



**THURSTON COUNTY**  
**WASHINGTON**  
SINCE 1852

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## **PUBLIC HEALTH AND SOCIAL SERVICES DEPARTMENT**

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### **Risk-Based O&M Program Project: Advisory Committee**

Meeting Notes from December 10, 2003

7:00 – 9:00 pm

- Members Present: Mark Blosser, City of Olympia  
John Brottem, Henderson Watershed resident  
Christine Buckley, Nisqually Shellfish Protection District  
Tris Carlson, Nisqually Shellfish Protection District  
Daimon Doyle, Olympia Master Builders  
David Hall, Thurston Conservation District Supervisor  
Seldon Hall, Washington State Department of Health  
Terry Hull, Puget Sound Water Quality Action Team  
Steve Langer, Henderson Shellfish Protection District  
Linda Malatesta, Nisqually Shellfish Protection District  
Mike Petit, WRIA 13 Planning Unit  
Bryan Wilson, Nisqually Shellfish Protection District
- Staff: Linda Hofstad, Environmental Health  
Steve Petersen, Environmental Health  
Art Starry, Environmental Health  
Mark Swartout, Development Services
- Guests present: Jim Dawson (People for Puget Sound)  
Mark Fischer, Community Shellfish Farm Project  
Betsy Peabody, Community Shellfish Farm Project  
Kirk Robinson (Thurston Conservation District)

1. Introductions were made of all committee members – including where they reside and what stakeholder group or interest they are representing.
2. Meeting Rules:
  - Respect others.
  - Discuss/debate ideas with respect
  - Comments need to be concise and brief

Question arose about parliamentary procedure. Determined that it would only be used if

necessary.

3. Background and history to the issue presented by Environmental Health staff - Linda Hofstad, Steve Petersen, and Art Starry.
  - a. Systems range from simple to complex, and it's important for owners of on-site systems to know where there systems are located, what are the various components, and how to maintain the system.
  - b. Septic systems treat household sewage to remove disease-causing pathogens before the water portion of the wastewater reaches ground or surface water. Because these systems deal with pathogens, septic systems, including their performance, become a public health issue.
  - c. This public health issue is heightened in our county due to the rich shellfish resource. Shellfish need cleaner water to be harvested from than we do to swim in. Therefore when shellfish harvest is limited due to downgrades of growing areas, it serves as a signal that the water quality is being polluted.
  - d. When septic systems fail to treat wastewater adequately, they become a source of nonpoint pollution and a public health concern.
  - e. In the 1980's, after shellfish downgrades, the EH staff repeatedly performed sanitary surveys of septic systems on Eld Inlet using the methodology of the time, which depended on talking with the homeowner and visual examination of the area. Using this method a few systems were found to be failing and were repaired. However, the Eld Inlet water quality did not improve.

Staff began developing a new intensive survey methodology that included both using dye flushed down the toilet and taking water samples from the location where the dye had surfaced. If both high bacterial counts and presence of dye were found this indicated a failing septic system. (HANDOUT AVAILABLE)

Using this new technology EH found 25% of the systems along this same Eld shoreline were failing. After the failed systems were repaired, there was such an improvement in the water quality in Eld Inlet that all conditions and restrictions to shellfish harvesting were removed.

Once the surveys were completed in the mid 90's, no further survey work has been done to check the performance of the septic systems. The bad news is the most recent water quality testing by DOH has found decreasing water quality trends in Eld Inlet.

- f. The County has done more than 2000 intensive surveys and has learned that the dye testing methodology:
  - Is sensitive to determining whether a septic system is failing.
  - Systems fail for many reasons. (HANDOUT AVAILABLE)
  - 50%+ of the failures were due to component problems, i.e. cracked pipes, off-level D-boxes, holes in tanks, etc. Many were simple fixes.
  - 14% of the marine shoreline septic systems are failing.
  - It is the only tool that provides a measure of performance of a septic system – performance means the degree at which the system is reducing bacterial contamination.
  - Just looking at a septic system won't determine whether it's failing or working properly.
  - An ongoing program is needed to maintain high water quality.

- Certain factors put a system at a higher risk of system failure:
    - Soil types
    - Proximity to surface water
    - Drainage systems too close to the drainfield.
4. Discussion of the current septic system operation and maintenance program.
- a. Education: - The current O&M program is primarily voluntary with a focus on education.
- 1) Workshops are held 6 times each year in the spring and fall:
    - Citizens learn about the various types of septic systems
    - The maintenance responsibilities to keep systems operating properly.
    - Workshops are well attended
    - It's evident that many property owners lack an understanding of all aspects of their systems.
  - 2) Since 1999 the County has maintained a Help Line to assist homeowners with their septic systems problems. This is well used by the public
- b. Operational Certificates:
- Required for complex systems not the more common gravity or pressure systems. Systems with sand filters, food service systems, mound systems, Glendon Biofilter systems, aerobic and disinfection treatment systems, large systems are examples of complex systems
  - Complex systems require high maintenance.
  - Complex systems make up about 10% of all the septic systems in the County.
  - Operation Certificates are required to be renewed on one, two, or three year cycles depending on degree of complexity and code regulations.
5. Discussed past obstacles found on page 3 of the handout "Strategy for Risk-Based O&M Program for Septic Systems in Henderson Inlet". Some have been resolved:
- The new County computer tracking system (AMANDA) will provide an efficient and equitable program.
  - The Henderson Inlet DNA study shows that bacteria from human sources were found in Henderson Inlet.
  - The support for the risk-based approach has broadened.
6. Why do a pilot program like this now?
- a. It has been found that taking a risk-based approach to regulating septic systems provides a cost effective means for reducing bacteria contamination.
  - b. Some past obstacles have been resolved.
  - c. The presence of human sources has been confirmed with the DNA study (HANDOUT AVAILABLE)
  - d. It was the right time to apply for a grant in Henderson Inlet watershed.
  - e. The grant provides resources to the County to define a risk-based program that can then be applied to anywhere in the County.
  - f. As far as a proactive program to address the septic system piece of the nonpoint pollution to Henderson inlet, this is the last chance. This is the only tool we know of that will look at performance of the watershed's septic systems.
7. The 6 points for the advisory committee input were discussed briefly. It was suggested that the first 2 points of boundary and name be discussed this evening. Next meeting, Jan 7<sup>th</sup>, would

have discussion about:

- The criteria for risk and inspections,
- Who would provide the services of inspections and maintenance, and
- Enforcement of the program.

The committee agreed to proceed in this manner. Discussion of the 6 points would be limited to the evening's discussion and then set aside. Otherwise if discussion continued until nothing further could be said, the meetings would extend beyond the 4 that have been planned.

The fourth meeting would have all the pieces put together for discussion of the proposal as a whole.

8. The group began discussing where the **boundaries** should be for the program. A worksheet was provided. The conclusions of the discussion were:
  - a. Use the current Henderson Inlet Shellfish Protection District boundary to begin the program.
    - 1) This connotes some degree of responsibility as a watershed citizen.
    - 2) Provides a better continuity to the area – rather than pieces here and there
    - 3) If boundary based on a matrix, the criteria could change
    - 4) Provides a bigger base for financing the program
  - b. Establish criteria to describe the degree of risk within the defined physical boundary
9. Discussed possible **names** of the area for the program -  
Suggested names:
  - Henderson Inlet Protection Area. - preferred
  - Henderson Inlet Resource Area

Other Handouts available include:

Sections of Article I of the Sanitary Code - administration

Sections of Article IV of the Sanitary Code – septic system regulations

Section from Shellfish Protection District recommendations

Discussion worksheets for Boundary, Name of area, Criteria for risk, Service Providers, and Enforcement