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MEETING NOTES

Project Name:	Dungeness Wastewater Feasibility Study		**Project No.:**	236-1578-005	
Location:	Old Dungeness School House	**Meeting Date:**	March 9, 2013	**Time:**	10:00 a.m. – 12:30 p.m.
Notes by:	Jan Rosholt				
Subject:	**Public Workshop #2**				

1. **Q: Why are there no red areas along the river and streams?**
   A: On the map referred to, red indicates commercial shellfish closure areas for Dungeness Bay.
2. **Q: What is the nitrogen problem and is it connected to OSS?**
   A: Unless special nitrogen-reducing technology is utilized for OSS (fairly uncommon), nitrogen compounds may accumulate in ground or surface waters from septic systems. Nitrogen in shallow marine waters is related to growth of macroalgae (such as ulvoids) in other areas of Puget Sound according to research from the past 20 years. Along the shoreline of the project area there are seasonal accumulations of macroalgae, which is a problem for residents and is displacing eelgrass habitat utilized by juvenile salmonids. Recent marine water sampling indicates that nitrogen concentrations are higher than normal at the sites tested; however, these data need to be verified and the research expanded upon to know if nitrogen loading from septic systems into marine waters is contributing to excess algae growth. Data from drinking water wells in much of the watershed show that nitrates are higher than background levels, indicating that it is accumulating.
3. **Q: If the 7% of problem attributed to septic tanks were fixed, would the shell fish industry be able to start up?**
   A: The Washington State Department of Health classifies commercial shellfish growing areas based on long-term data sets for fecal coliform in marine water, and only for areas it is requested to do so. Fecal coliform concentrations have decreased at many sampling stations over the past decade, resulting in certain growing areas opening for the dry season. Several actions effectively reducing fecal contamination, including OSS management and repair, may have contributed to the water quality improvement. The so-called 7% problem refers to a 2009 study by Battelle that reported "Human-derived sources [of fecal coliform bacteria], primarily from on-site septic systems, were present at all freshwater and marine water stations and one sediment station. These sources represented about 7% of isolates on average…." There is no way to predict when or if the state will further open growing areas; as sources of fecal coliform to the marine environment have been eliminated or reduced, water quality has improved.
4. **Q: Why not go after the 93% of the problem?**
   A: Battelle reports that while some contamination sources may be difficult or impossible to manage (e.g. birds account for appx. 42%, wild mammals 26%), the study provides evidence of sources that can be controlled or mitigated for ("approximately 24% of fecal coliform bacteria are from

controllable sources (i.e. human-derived, domestic animals, farm animals, and game farm animals)").

5. Q: What is the cost of O&M for the OSS?
   A: It is estimated that the annual O&M costs will be$300 to $400, including equipment replacement costs.
6. Q: Does the cost include the required inspection?
   A: Yes it does.
7. Q: What are the current design requirements for OSS?
   A: The sewage system design requirements are provided in WAC 246-272A (http://www.doh.wa.gov/CommunityandEnvironment/WastewaterManagement/RulesandRegulations.aspx). Generally, the design requirements are based on wastewater strength and volume, soil type, topography, depth to groundwater or impermeable soil layer, and distance (i.e. setbacks) to surface waters, water wells etc.
8. Q: Do the cluster system costs include land acquisition?
   A: Yes it does.
9. Q: How many total lots in the project area and how many can be built on?
   A: There are a total of 293 lots and it was assumed that all lots would be capable of being built upon. We understand that this may not be the case, but it is a more conservative approach.
10. Q: Is the project required by a regulatory agency?
    A: No. The WRIA 18 Elwha-Dungeness Watershed Plan contains a recommendation to provide septic infrastructure and explore the feasibility of providing "small package" sewer treatment plants in unincorporated areas of concern (and lists the Golden Sands/Three Crabs area). The County took the initiative to obtain grant funding to prepare a feasibility study so that residents would have information on options as they think about the future and their investment.
11. Q: Need to take into account the age of the property owners and limited income.
    A: Residents are being polled on the most important criteria they think the County should use in its recommendations. See project website for the Resident Questionnaire.
12. Q: The size (gpd) of Sunland not equivalent to 3-crabs.
    A: That is correct
13. Q: How was the number of lots counted, because in Golden Sands it can take 3 lots for one residence plus OSS?
    A: For simplicity and to be conservative, we assumed one resident per lot. We did not take into account that a single residence may be on several lots.
14. Q: Who and how were the alternatives scored?
    A: The scoring of the alternatives was a collaborative effort by the County and the engineering consultant. The scoring was not weighted because this would have been considered subjective. The questionnaire that was handed out at the meeting and posted on the website encouraged the public to provide their input and preference to the alternatives presented.
15. Q: How was impact on property value determined?
    A: This was determined by whether an alternative would enable the property owner to make improvements to their property and/or building structures. For example, if there was a centralized

collection and treatment system, a property owner could possibly add a bedroom to their house and not be limited by the size of their drainfield. All the alternatives were assumed to have a positive impact to the property values.

16. Q: How do Dungeness Heights and other neighborhoods impact water quality?
    A: The potential addition of nearby neighborhoods to the project area will be dealt with in a generic manner in the final feasibility study (i.e., the additional cost will be addressed very generally, not location specific). Investigating how these other neighborhoods impact WQ was not part of the study performed under the grant funding.
17. Q: How would you address expansion of the project area in future?
    A: Expansion to serve areas outside of the project limits would be easier under either the Centralized System Alternative or the Centralized System to Sequim Alternative. During the first several years of operation, the actual wastewater flowrates from the project area would be measured. This would then allow the County to determine if there is excess capacity sewer available to expand the sewer collection system into neighboring areas. The expansion of the service area would also need to be approved by the County's Planning Department.
18. Q: Going too fast – public has not been informed.
    A: Review: the project started with two community meetings in May and June of 2012; invitations were mailed to 224 property owners, in addition to announcements in the media.
19. Q: What is the regulatory requirement for nitrogen?
    A: Drainfields larger than 3,500 gpd are required to determine the nitrogen loading impacts to surface waters and adjacent water wells, as part of the design and permitting process. This is regulated at the state level and not at the County. The effluent from a drainfield or other wastewater disposal facility cannot increase the nitrogen level of adjacent water wells or water bodies beyond a concentration of 10 mg/L.
20. Q: Do tribes play a role in the study?
    A: The Jamestown S'Klallam Tribe is an active partner in the activities of the "Clean Water District," formed in 2000 after the closure of the shellfish growing area to coordinate monitoring and outreach aimed at improving water quality.
21. Q: Is there conclusive evidence that the problem of water quality is coming from the 3-Crabs area? Where is the proof?
    A: The fecal coliform problem in the watershed is known as "non-point" contamination, meaning it comes from a variety of diffuse sources including OSS, stormwater runoff, pet waste, hobby farms, and others. See the answers to questions 3 and 4 for more information on potential sources of fecal coliform. Nitrogen contamination in the marine water is not well documented; in groundwater it is documented and pervasive, but is derived from animal or human waste or fertilizers and difficult or impossible to trace. In non-point contamination situations, the best remedy is to control as many sources as possible.
22. Q: Is the County going to go point by point along the "Bluff" to look at problems?
    A: In 2011-2012, Environmental Health did contact many marine bluff homeowners requesting information about their septic system where the County had no records of the systems. The Clean

Water District has monitored bluff discharges and the County is focusing efforts on OSS management in the lowest part of the watershed with the same grant this project is under.

23. Q: How assured is the County that the project will fix the water quality problem?
    A: The water quality problem is not the County's only, or primary, concern. Long-term viability of property values and infrastructure are other important concerns of the County.
24. Q: What caused the recent improvements of water quality in the bay?
    A: Several actions effectively reducing fecal contamination, including OSS management and repair, may have contributed to the water quality improvement.
25. Q: How does the County plan to address the fact that 60-70% of septic systems are not inspected?
    A: The County has grant funding targeted to improve compliance through outreach but also is making changes to the County septic system ordinance, expanding its enforcement capability.
26. Comment: It seems as if non-compliance is the problem.
    A: Comment noted.
27. Comments a resident voiced about the Report:
    - Goals and objectives statement in the study states that the purpose is to open shellfish beds for harvesting
    - 2002 study addressed the OSS problem
    - Past studies reflect problem is caused by upstream areas, circulation in Bay is towards 3 Crabs
    - No proof this area is contributing to WQ problem in the bay as there have not been samples taken and analyzed
    - Irrigation ditches contribute to the problem

    A: Comment noted.
28. Q: Why were the areas west of the river not included?
    A: The grant for this feasibility study was for the Dungeness Area only; however, the ability to expand beyond the project limits will be briefly addressed in the final study.
29. Q: What was the specific notification process for the public meetings? Did mailings get distributed?
    A: The County mailed out notification mailings, advertised in the Peninsula Daily News, and also posted the meeting dates on the County's website.
30. Comment: Inspections required are not being reported to the County; O&M contracts may not be working out. Need education program to get property owners to comply with regulations? Or we need another method.
    A: noted. Also see answer to 25.
31. Comment: County's OSS program should put the responsibility of system reporting on the installers and not on the property owners. Installer must comply with the respective installation warranty.
    A: Comment noted.
32. Q: How is the potential rise in sea level being addressed?
    A: Susceptibility to rising sea levels was briefly discussed under each alternative. Climate impacts to the project area were also included in Section 2.3 of the study.
33. Comment: There are illegal activities going on in the lower reaches of the river including compost toilets and buildings with no connection to septic tank.
    A: Comment noted.

34. **Comment: The County web site for this project should include the following: (also, can they be made available at the library?)**
    - **FAQ**
    - **Past and/or recent reports (annotated as much as possible)**
    - **Project schedule**
    - **Location of contributing sites**

    A: Suggestions noted.
35. **Q: Has a water quality study of the bay been done since the ditches have been piped?**

    A: The Washington State Department of Health monitors fecal coliform in the Bay every month. Piped ditches may be another contributing factor to water quality improvements of the past decade.