

Henderson Inlet Shellfish District's Status Report of Stakeholders' Recommendations

| Henderson Inlet Shellfish Protection District Stakeholder Recommendations | Status – Who and What |
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| Septic Systems: | |
| 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 (see below). |
| 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: | 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 the stakeholder group recommendations. This work will act as a pilot for Nisqually. 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 March 2004, and the risk-based program for Henderson should be implemented by 2006. Contact Art Starry – 360.786.5456 |
| 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 all 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. | |
| i. Inspection reports will recommend preventative maintenance actions needed to address identified problems that are not yet certifiable as a failure. | |
| 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. | |
| iii. Required corrections must be completed and approved before the certificate of renewal is issued. | |
| 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 2003. It will be used to manage the O&M program beginning 2/04. |
| 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"> a. Discover any possible damage that may have occurred during construction activities. b. Make repairs before problems get worse. c. Contact and educate the new owner on the location, and the operation and maintenance of their system. | 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"> a. Continue public workshops and recruit volunteers to conduct school programs. 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?” c. Pursue grant funds and sponsorship for public education. | EHD - Education is ongoing. A workshop for alternative systems will be developed and conducted in 2004 within the Henderson / Nisqually area. EH will conduct two general septic system workshops in the Henderson area each of the next three years and will continue to look for funding to enhance on-site education. TCD and EH are developing a watershed pledge project for the Henderson Inlet Shellfish Protection District. The project will be field tested with 25 TCD |

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| 6. Education (continued): | <p>Cooperators with conservation plans and 25 neighborhood association residents in June. The program will expand to 200 participants in 2005 with full implementation in 2006. Kathy Whalen, TCD, 754-3588 ext. 114</p> <p>South Sound GREEN teachers and students conduct water quality sampling in the Henderson Inlet watershed.</p> |
| Stormwater: | |
| <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&WM) is working with local jurisdictions in developing a revised regional stormwater manual. Anticipated adoption in 2005. Contact Kevin Dragon 360.357.2491</p> <p>W&WM staff participates as a member of the WDOE Low Impact Development Technical Advisory Committee.</p> <p>W&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</p> |

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| Action 1 (continued): | <p>an on going program that will expand throughout the Districts and the utility service area. Contact Suzi Vanderburg 360.357.2491</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> |
| Action 2: In areas with Hydrologic Soil Groups C & D ¹ (tight soils) within the District: <ol style="list-style-type: none"> 1. Revise zoning to prohibit development at urban densities in rural areas; or 2. Require development standards that do not allow the surface discharge of stormwater. | The revised regional manual will provide for greater protection standards in areas with Hydrologic Soils Groups C&D. |
| 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. | The action will also be included in the EH and TCD watershed pledge project described above. TCD will air two TCTV television shows and two workshops on water quality / agriculture issues and publish two ads in the Olympia and Yelm newspapers about conservation. Contact Kris VanGorkom 754.3588 x110. EHD/W&WM in 2003 developed a new pet waste brochure for distribution to the general public. Over 10,000 brochures have been |

¹ Soil Survey of Thurston County, Washington, USDA SCS1982, p. 125.

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| Action 3 (continued): | distributed and 25 posters have been posted. Also, 1 newspaper article (Dr. Yu), 1 radio spot, and at least two newsletter articles have been printed and broadcast. |
| Action 4: Require or provide pet waste management information and supplies for privately owned stormwater facilities, and common areas. | <p>EHD/W&WM and cities have held 8 stormwater pond maintenance workshops over the past couple of years where the attendees learn of the negative impacts of dog waste to stormwater quality.</p> <p>EHD/W&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> |
| Agriculture: | |
| 1. Enforcing the current regulations that apply to agricultural activities will improve water quality. | <p>EH will continue to investigate agriculture related water quality complaints. EH is working with TCD to track landowners that develop and implement resource management plans to assure they implemented within time frames specified in Article VI, the county's non-point pollution ordinance. Contact Sue Davis - 360.754.4111</p> <p>TCD responds to referrals from EH, meets with the landowners,</p> |

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| 1. Enforcing the current regulations (continued): | recommends corrective action, and transmits recommendations back to EH. Contact: Kathy Whalen, TCD, 754-3588 ext. 114 |
| 2. Review and revise as necessary, current regulations to ensure that they are enforceable | EH is working to evaluate and update Article VI. This should be completed in 2004. Contact Sue Davis - 360.754.4111 |
| 3. Conservation District will follow up on Conservation Plans and work with landowners on the implementation of best management practices (BMPs). | Funding is available from the TCD for fencing and riparian planting in the Henderson Inlet Watershed. Contacts: Brian Thompson or Chrissie Wiseman, 754-3588. |
| 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 guidelines to determine the appropriate number of animals per acre. | TCD will provide recommendations and guideline to EH during the review of the Non-Point Ordinance. Contact: Kris VanGorkom, 754-3588 ext 110. |

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| 7. Develop and implement an ongoing program of water sampling of ditches and streams near farms to track the progress of best management farm practices. | |
| 8. Reward landowners who do a good job with their farm practices. | <p>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. 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> |
| 9. Provide for WCC (Washington Conservation Corps) crews to assist landowners implementing farm practices such as fencing and creating riparian buffer areas. | <p>In 2004, the TCD has funding available for the WCC crew to assist landowners for 10 days of riparian planting and maintenance and 8 days of fence building.</p> |
| 10. Work with realtors to educate new property buyers on farm practices that protect water quality. | <p>TCD participates in the WSU Extension Service program that provides in-service training to realtors on agricultural issues.</p> |
| 11. Require all agriculture lands with livestock to manage buffers along streams and rivers to reduce bacterial loading. | <p>TCD manages the Conservation Reserve Enhancement Program that provides financial assistance to landowners to plant buffers and construct fences.</p> <p>The County's Non-Point Ordinance already includes this provision (Section 4.2(a)).</p> |

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| <p>12. Provide support and funding for the development and continuation of a Community Shellfish Farm that will promote community involvement and public awareness of water quality issues that effect shellfish harvesting.</p> | <p>The Commissioners approved the 2004 work plan for the Shellfish Protection Fund to include funding the activities of the Community Shellfish Farm.</p> <p>In February 2004, the Farm hosted a field trip from the Science Writer’s Conference. Contact Mark Fischer 360. 866.8960.</p> <p>TCD produced a television program on TCTV on the shellfish issue and highlighted the Community Shellfish Farm.</p> <p>TCD hosted a community leaders tour of the Henderson watershed and the Community Shellfish Farm.</p> |
| Land Use | |
| <p>1. Find ways to incorporate LID techniques on re-developing sites.</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>2. Develop regional LID standards:</p> <ul style="list-style-type: none"> a. Require LID for redevelopment in the Urban Growth Area where possible. Research ways to incorporate LID techniques on redeveloping sites. b. Regional standards are needed to be maximally effective across jurisdictions. c. Identify locations where LID should be used based on criteria such as soil types, vegetation, and proximity to surface water. d. Adjust LID standards as additional science is developed on the impacts to shellfish growing areas. | <p>WW&M is working with local jurisdictions in developing a revised regional stormwater manual. Anticipated adoption in FY 2005.</p> <p>W&WM staff participates as a member of the WDOE Low Impact Development Technical Advisory Committee.</p> |

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| <p>2. Develop regional LID standards (continued):</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>3. Use the Special Management Area provisions of the Critical Areas Ordinance in the unincorporated and rural areas of the Shellfish Protection Districts to:</p> <ul style="list-style-type: none"> a. Develop stricter development standards. b. Retain at least 65-70% tree canopy. c. Increase setbacks from shoreline. d. Set higher septic system standards. | <p>The Critical Areas Ordinance will be updated by the end of the 2004. Contact John Sonnen 360.786.5467.</p> <p>The revised CAO won't include a Special Management Area provision during this cycle.</p> <p>The recommendations to develop stricter development standards and retain a 65-70% tree canopy applies more to zoning ordinance than CAO, which may be updated in 2005 as resources allow.</p> <p>The recommendation to set higher septic system standards are being addressed above in the Septic System section.</p> |
| <p>4. Continue program to purchase land and build regional stormwater facilities in developed areas to meet newly revised stormwater retention standards as the opportunity arises.</p> | <p>In 2003 land acquisition and pond facility project is under way for the Thompson Place area, in the Woodland Creek basin. This project is one of the top priority projects as determined by competitive rating process. The</p> |

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| 4. Continue program to purchase land and build regional stormwater facilities (continued): | rating uses about a twenty-category evaluation process among which the location and benefit to shellfish are considered. Future projects will depend on the continuation of capital facility funding, which is up for Commissioners review in 2004. |
| 5. Use funding sources such as the Conservation Futures Fund to: a. Purchase of shoreline properties, if possible; or b. Purchase development rights or conservation easements from willing sellers. This is an effective tool to permanently protect valuable wildlife riparian areas as well as protect water quality from further degradation. | The Conservation Futures program allows this sort of acquisition but needs to compete with other proposed projects each year. Contact Mark Swartout 360.709.3079. |
| 6. Increase enforcement of current land use regulations and institute adequate penalties to remove incentives to ignore the regulations. | In 2003 the County created a five-person compliance section to increase enforcement of land use, building codes, and on-site septic systems regulations. The compliance section is authorized to issue civil infractions as needed. |
| 7. Promote proactive assessment of streams and marine shorelines for buffer zone and other land use violations. | Same as #6 above. |
| 8. Educate stream and marine shoreline owners regarding the function and value of buffers of native vegetation dominated by mature conifers. Provide incentives and/or technical assistance to property owners interested in protecting and/or re-establishing native shoreline buffers. | W&WM has a project scheduled in the fall 2004 to restore the shoreline along Henderson Inlet at Harmony Farm (a CLT easement property). Contact Suzi Vanderburg 360.357.2491. W&WM and the City of Lacey |

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| <p>8. Educate stream and marine shoreline owners (continued):</p> | <p>are working together on shoreline revegetation projects on Woodland Creek.</p> <p>City of Lacey has a Plant Grant program for streamside property owners along Woodland Creek to help reestablish riparian buffers. Contact Lisa Dennis-Perez 360.438.2687</p> <p>City of Lacey is continuing to revegetate along Woodland Creek Community Park.</p> <p>This action will also be included in the TCD and EH watershed pledge program described earlier.</p> |
| Wildlife: | |
| <p>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:</p> <ol style="list-style-type: none"> 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. | <p>There are activities throughout this report to help fully address human and domestic animal source pollution.</p> |

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| Adaptive Management: The implementing agencies will: | |
| <ol style="list-style-type: none"> 1. Cooperate to develop an adaptive management strategy. The strategy will be consistent with federal, state, and local requirements. 2. Support monitoring programs needed to obtain environmental and performance-related data and information. Programs may target specific stream reaches or discharges, quality indicators, or runoff conditions. 3. Coordinate with government agencies or community based groups to assess data and measure performance. 4. Share information with the public and consider their feedback in revising programs. 5. Use data, assessments, and feedback to evaluate and modify programs, thereby improving predictability, efficiency, and cost-effectiveness, while working toward achieving bacteria standards. | <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 some of the major categories of recommendations are approved and implemented.</p> |
| Governance: | |
| <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 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 to their role as advisors 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> |

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| <p><u>Boundary</u>: The boundary for the Henderson Inlet Shellfish Protection District was based on using past basin planning areas with the intention that the stakeholder group would review and make recommendations as part of their final report. The stakeholder group is recommending that the District boundary be reestablished based on surface water runoff from land within the current District boundary that influences the water quality of the shellfish beds in Henderson Inlet, taking into consideration the travel time needed for viable fecal coliform bacteria to reach the Inlet. 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> |