system alternative was also proposed, a combined gravity/pressurized system, with gravity in the central, core portion of the system and pressure (STEP or grinder) in the outer reaches of the system.

**Advantages and Drawbacks of Short-Listed Technologies**

<b>Advantages</b>	<b>Drawbacks</b>
<b>Conventional Gravity</b>	
<ul style="list-style-type: none"> <li>• Proven reliability</li> </ul>	<ul style="list-style-type: none"> <li>• Requires constant downward slope                             <ul style="list-style-type: none"> <li>○ Deep sewers for flat terrain</li> <li>○ Intermediate pump stations for hilly areas</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Lowest operations &amp; maintenance (O&amp;M) costs</li> </ul>	<ul style="list-style-type: none"> <li>• Highest initial cost (deeper sewers)</li> </ul>
<ul style="list-style-type: none"> <li>• No need for septic tanks or pumps for individual connections</li> </ul>	

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<b>Pressure – STEP</b>	
<ul style="list-style-type: none"> <li>• Low initial cost</li> </ul>	<ul style="list-style-type: none"> <li>• Septic tank O&amp;M (ownership agreements)</li> </ul>
<ul style="list-style-type: none"> <li>• Smaller sewers that can follow terrain</li> </ul>	<ul style="list-style-type: none"> <li>• Pump requirements (electrical connection)</li> </ul>
<b>Pressure - Grinder</b>	
<ul style="list-style-type: none"> <li>• Used when terrain doesn't allow gravity sewers and septic tanks aren't desired</li> </ul>	<ul style="list-style-type: none"> <li>• Pump requirements (electrical connection, O&amp;M)</li> </ul>
	<ul style="list-style-type: none"> <li>• Pump must pass solids                             <ul style="list-style-type: none"> <li>○ More difficult than passing liquid only</li> <li>○ Additional maintenance required</li> </ul> </li> </ul>

Mr. Dour presented qualitative comparisons of the short-listed collection system technologies.

**Qualitative Comparisons of Collection System Technologies**

<b>Conventional Gravity</b>	<b>Pressure (STEP or Grinder)</b>
Well-suited for high density housing (> 3 houses per acre)	Well-suited for low density housing (≤ 3 houses per acre)
Higher up-front cost	Lower up-front cost
Lower O&M cost and lower cost for future connections	Higher O&M cost and higher cost for future connections
More convenient: No tank or pump on private property	Less convenient: Septic tank and pump on private property <ul style="list-style-type: none"> <li>• Requires dedicated space</li> <li>• O&amp;M, access for pumping</li> </ul>
Greater flexibility: if install gravity in commercial core, later can install either gravity or pressure sewer in outer areas	Less flexibility: if install pressure sewer in commercial core, later must install pressure sewer in outer areas
Higher total cost over 20-year planning period	Lower total cost over 20-year planning period
System tends to last longer, up to 50 years	Systems tend to last for less time; some major system components would likely be replaced after 20 years
Higher percentage of total cost would be eligible for grant funding. Gravity has higher up-front capital costs, which are often eligible for grants.	Lower percentage of total cost would be eligible for grant funding. Pressure involves costs for septic tanks and pumps on private property, which are generally not eligible for grants.

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Mr. Dour concluded by presenting planning level estimates for the implementation costs, both by total cost and by cost per ERU, for a gravity sewer collection system, a pressure sewer collection system, and a combined sewer system. The costs were broken down by sub-planning area.

### **Questions & Comments**

Workshop participants commented and asked questions during the presentation and during the discussion period at the end of the workshop. Their comments and questions, as well as the project team's responses, are grouped by topic.

#### *Conventional Gravity Sewer Details*

**Question:** What is the actual slope for a gravity sewer?

**Response (Dour):** The slope depends on the diameter of pipe, but a typical minimum slope for an 8 inch sewer is 0.004 feet per foot. When larger pipes are used, the slope can be a little less, but there is a substantial drop if the pipeline is very long. Of course, it is rare to have a natural downward slope for the whole course of the sewer.

**Question:** Generally, what is the topography of the service area?

**Response (Dour):** Coming south through Irondale, it goes from a high point to a low point with a change of about 30 or 40 feet. But way at the north end there are low points, although we probably wouldn't develop a sewer right by Chimacum Creek, where there is a 100 foot drop.

#### *Pressure Sewer Details*

**Question:** I assume at high densities, where it looks like a gravity sewer makes more sense than a pressure sewer, in part because of the number of septic tanks or grinder pumps that would be required, that you would explore catching the wastewater for multiple homes in one tank or pump.

**Response (Dour):** Yes, perhaps.

**Question:** Maximizing the use of available land is an important part of expanding. Compared to current septic systems, could more land be used with a pressure system that has a septic tank or a grinder pump? What would be the impact on a commercial parking lot?

**Response (Dour):** If there is a septic tank in place now, the new septic tank or the grinder pump could be placed in the same space. The drainage field would no longer need to be protected, so that land could be used. Also, a parking lot could go over top of an extra strong septic tank (designed for vehicle loading) or grinder pump system (if installed in a vault).

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### *Pressure Sewer, Grinder Details*

**Question:** Would each home have to have its own grinder pump system? Is the grinder pump a new technology?

**Response (Dour):** Grinder systems are not particularly new. There would be no solids in a tank on the property, but, yes, each home would have a grinder pump and electrical connection.

**Question:** Would existing septic tanks have to be replaced with a grinder pump?

**Response (Dour):** Yes, existing septic tanks would be replaced.

**Question:** What happens if the power goes out?

**Response (Dour):** Usually you would get a high level alarm, which underscores the differing levels of convenience among the sewer technologies. You would have to call the responsible agency to come and fix the problem, and you'd have to minimize your water usage in the interim. And nine times out of ten, it seems these problems happen late at night.

**Response (Santroch):** There is some storage capacity in the grinder and STEP systems. More storage capacity could be built in, but that would be more expensive.

### *Pressure Sewer, STEP Details*

**Question:** Could existing septic tanks be used with a STEP system? Most of them already have pumps.

**Response (Dour):** The presumption is that existing septic tanks would need to be replaced. STEP systems involve the use of specialized tanks with integral pump vaults and electrical connections. It would cost more to retrofit an existing septic tank to make it work according to electrical codes and design requirements than it would to replace it. Another problem with existing tanks is that most of them are not watertight. They experience groundwater infiltration, which is a problem in a pressure system. In our evaluation of collection system alternatives, we assumed that all septic tanks would need to be replaced for a pressure sewer.

**Question:** You use concrete tanks don't you?

**Response (Dour):** The tanks are concrete, but they have a specialized chamber for the pump.

**Question:** Assuming you have a working septic tank, could the effluent go into the sewer?

**Response (Dour):** Theoretically, yes. It's something that would have to be decided during final design and negotiated with the sewer agency. Experience shows that only ten percent of current septic tanks are usable. STEP tanks are higher quality tanks that are created with a monolithic pour; they are designed to be watertight so the treatment system doesn't end up treating groundwater inflow.

**Question:** Can multiple buildings be connected to one septic tank?

**Response (Dour):** For a standard, single family lot, it is normal to plan for each home to have its own tank and pump. For houses that are relatively far apart, it doesn't work to connect to the same tank. For denser development, such as apartments and multi-family housing, one large tank may be able to serve multiple residences. The main issue is to not overload the tank.

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If a STEP pressure sewer were implemented, we would look in detail at how buildings would be connected. Looking at existing STEP pressure sewers, for example in Yelm and Montesano, the rule of thumb is that single family homes have their own tank.

### ***Sewer System Costs & Funding***

**Comment:** From a property owner standpoint, once the sewer system is in, the value of your home goes up significantly when you're ready to sell.

**Question:** Are your cost projections just for collection or do they include treatment also? Would there be a cost savings for treatment when using a STEP system?

**Response (Dour):** The cost projections are for collection only. Whether or not there is a cost savings for treatment when using a STEP system depends on the situation. STEP involves less solids handling at the treatment plant, but there is decentralized solids handling. I can't say what the answer is in a general sense. An answer to this question will be discovered further into the study once we have developed an integrated collection, treatment, and disposal system.

**Comment:** Let people be aware that with a pressure system, property owners have to pay for the electricity for the pump.

**Comment:** As a homeowner, I think that whatever system is put in, if people find out that it will cost them several thousand dollars, they will fear that that the money has to be paid all up front. I assume the costs will actually be amortized over time.

**Response (Wheeler):** Correct, and we will analyze what rates would actually be over time.

**Question:** I assume there may be some grant money available to build a sewer system. Are there different funding levels based on the different sewer system alternatives?

**Response (Wheeler):** There are a number of grant sources that we'll investigate. The member of our team who will research funding options is on the Washington State Public Works Board, which is a source of low-interest loans. Each different grant source, such as the Centennial Clean Water Fund, has different criteria. However, usually grants can be applied to public portions of the sewer, but not for components on private property, such as septic tanks or grinder pumps. So in that regard, there may be some preference for a gravity sewer, which has more of its costs tied up in public portions of the sewer. However, we still have to do more investigation.

**Question:** Are the costs of responding to maintenance calls borne by the whole system or by the individual?

**Response (Dour):** The Department of Ecology says that it's all part of the system, so those costs go into the rates.

**Question:** You broke implementation costs down by ERU. For those of us who are businesses or agencies that use high volumes of water, are there other ways to do the breakdown so we can get a general idea of our potential costs?

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**Response (Dour & Santroch):** It is hard to do because you would have to break down the whole design system. However, one way to look at it is to consider that an ERU is equivalent to X gallons per day of sewer, which works out to around 85-100 gallons per person per day. If you estimate how many people you're dealing with, you can estimate your costs based on the ERU costs.

**Question:** Can you estimate your usage by your water usage and find out if you're a big user or a little user?

**Response (Dour):** Yes, absolutely. You can look at your water records, based on your business meter usage, to see your current water usage and forecast future usage.

**Response (Santroch):** You would need to look at your winter water usage, because people use potable water in the summer for irrigation.

### *Sewer Study Methodology*

**Question:** Are the six sub-planning areas that you defined for the sewer study topographical or political?

**Response (Dour):** There is nothing political about the sub-planning areas. At the onset of the study, we knew we needed to work within a 20-year and a 6-year boundary. Because the service area is so large, we did not want to assume that the whole area would get built out at once. That's why we made step-wise chunks broken out by how we thought the progression of development might occur. We looked at which areas within the 20-year boundary would be closest to sewers completed in the 6-year boundary. The sub-planning areas were estimated based upon where we thought areas would connect independently to the 6-year sewers. These were planning assumptions and they are not set in stone.

**Question:** One of your major assumptions in planning is that everybody hooks up to the sewer. Did you know that six weeks ago the County adopted new development regulations that referred to optional sewer areas in the 20-year boundary?

**Response (Dour):** I had not heard that, but for planning purposes and comparing alternatives, the main thing is to use the same assumptions for all alternatives, so it would not affect our analysis.

**Comment:** The sewer system is being studied in stages, first the collection system, then treatment and disposal. But if you studied the system as a whole sooner, you might find some opportunities. For example, you might find that for disposal you're going to pipe reuse water back in the same ditch the collection system is in.

**Response (Dour):** Once the collection, treatment, and disposal components are determined, we think we may identify efficiencies in the system.

**Response (Santroch):** Regarding your example, code requirements prohibit putting sewer pipe in the same ditch as treated water. They have to be 10 to 12 feet apart.

**Question:** Isn't that requirement changing?

**Response (Santroch):** It actually just changed to the numbers I mentioned.

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### *Cost Methodology*

**Comment:** If you find the total cost, and then use the discount rate to come up with a discounted number, you'll have the absolute present value.

**Response (Dour):** Yes, that's what we did.

**Comment:** Earlier you identified that the gravity sewer system is a lot longer-lived than a pressure system. In comparing the implementation costs of the three alternatives, it appears you are assuming the same overall service life of each of the three alternatives. It bothers me in a way, that it will mislead people into thinking that these systems will last only 20 years.

**Response (Dour):** That is a good point. Gravity could probably last 50 years. This analysis looks at a 20 year time span for comparison purposes, because of the 20-year planning boundary and because septic and pumps have to be replaced after about 20 years.

Pressure sewers can be viewed as a “starter kit” for a sewer system: after 20 years when the area is more densely populated and there are more people to pay, the system can be replaced with a gravity sewer. It is good to be aware that gravity lasts longer, but pressure may be all that a community can afford today. Pressure will work, but people must be aware that it's a pay-as-you-go system and it is less convenient because of ongoing maintenance.

**Question:** If you did a 30- or 40-year timeline, would the STEP lines (implementation costs) be a lot taller?

**Response (Dour):** Basically yes. It still comes down to an ability to launch or not.

### *Environmental Considerations*

**Comment:** I'd like to remind everyone that much effort has gone into caring for Chimacum Creek over the years. There is a lot of groundwater recharge from septic systems that seems to be somewhat indicative of a high return flow to the creek. If we are looking at a sewer system that will, in effect, take groundwater recharge away, there will be consequences for the creek.

In this vicinity, there seem to be at least two stacked aquifers. The PUD's belief from testing over time and working two wells is that very little, if any, of the recharge from septic reaches the lower aquifer, but it's highly likely, although I'm not a hydrogeologist, that some of the recharge gets to the upper aquifer. I'm not saying we should use one system over another, but it tells you that there is an ecological advantage to having septic systems here.

**Response (Dour):** We do have a geologist on the consultant team, and we are looking at how to dispose of treated wastewater. Disposal will probably not be an outfall into the bay, and it may be some kind of distribution system, so the sewer system may not necessarily remove the recharge to groundwater. However, our analysis of disposal options is very preliminary and our options may change.

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### *Water Reuse*

**Question:** Have you thought about separating gray water and wastewater? The state PUD association is working on that.

**Response (Dour):** It's a big topic at the Washington Association of Water and Sewer Districts. This is not something we have considered at this point in the analysis. We will take a preliminary look at this option to see if there is any viability.

**Question:** Does either pressure or gravity have an advantage in separating gray water and wastewater?

**Response (Dour):** You would have to replumb the house to separate black and gray water. For pressure, black water would go into the septic tank or grinder, so a pump vault and control panel would still be necessary. It might mean a smaller septic tank on the property, but in the grand scheme, with all of the components involved, I don't see a major cost shift.

For gravity, it could change the ability to convey solids, so it may affect the level of infrastructure needed. If you were just doing gray water recharge, and there were no cost considerations, a pressure system would be better.

**Question:** Is it easier to separate black water from gray water in new construction?

**Response (Dour):** Yes.

**Comment:** We need to consider that at this stage, we have the chance to do things from scratch. In 50 years, plain water will be a precious thing. If we don't plan to reuse water now, our descendants will wonder why we didn't do it right the first time, when the ecological cost of doing things over is high.

**Comment:** I don't think gray water is that clean to begin with: we can't guarantee what's going down the gray water system. If we're doing treatment, we might as well treat gray water, too, and then let it infiltrate.

**Comment:** I agree, but reclamation has to be part of the plan from the beginning.

**Response (Santroch):** To be honest, disposal via an outfall seems unlikely, so we will be looking at alternative methods of disposing of treated water, such as infiltration.

### *Implementation of Sewer Plan*

**Question:** I have a 25-year old septic system, and many other people are similar. What is its life expectancy?

**Response (Dour):** It is probably in its golden years.

**Question:** If you live in an outlying area and your septic fails next year, what should you do?

**Response (Dour):** You would need to replace the septic system. But this is getting ahead of where we are, down to how a sewer system would be implemented. There are policies that would need to be in place. For example, maybe if the sewer line is adjacent to your home, you

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don't need to hook up until your septic system fails. That is a possibility. Sometimes a developer pays to put in a sewer line, but you don't pay until you connect to it. There are many options.

**Response (Wheeler):** We are certainly taking into account the fact that some people in the area have recently put in new septic systems or will be doing so soon.

**Comment:** People should be aware that they will have to pay for pump maintenance on their property. The PUD is not going to do plumbing.

**Response (Dour):** We assume that the sewer agency will maintain pumps.

**Comment:** But a property owner could put a "no trespassing" sign up and the agency couldn't enter. Besides if a property owner isn't responsible for, say, grinder maintenance, they will be less careful about letting things like spoons go down the drain.

**Response (Dour):** In order for a sewer agency to do pump maintenance, it would be necessary to negotiate a maintenance agreement with property owners. In terms of being careful about letting objects down the drain, property owners are inconvenienced when the pump or grinder needs repair. But all things being equal, you're right on that point.

**Response (Wheeler):** Central authorities elsewhere are doing the maintenance work for pressure sewers, and the Department of Ecology would probably push for central authority here, too.

**Response (Dour):** That is definitely a possibility, but at this point it's not certain how maintenance would be done here.

**Comment:** The point is that it doesn't operate as smoothly as advertised.

**Question:** If you look at your experience with what actually gets built, isn't it always a combined system?

**Response (Dour):** Yelm, Montesano, and perhaps others are STEP only. Olympia is a combined system, which is an interesting example. The less dense outlying area went to STEP, but the density increased faster than expected, so they put a moratorium on STEP in that area. They are at the point where they are considering how to implement a conversion of the STEP system to gravity because of the increased density.

### *Preferences for Collection System*

**Comment:** As we start talking about a possible preferred collection system alternative, I know you have to create a plan, and a 20-year planning horizon makes sense at this stage. But think about a 50-year timeline: gravity would be a big upfront cost, but it could conceivably be mitigated by outside funding, and it might be more politically feasible because the costs of individual hook-ups are lower. Gravity seems like a good way to go.

**Comment:** I think a combined system of gravity and pressure is preferable.

**Response (Wheeler):** Let me mention again that if you start with a gravity sewer in the core of the service area, you can decide later whether to do pressure or gravity in the outer areas. It gives you some options.

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**Comment:** The Olympia example demonstrates that gravity provides more flexibility than STEP. STEP is affecting Olympia’s ability to grow.

**Comment:** I, Mike Regan, representing Irondale Community Action Neighbors, would like to say that the gravity system seems preferable by far, even without seeing the 50-year cost projection. This discussion seems to say for many reasons that gravity has more advantages. One important thing is that with gravity the cost to the individual of putting in tanks, pumps, etc. is smaller, especially since those are costs that grants won’t cover.

**Comment:** I would like to courteously disagree that a combined system is best. It is a case of pay me now for gravity, or pay me twice for pressure, and the next time comes soon. I would also reinforce the comments about reuse or gray water reuse. I would hope a good part of the consultants’ analysis is on reuse. There seems to be a growing consensus for ecology and health that we need reuse. There is a big, untapped Saudi Arabia of water in once-used water. Now may not be the best time, because the consensus may not be strong enough yet, but the consultants need to keep alert to that movement.

**Comment:** Since the PUD may very well operate the sewer system, we need to try to think hard about the total out-of-pocket cost each month, including power costs, considering our public. The locality doesn’t have control over outside power coming in.

### *Action Item*

Several workshop participants urged the consultant to prepare a 50-year cost estimate for the three collection system alternatives, noting that it would show that gravity was a better value in the long term. The consultant agreed to do so.

<p><b>ACTION ITEM:</b> The consultant will prepare a 50-year cost projection to compare the three collection system alternatives.</p>
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### **Next Steps and Wrap Up**

Mr. Wheeler encouraged all of the workshop participants to sign the sign-in sheet and to indicate whether they wanted to receive periodic project updates. He noted that another stakeholder workshop would be held in about two months. In response to a request, Mr. Dour agreed to send the PowerPoint presentation to Frank Gifford, the Jefferson County Director of Public Works, who would distribute it to interested parties. Commissioner David Sullivan thanked the participants for attending, noting that their perspectives were helpful.

Mr. Wheeler adjourned the workshop at 12:10 pm.

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### Workshop Attendance

The stakeholder workshop was attended by County Commissioner David Sullivan (District 2) and County Commissioner Pat Rodgers (District 3). Additional attendees are listed below.

<b>Name</b>	<b>Affiliation</b>
Kyle Alm	Citizen
Mike Blair	Chimacum School District
Evan Cael	Peninsula Daily News
Larry Crockett	Port of Port Townsend
Nancy Dorgan	Appellant in <i>Irondale Community Action Neighbors and Nancy Dorgan v. Jefferson County</i> , Western Washington Growth Management Hearings Board
Craig Durgan	Citizen
John Fischbach	Jefferson County, County Administrator
Frank Gifford	Jefferson County, Public Works
Sandy Hershelman	Jefferson County Home Builders Association
Tim Hockett	Olycap
Wayne King	Jefferson County PUD #1
Mike Regan	Irondale Community Action Neighbors; Appellant in <i>Irondale Community Action Neighbors and Nancy Dorgan v. Jefferson County</i> , Western Washington Growth Management Hearings Board
Dana Roberts	Jefferson County PUD #1
Allen Sartin	Jefferson County, Central Services
Al Scalf	Jefferson County, Department of Community Development
Ray Serebrin	Jefferson County Library
Duke Shold	Shold Excavating
Jim Strong	Hadlock Building Supply
Troy Summerill	Inn at Port Hadlock
Pete Wright	Citizen

### Consultant Team Staff in Attendance

#### *TetraTech/KCM*

Kevin Dour, Project Manager; Jim Santroch, Senior Project Engineer – Treatment

#### *Triangle Associates, Inc.*

Bob Wheeler, Facilitator; Ellen Blair, Public Involvement Support