

## Nisqually Reach Shellfish District's Status Report of Stakeholders' Recommendations

Recommendations	Status – Who and What
<b>Septic Systems:</b>	
1. Declare as an “area of special concern” all properties within the Shellfish Protection District in accordance with Section 22 of the Sanitary Code Article IV. “The formation ordinance for the ‘area of special concern’ should specify the additional, more stringent environmental health rules that apply within the designated boundary.”	This will be addressed by Environmental Health (EH) as part of the development of the on-site sewage system operation and maintenance program.  EH is developing a risk based O&M program for Henderson Inlet as part of larger effort covered by a Centennial Clean Water Grant. This program will consider all the elements recommended by the stakeholder group. The Henderson will act as a pilot for Nisqually District. EH is currently meeting with an advisory committee to refine a proposal for consideration by the Board of Health. The advisory committee should finish their work in mid-2004, and the risk-based program for Henderson could be implemented by 2006 if the Board of County Commissioners approves.
2. All on-site systems within the District shall be required to have an Operational Certificate and be in the following Operation and Maintenance (O&M) program:	
a. All on-site systems shall be inspected by a licensed O & M specialist or certified pumper of the homeowner’s choosing every three years. Thurston County staff would conduct quality assurance inspections on approximately 10% of these privately inspected systems.	
b. Dye test <b>all</b> shoreline parcels at least every 6 years by County staff. The shoreline definition would include all systems that have a potential pathway to the surface water.	
c. Additional monitoring and maintenance requirements will be required on complex systems and those that pose the greatest risk to contaminating surface waters.	
d. Ensure proper O&M of community drainfields systems serving two or more homes to improve compliance with conditions specified in operating permits.	
e. Develop and issue a “report card” to the property owner, following each inspection, describing the system’s condition, with a copy sent to Environmental Health. <ul style="list-style-type: none"> <li>i. Inspection reports will recommend preventative maintenance actions needed to address identified problems that are not yet certifiable as a failure.</li> <li>ii. The “report card” will be reviewed at the next inspection to check the condition of the items previously identified as potential concerns and the level of preventative maintenance actually performed.</li> <li>iii. Required corrections must be completed and approved before the certificate of renewal is issued.</li> </ul>	
f. Issue a certification/renewal based on the inspection and report card. Certification/renewals must be kept current at all times. The certificate must be presented to the new owner at the time of property sale.	

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3. Utilize the new “AMANDA” permit tracking system to capture data from on-site septic systems inspections for use in issuing certificates and monitoring renewal compliance	AMANDA went on line in June’03. It will be used to manage the O&M program beginning Feb.’04.
4. Perform a follow-up inspection of all new systems 6 months to a year after installation in order to: <ul style="list-style-type: none"> <li>a. Discover any possible damage that may have occurred during construction activities.</li> <li>b. Make repairs before problems get worse.</li> <li>c. Contact and educate the new owner on the location, and the operation and maintenance of their system.</li> </ul>	This is being evaluated concurrently with the development of the risk based O&M proposal. A final proposal should be presented to the Board of Health in summer 2004. Implementation date of the program will be dictated by need to update on-site code and fee schedule.
5. Extend to all property owners in Thurston County regardless of income, low interest loans for repair of failing on-site septic systems.	Done. EH has applied for funds to continue low interest loan program beyond 2004.
6. Education: <ul style="list-style-type: none"> <li>a. Continue public workshops and recruit volunteers to conduct school programs.</li> <li>b. Conduct a mail outreach on new installations and to new homeowners, prior to the 6-month inspection, providing information regarding the protection of their system i.e. “For Your Protection”, “Before Your Warranty Expires”, “Did You Know?”</li> <li>c. Pursue grant funds and sponsorship for public education.</li> </ul>	EHD - Education is ongoing. A workshop for alternative systems will be developed and conducted in 2004 within the Henderson/ Nisqually area. EH will conduct one general septic system workshop in the Nisqually area each of the next three years. EH will continue to look for funding to enhance on-site education. TCD and Environmental Health are developing a watershed pledge project for both the Henderson and Nisqually Shellfish Protection Districts. The project will be field tested with 25 TCD Cooperators with conservation plans and 25 neighborhood association residents. The program will expand to 200 participants in 2005

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<p>6. Education (continued):</p>	<p>with full implementation anticipated in 2006.</p> <p>Staff contact: Kathy Whalen, TCD, 754-3588 ext. 114</p> <p>South Sound GREEN and Nisqually River Education Project included in their 2002/03 school year activities to bring a greater awareness in the shellfish issues. These activities included:</p> <ul style="list-style-type: none"> <li>▪ 2 major water quality bacteria monitoring events throughout South Sound.</li> <li>▪ Bacteria monitoring every month at 9 stations by River Ridge, Yelm, and Timberline High School students.</li> <li>▪ The annual GREEN Student Congress included the topic of shellfish bed downgrades in their data analysis.</li> <li>▪ The Henderson Inlet Community Shellfish Farm hosted almost 40 students to a workshop, “Tidal Treasures: Farming the Sea”.</li> <li>▪ Students assisted in many streamside revegetation projects.</li> <li>▪ The Summer Teacher Institute included “Watersheds, Shellfish and the Near-Shore Environment” dealing exclusively with shellfish protection issues. Contact Chris Maun 458.6137.</li> </ul>

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<b>Stormwater:</b>	
<p>Action 1: Support land-use and stormwater facilities that minimize the collection and transport of fecal coliform bacteria, optimize treatment, and ensure performance. This includes adopting “low-impact development” standards and revising the stormwater design manual.</p>	<p>The Department of Water and Waste Management (W&amp;WM) is working with local jurisdictions in developing a revised regional stormwater manual. Anticipated adoption in FY 2005.</p> <p>W&amp;WM staff participates as a member of the WDOE Low Impact Development Technical Advisory Committee.</p> <p>W&amp;WM working with the cities of Lacey, Olympia, and Tumwater, continues to implement a grant funded pilot program to increase stormwater pond maintenance for subdivisions and commercial properties. The pilot program provides a framework to continue an on-going program that will expand throughout the Districts and the utility service area.</p> <p>It is anticipated that in mid-2004 Thurston County will host a summit of interested parties including the shellfish protection district stakeholders to discuss an action plan to create a Low Impact Development Ordinance for Thurston County.</p>
<p>Action 2: In areas with Hydrologic Soil Groups C &amp; D<sup>1</sup> (tight soils) within the District:</p> <ol style="list-style-type: none"> <li>1. Revise zoning to prohibit development at urban densities in rural areas; or</li> <li>2. Require development standards that do not allow the surface discharge of stormwater.</li> </ol>	<p>The revised regional manual will provide for greater protection standards in areas with Hydrologic Soils Groups C&amp;D.</p>

<sup>1</sup> Soil Survey of Thurston County, Washington, USDA SCS1982, p. 125.

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<p>Action 3: Educate or regulate homeowners, recreational users and businesses to dispose of pet waste properly, detect and correct overflowing septic systems, prevent garbage can/dumpster leakage, dispose diapers properly, and identify and eliminate other sources.</p>	<p>This action item will also be included in the EH and TCD watershed pledge project described above.</p> <p>TCD will air two TCTV television shows and hold two workshops on water quality / agriculture and publish two ads in the Olympia and Yelm newspapers about conservation.</p> <p>EHD/W&amp;WM in 2003 developed a new pet waste brochure for distribution to the general public.</p>
<p>Action 4: Require or provide pet waste management information and supplies for privately owned stormwater facilities, and common areas.</p>	<p>EHD/W&amp;WM and cities have held 8 stormwater pond maintenance workshops where the attendees learn of the negative impacts of dog waste to stormwater quality.</p> <p>EHD/W&amp;WM created and posted two signs at Woodland Creek Community Park and Lake Lois Park (with dog waste bags).</p> <p>Money remaining from the grant will go to providing more signs to private stormwater ponds</p>

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<b>Agriculture:</b>	
<p>1. Enforcing the current regulations that apply to agricultural activities will improve water quality.</p>	<p>EH will continue to investigate agriculture related water quality complaints. EH is working with the TCD to track landowners that develop and implement resource management plans to assure they implemented within time frames specified in Article VI.</p> <p>TCD responds to referrals from EH, meets with the landowners, recommends corrective action, and transmits the recommendations back to EH.</p> <p>Staff contact: Kathy Whalen, TCD, 754-3588 ext. 114</p>
<p>2. Review current regulations to see if they are enforceable</p>	<p>EH is working to evaluate and update Article VI, the county's non-point ordinance. This should be completed in 2004.</p>
<p>3. Conservation District will follow up on Conservation Plans and work with landowners on the implementation of best management practices (BMPs).</p>	<p>TCD will prepare five conservation plans in the Nisqually Watershed and will follow-up on several completed plans. 75% BMP implementation is projected by August 2005.</p> <p>Funding is available from the TCD for fencing and riparian planting in both the Henderson and Nisqually Watersheds.</p> <p>Staff contacts: Brian Thompson or Kathy Whalen, 754-3588.</p>

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4. Hold workshops that address topics such as composting of manure, pasture management, etc.	TCD will conduct an agricultural workshop in April and a water quality workshop in June. Contact: Kathy Whalen, ext. 114
5. Develop a program that would assist non-commercial farms that have livestock, but limited acreage and manure storage. This program would have a pickup service that would take the manure to a centralized composting area.	TCD maintains a manure-brokering list that identifies farms that give away or sell manure. Brian Thompson, ext. 137.
6. Set up an on-going maintenance program for private and public owned tide gates in the McAllister Creek watershed.	The responsibility for this action is between the private landowners where tidegates are located and WDOT the owner of and maintains the tidegates.
7. Set up guidelines to determine the appropriate number of animals per acre.	TCD will provide recommendations and guideline to EH as part of the update of the county's non-point ordinance (Article VI). Contact: Kris Van Gorkom, 754-3588 ext 110.
8. Develop and implement an ongoing program of water sampling of ditches and streams near farms to track the progress of best management farm practices.	TCD, in conjunction with Ecology is monitoring water quality along portions of the McAllister Creek. Contact: Chrissie Wiseman, 754-3588 ext. 136.
9. Reward landowners who do a good job with their farm practices.	The Conservation Reserve Program established by NRCS takes effect in 2004. This program will reward landowners who have installed conservation practices. TCD will proactively inform qualified property owners of this program. NRCS contact: Jeff Swotek, 704-7750.

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9. Reward landowners who do a good job with their farm practices (continued).	<p>TCD contact: Kris Van Gorkom, ext. 110.</p> <p>TCD will also include a reward program once the Watershed Pledge Project is being implemented.</p> <p>TCD is establishing a landowner recognition program for Thurston County. Contact Kris VanGorkom 754.3588 ext. 110.</p>
10. Provide information on alternative sources of organic fertilizer for organic growers.	
11. Continue to encourage Washington State Department of Transportation to move McAllister Creek back to its original channel.	
12. Provide funding for on farm composting and manure storage facilities.	<p>The EQIP Program established by NRCS provides cost share funding for manure storage facilities. NRCS contact: Jeff Swotek, 704-7750. TCD contact: Brian Thompson, 754-3588 ext. 137.</p> <p>TCD will promote this program with qualified landowners and will assist them in planning if they want to participate.</p> <p>TCD included this information in their 2003 TCTV programs.</p>
13. Locate drainage tiles and adjust agriculture practices near them that protect water quality.	
14. Assist farmers in building composting and manure storage facilities by obtaining funding resources.	<p>The EQIP Program established by NRCS provides cost share funding for manure storage</p>

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<p>14. Assist farmers in building composting and manure storage facilities (continued).</p>	<p>facilities. NRCS contact: Jeff Swotek, 704-7750. TCD contact: Brian Thompson, 754-3588 ext. 137.</p> <p>TCD notifies landowners of the availability of this program and funding. They have also advertised in the Nisqually Valley News and The Olympian newspapers.</p> <p>TCD has funding available for riparian planting and fencing. Contact Kathy Whalen or Mike Kuttel – 754.3588.</p>
<p><b>Land Use</b></p>	
<p>1. Require new development to meet Low Impact Development (LID) Standards in the areas of the district zoned 1 residential unit per acre or higher and are most prone to stormwater run-off.</p> <ol style="list-style-type: none"> <li>a. Immediately institute interim standards requiring 100% infiltration for development immediately in areas based on soil type, proximity to sensitive areas, and areas zoned 1 residential unit per acre or higher while LID Standards are developed.</li> <li>b. Identify locations where LID Standards have practical application using criteria such as soil types, vegetation, and proximity to sensitive resources.</li> <li>c. Request the City of Lacey to require LID in the northern area of the city boundaries in the Hawks Prairie Planned Community located near the marine shoreline of the Nisqually Reach.</li> <li>d. Develop regional LID Standards. In order to maximize effectiveness LID Standards need to be cross-jurisdictional standards.</li> <li>e. Adjust LID standards as additional science is developed on the impacts to shellfish growing areas.</li> </ol>	<p>It is anticipated that in mid-2004 Thurston County will host a summit of interested parties including the shellfish protection district stakeholders to discuss an action plan to create a Low Impact Development Ordinance for Thurston County.</p>
<p>2. Declare an emergency down zone of 1 unit to 2 acres for rural areas that are currently zoned 1 unit to 1 acre within the shellfish protection district before further development occurs, and codify the down zone during the comprehensive plan update.</p>	<p>To implement this recommendation further site-specific evaluation will need to occur to predict the impacts of bacteria loading to the marine waters. This evaluation will need</p>

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2. Declare an emergency down zone of 1 unit to 2 acres for rural areas (continued).	to consider the natural runoff characteristics including slope, soils, vegetative cover, and effective impermeable surface to name a few.
3. Use the Critical Areas Ordinance update to request that Best Available Science be explored to determine appropriate buffers that effectively remove fecal coliform and apply the results to the current Critical Areas Ordinance update.	TCD will provide comments on the draft county's CAO. Staff contact: Kris Van Gorkom, 754-3588 ext. 110.
4. Recommend wording change to Comprehensive Plan Chapter #3 – Natural Resource Lands – Propose Policy (Aquaculture Resources - #3).  Proposed Policy – Uses of lands that are <u>adjacent near</u> to designated marine aquaculture areas should be compatible, such as forestry and low density rural residential. Those uses should not increase stormwater runoff or otherwise degrade water quality of aquaculture use.	This was completed in 2003
5. Natural Environment Chapter 9 should address not only commercial and recreational shellfish on public lands but also shellfish harvest on private lands.	This was completed in 2003
<b>Wildlife:</b>	
Fully address human and domestic animal source pollution (as recommended in other sections) and take remedial actions. If water quality does not improve, further investigate wildlife source pollution through following steps: 1. Identify possible areas of wildlife concentrations and seasonal usage of sites. 2. Develop strategies to identify species that contribute most to fecal coliform contamination. 3. Monitor over a significant period of time the wildlife populations and any increase in populations in areas of greatest fecal contamination. 4. If a direct correlation can be made between high fecal counts and specific species, formulate a remediation plan. 5. Continue research and publication reviews on source identification methods. 6. Explore new technologies and other techniques to lower fecal coliform levels such as mycoremediation and riparian zone revegetation.	There are activities throughout this report to help fully address human and domestic animal source pollution..

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<b>Adaptive Management:</b> The implementing agencies will:	
<p><u>Adaptive Management Work Plan</u></p> <p>The implementing agencies will cooperate to develop an adaptive management strategy, and will use and refine it on a regular basis. The strategy will be consistent with WAC 365-195-900, which requires local governments to use adaptive management to protect critical areas (such as surface waters) when the best available science is inadequate. The strategy will also be consistent with local government, state, and federal goals and objectives. Changes in implementing agency work plans resulting from adaptive management will likely have budgetary impacts. As assignments change, both budget and funding must change. Therefore, adaptive management will also need to consider mechanisms to adjust income (such as shellfish district or stormwater utility fees) to provide necessary funding.</p>	<p>Data from current and past water quality sampling efforts that are part of the Clean Water Act TMDL process will be used as benchmarks to help measure success. An adaptive management strategy will need to be developed once the TMDL process is completed and as major categories of recommendations are approved and implemented.</p>
<b>Governance:</b>	
<p><u>Implementation Oversight Committee:</u></p> <p>The stakeholders have determined that it is important that there be some form of continued citizen involvement during Phase 2 (implementation). It is recommended to combine the two shellfish district stakeholder groups into one committee for both. Their role would be to advise the Board of County Commissioners and City Councils, assist in developing a Phase 2 implementation work plan, and to track completed actions with effectiveness in improving water quality. They should meet only when necessary and each year the Board of County Commissioners will evaluate whether to continue the committee.</p>	<p>This action item is being implemented. The two district stakeholder groups have been combined.</p> <p>The Board of County Commissioners agreed that their role is to advise them on actions needed to address the water quality that is impacting shellfish beds.</p> <p>The joint stakeholder group is currently working on a Phase 2 implementation work plan beginning with the Risk Based Operation and Maintenance On-Site Sewage Program.</p>
<p><u>Boundary:</u> The stakeholder group recommends the District boundary be reestablished based on surface water that influences the water quality of the shellfish beds in the Nisqually Reach and McAllister Creek areas. The new boundary should be determined using the most current topographical technology and information.</p>	<p>The District boundary is currently included the discussion on developing a Risk Based Operation and Maintenance On-Site Sewage Program.</p>