



THURSTON COUNTY
WASHINGTON
SINCE 1852

BOARD OF COUNTY COMMISSIONERS
OFFICE OF PROGRAM AND BUDGET DEVELOPMENT

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Henderson Inlet Shellfish Protection District
Stakeholder Group
Meeting Notes of September 16, 2002

Present: Bruce Rouillard, Peter Heide, Mark Sloan, Toby Jewett, Jerry Yamashita, Laura Hamilton, and Mark Blosser
Not Present: Gene Hummel, Lisa Dennis-Perez, and Jack Beeching
County Staff: Mark J. Swartout
Guests: Stuart Glasoe (PSWQAT)

1. Meeting called to order by the chair at 6:30.
2. Administration issues:
 - a. Introductions were made.
 - b. Approved Agenda with additions.
 - c. Approved the August 19th Meeting Notes with a change on Page 2.b.v.1
 - d. Toby Jewett (Mark Sloan's alternate) was introduced.
 - e. Ken Filak will be Steve's alternate with the understanding that when Steve is absent Ken would not be the Co-Chair of the meeting.
3. Quick Fixes discussion:
 - a. Question – Why is there a weak correlation between failed systems and age, system types, and distance from shoreline? (See attached explanation from Sue Davis)
 - b. Distributed the Sept. WSAC article regarding Kitsap County's low-income septic repair program.
 - c. There was general agreement that a "Risk Based O&M" program for septic systems was appropriate.
 - d. Discussed funding and staffing implementation of the committee's recommendations.
 - e. Discussed the On-Site Construction Standards Manual.
 - i. Question – How well can the Manual be if the industry was involved with writing it?
 - ii. Answer (Steve Petersen) - *"It is the department's desire to work with the industry and develop goals and requirements that meet the minimum standards set forth in the regulations/guidelines AND are effective and achievable. Industry professionals have knowledge and experience on how to meet the standards and are a valuable resource, as there are often many ways to meet them.*
Department staff and the State Board of Health reviewed the manual. The manual received very positive reviews from staff, industry, and the Board of

Health. The Department has set the standards as a regulatory authority and reviews sewage system installations accordingly. In several instances the industry was more stringent than the regulations and the department has seen an improvement in the quality of installations."

- f. Discussed Land-use.
 - i. A possible quick fix is for the Commissioners and City Councils to declare emergency land-use regulations such as a moratorium on future shoreline development.
 - ii. A quick fix could also be to adopt low-impact development regulations.
- g. Discussed agriculture:
 - i. Change the current County's Non-Point Ordinance from complaint driven to survey and site inspections.
 - ii. Use of aerial photography would be useful as a survey technique rather than just drive by. Below is the response I got from the Conservation District:

Good suggestion. Unfortunately, our current in-house aerials of the Henderson area are outdated and not clear enough to consider using them for such surveys. We could, however, utilize TCD (Thurston Conservation District) Geodata aerials.

My inclination would be to study the aerials first, and perform a driveby on an as-needed basis (to confirm herd type and numbers, specific problems on site, etc.) I would hesitate to state that aerials could replace the driveby surveys because sometimes it is necessary to get closer to identify issues on site.

Because aerial surveys are somewhat expensive and specific, we'd need that type of survey written in the grant contract. Perhaps this is something that we should run a cost analysis on and consider such a method in upcoming grant proposals.
- h. Discussed Stormwater possible quick fixes.
 - i. Require fencing stormwater ponds to keep dogs out.
 - ii. Adopt low-impact development standards. One possible incentive may be permit streamlining.
 - iii. Adopt the new Stormwater Manual as quickly as possible – this would also lead toward low-impact development.
 - iv. Look for and fund capital projects in the District that would improve water quality.
 - 1. The County has used the Shellfish Districts' concern in prioritizing capital projects.
 - 2. The City of Olympia provided a list of several capital projects at the July 15th meeting (refer to meeting notes for details).

- 4. Products and Report format – used the Nisqually draft Table of Contents for discussion.
 - a. Need to include discussion of governance.
 - b. Need to add monitoring, assessing, and adaptive management.
 - c. Need to add boundaries (depending on recommendations).

5. The Ecology TMDL information sheet was distributed.

6. Discussed and agreed to draft a letter to the County Commissioners in support of the

continuation of the Thurston Conservation District annual assessment.

7. Agenda for October 21st meeting.
 - a. Public comments.
 - b. Review and discuss the County's Natural Resource Chapter of the Comprehensive Plan.
 - c. Review and discuss the County's (Cities') Critical Areas Ordinance update.
 - d. Name of group.
 - e. Watershed Tour update
 - f. Continue discussion on the Table of Contents.
 - g. November Agenda

8. Adjourn – 8:30

Attachment: Response to question regarding correlation of failed septic systems.

The term "risk", as it was used in the recent grant proposal, refers to those systems most at risk of contaminating surface waters if they fail. There is information indicating what those conditions are which increase the risk that a system will fail and contaminate surface water.

In one study, statistical analysis performed by a consultant in 1996 on Thurston County septic system dye tracing evaluation data found a statistically significant correlation between the occurrence of system failures and types of system, proximity to the shoreline, and system age. This means there is a definite relationship between failure and those three conditions, and that is an important finding. In contrast, there was no correlation seen between failure and time elapsed since last septic tank pumping. (In talking with a WDOH staff person proficient in application of statistical tests, he indicated that the term weakly or strongly correlated is usually a function of the amount of data available for the test. In other words, often the more data available, the stronger a correlation you can see. The consultant's actual calculations were not provided in the report, so I am not able to comment further on the use of the term "weakly".)

In another study, the Health Department conducted a comprehensive evaluation of septic systems on Cooper Point between 1990 and 1996. The distance between the drainfield and surface water was determined for 868 of the systems evaluated. The test results as they relate to distance from surface water are shown in the table below. The failure and suspect rates are noticeably higher for systems located 100 feet or closer to surface water.

Distance of Drainfield from Surface Water	% Failing	% Suspect	% Operational
< 50'	39%	14%	47%
50-100'	26%	12%	62%
>100'	5%	4%	91%

Looking at soil conditions as a factor in failure, the Cooper Point study showed that 71% of the failures found were located on one of two particular soil types. The remaining 29% were located on one of six other soil types. Also, reviews of repair permit records for specific geographic areas have indicated high repair rates in areas associated with certain soil conditions. They have been consistent with Cooper Point findings.

To think about it logically, if a septic system is located on a soil type that does not drain downward very well such as those soils high in silt and clay or those with a hardpan layer close to the surface AND the system is located near the shoreline, creek, or street drainage system,when or if it fails, the chances are much higher that the sewage will reach the surface water than they are for a system located on well-drained soil and at considerable distance from a water course.