

Nisqually Reach Watershed Protection Area Septic System O&M Program Proposal Open House

Revised March 2011

As you can see from the length of this document, dozens of questions were asked about the Septic System Operation and Maintenance Proposal for Nisqually Reach Watershed Protection Area. Thank you for your patience in receiving answers, and thank you for asking good questions.

Your questions have been grouped together under 4 different topics so you can read other questions regarding the same issue. Several people asked similar questions, and these have been grouped together to answer. In some instances, when an individual asked several different questions, the questions were split up and put under the related topic.

These questions are compiled from e-mails and the open house attendees. (Approximately 200 citizens were in attendance January 25th.)

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Program

1. Has County considered a countywide O&M (Operation and Maintenance) program? It seems fairer. All property owners in Shellfish District/WPA boundary should help pay for program. Even those on sewer benefit. On site owners should pay more, but all should contribute.

Thurston County had a county wide septic system O&M program from 1990 to 1999 where every new and repaired septic system was required to have a renewable operational certificate. And when properties were sold, the property owners were required to obtain a renewable operational certificate. That countywide program was changed in 1999 to the current countywide program which requires renewable operational certificates only for complex septic systems (i.e. mounds, sand filters, Glendons, aerobic treatment units) and large community systems.

The Thurston County Board of Health was recently briefed on the current septic system O&M program. Part of that briefing included comments, concerns and suggestions made by the public and industry professionals. The merits of a countywide program were discussed. We anticipate future briefings on this topic.

This O&M program for septic systems in the Nisqually area is proposed because past septic system dye tests and water quality studies have shown that septic systems are one of the sources of

surface water pollution. While state law allows sewerred properties within an adopted shellfish protection district to be charged for shellfish protection activities, they cannot be charged twice for shellfish related activities. In the Nisqually area, programs already exist to address pollution from stormwater and agricultural practices that are funded by assessments and rates charged against the property, including property served by sewer. New charges against these properties could only be for different activities or for activities beyond those covered by existing programs.

2. Why isn't Pierce County / JBLM part of this, since they affect water quality in the Nisqually Delta shellfish closure area?

This is a Thurston County proposal for a program that addresses septic systems in an identified area of the Nisqually Shellfish Protection District in Thurston County. The proposed area is north of Lake St Clair to the tip of Johnson Point, bordered by the Henderson Watershed Protection Area on the west and the Nisqually River on the east and south to the Nisqually Indian Reservation. This is the watershed area that has the greatest influence on the water quality of McAllister Creek and Nisqually Reach marine shoreline.

Thurston County Public Health and Social Services Department is responsible for managing on-site sewage systems within Thurston County in accordance with state law and the County's Sanitary Code. The two main areas of documented water quality violations in the Thurston County portion of the Nisqually watershed are along the Nisqually Reach marine shoreline and in McAllister Creek. The proposed program is intended to improve and protect water quality in McAllister Creek and along the Nisqually Reach as well as to protect the public health of Thurston County residents.

3. Who all is included in the proposed program area? How many septic systems exist in the proposed Nisqually Conservation Area?

All owners of septic systems within the boundary area defined in question 2 above. The number of parcels with septic systems is estimated to be about 4100, and approximately 4960 residences served by septic systems.

*The name of the proposed area is **Nisqually Reach Watershed Protection Area**.*

4. I could not find a boundary map. Has the boundary been established and if so where can I find a map of it?

A map can be found on page 5 of the proposal. Go the website www.co.thurston.wa.us/health/ehrp/nisqually.html Click on "Draft O & M Proposal for Nisqually Watershed" link under HOT TOPICS! on the right side bar, first item.

5. Is this a program to 'control' our septic systems?

*The goal of the proposed program is to **ensure that on-site sewage systems are properly operated and maintained to protect the health of county residents and preserve the quality of the county's water resources**. The three objectives of the proposal are to: 1) Protect **public health** from exposure to sewage from failing septic systems, 2) Preserve the **quality of the county's water resources** by ensuring that septic systems are maintained and operated properly, and 3) Protect the **investment** in on-site sewage treatment systems through routine inspection and maintenance.*

It is a proposal that would establish inspection requirements for septic systems and hold owners responsible for ensuring that their systems are properly operated and maintained.

6. Make your decisions fair remembering that all water flows down hill. It is not just waterfront property affecting the Sound. Be sure you check Fort Lewis's output, into and effect on the Nisqually Reach waters.

If the proposal is adopted, everyone who owns a septic system within the program area would be responsible for ensuring that their system is being maintained and working properly. Each on-site sewage system would be assigned a risk level of either "high" or "low" based on the risk of contaminating the surface water if the system were to fail. A system located in an area of poorly draining soils and close to the marine water or a stream is assigned "high risk" and would be dye tested every six years, in addition to an every three year inspection. Systems located inland would be assigned as "low risk" because they do not pose as high a risk of directly contaminating surface water, but still could if sewage runs off the site and into a road ditch or street drain or drainage. Any failed system, regardless of location, poses a potential health risk to nearby property owners and residents.

The regulatory authority for the wastewater treatment plant that serves Joint Base Lewis-McChord is the US Environmental Protection Agency. Information about the review and issuance of the most recent discharge permit for that wastewater treatment plant can be found at http://yosemite.epa.gov/r10/water.nsf/NPDES+Public+Notices/solo_point

The question of what the potential impact of Joint Base Lewis-McChord wastewater treatment plant discharge is on the water quality in the Nisqually River delta area and along the Nisqually Reach was examined as part of the total maximum daily load study conducted by the Washington Department of Ecology. The study results are reported in the document titled "Nisqually River Basin Fecal Coliform Bacteria and Dissolved Oxygen Total Maximum Daily Load Study", dated May 2005, beginning on page 21. The study found that "...the wastewater treatment plant, operating under the current flow regime and within the permit limits, is not expected to contribute to elevated bacteria levels found historically at the DOH monitoring locations within the Nisqually Flats." The Washington Department of Ecology report can be found at www.ecy.wa.gov/biblio/0503002.html

7. Will the LIDAR topo maps be available to the public to show water runoff and drainage patterns (when complete)?

LIDAR, 2-foot topography, and aerial photography are currently available online at the following website: www.geodata.org/online.htm Click on the "Main Map" choice; then in the "Layers" tab check the map layers you would like to view.

Final area boundaries will be refined using LIDAR.

8. Please provide on the web information about soil types. The handout information is all in code to the average citizen (soil type- restrictive, non-restrictive, etc) doesn't mean anything without including definitions.

A soils map will be made for the proposal area and posted on the Nisqually project website.

*Basically, **Restrictive** means soils that are poorly drained, such as Skipopa or Kapowsin silt loam, or soils that have a cemented layer within a few feet of the surface, such as Alderwood sandy loams.*

Water moves through these soils very slowly or not at all, and much of the rain water runs off over the surface of the ground. **Non- restrictive** means soils that water moves through easily. They are sandy and gravelly soils, such as Everett gravelly sandy loam or Indianola loamy sand. Unfortunately for septic systems, the glaciers left South Sound with an abundance of restrictive soils, especially along the shorelines.

A soils map for the County can be viewed online at the following website: www.geodata.org/online.htm Click on the "Natural Resources" choice; then in the "Layers" tab check the soils layer. Also check the box to turn on the labels for the soils. Use the + button to zoom in to your property.

9. On three year renewal cycle, what if the owner was/were deployed (military) for a year; would he/she be granted one year extension?

The County is very willing to, and routinely does, make provisions for homeowners who have personal circumstances, such as military deployment, that make it difficult to meet the assigned inspection due date. If someone finds themselves in that position, they should contact the County program staff to make alternative arrangements.

10. Why don't you phase in the program starting with the properties along the shore line and go back about 1 mile test those systems first then check the water in one year if you still have a problem then extend the boundary out another mile then retest in another year and keep doing this until the water gets "clean"?

There were similar suggestions when the Henderson septic program was being developed. In that case, the proposed boundary area was reduced to exclude the southern part of the watershed that drains directly to the Long/Pattison/Hicks lakes. However, the committee and the Commissioners chose to keep "upland" septic systems in the program because even septic systems that are not immediately adjacent to the shoreline can have an impact if they fail and sewage runs off the property such as into a road ditch or stormwater catch basin. And a failing system poses a public health risk to people living nearby.

The advisory committee believes that including every septic owner within the watershed is an acknowledgment that everyone contributes to pollution and that everyone working together can have a positive effect. They also believe it is the fairest way to implement the program.

11. If you are going to have a blanket policy that every house in a certain area is going to be checked because you think it is polluting (which you have no proof that a house 10 miles in land is polluting the shell fish beds) why don't you include every house within 1 mile of the Nisqually river all the way up to Alder Lake?

The boundary and the influence of the river on water quality in Nisqually Reach was a topic that the stakeholder committee discussed at length. Ultimately the committee recommended including the septic systems that are along the river up to the Nisqually Indian Reservation boundary. Even though the river generally is meeting the state water quality standards, the committee felt that septic failures occurring in the lower reach of the river could still impact water quality in the Reach. There was also a higher percentage of sewage complaints received in the area along the lower Nisqually River than elsewhere in the watershed. The reservation land upstream of the proposed boundary is the Nisqually

Tribe's jurisdiction, and the military land upriver from the reservation is outside Thurston County jurisdiction.

12. Why was Mountain Aire housing area included in the Nisqually Reach Watershed? What were the criteria used?

The area within the proposed boundary includes all of the land that drains into the Nisqually Reach and the land that drains into McAllister Creek. The McAllister Creek watershed is included in the proposal area because McAllister Creek has a major influence on the water quality in the Nisqually Reach. All but a few lots in the Mountain Aire neighborhood are in the McAllister Creek watershed. Mountain Aire is very close to the divide between the Henderson Inlet watershed and the Nisqually/McAllister watershed, but it is mostly within Nisqually/McAllister. A few lots on Mountain Aire Loop are within the Henderson Watershed and are already participating in the Henderson septic operation and maintenance program. The watershed boundary was examined very closely and refined during the Henderson program development using the latest topographic information and a model called the "rain-drop analysis".

13. If my house was included in the Henderson Inlet Watershed and was given an exception why would I not be exempt now? Your data is 10 years old. Why not get new data before going forward?

If a property has already been determined to be within the Henderson O&M program, it would not be subject to duplicate inspection requirements and charges. The goal is to ensure that septic systems are being inspected and maintained to protect water quality and public health. When the Henderson O&M program was adopted, many parcels were bisected by the watershed boundary between Henderson and Nisqually. The determination of whether or not a property was subject to the Henderson septic system inspection requirements is based on whether any part of the septic system or sewage plumbing is within the Henderson watershed.

Henderson property owners of a bisected parcel could have requested reconsideration of inclusion in the Henderson program if they provided evidence to show that the septic system and plumbing was not on the Henderson side of the watershed divide. It sounds like this question is from a property owner of a bisected parcel whose septic system and plumbing was located on the part of their property that drains to the Nisqually. In cases such as this, if the Nisqually proposal is adopted, this septic system would be included in the Nisqually O&M program. The 'exception' granted was apparently from the Henderson program because the septic system/sewage plumbing is actually in the Nisqually watershed.

14. I currently live in the Henderson Watershed Area. It appears that I am going to be in the proposed Nisqually Reach program boundary also! Double costs and requirements? Concerned about increased costs.

No one will be charged double or have duplicate inspection requirements. See answer above.

15. How were watershed residents notified of this meeting?

A 5 ½ by 4 ¼ inch lime green postcard was mailed to approximately 4,000 property owners in the proposed Nisqually Reach Watershed Protection Area. The cards were mailed from the County on January 12, 2011. The card stated that the recipient was invited to an Open House to learn about and

give feedback to a proposed Septic System Operation & Maintenance Program - the purpose of which is to protect water quality and public health.

A press release was also issued to the local media the week before the meeting, and The Olympian ran an announcement in the newspaper on the day of the meeting, January 25th. The meeting notice was posted on the Public Health and Social Services web site beginning January 12th, and posted as a "Hot Topic" on the Thurston County website from January 12th to 19th.

Water Quality

16. Do studies done by the Department of Ecology support what the Advisory committee is proposing?

During the Total Maximum Daily Load (TMDL) it was determined that the Nisqually River and most of Nisqually Reach met fecal coliform water quality standards. However, there are problems with water quality in the Nisqually Basin, specifically in McAllister Creek. McAllister Creek pollution feeds directly into the reach area affecting shellfish beds. Fecal coliform load reductions are required by the TMDL. A 32 percent load reduction is needed at McAllister RM 4.3 and a 34 percent reduction is needed at McAllister RM 0.1. Page 28 of the implementation plan states that on-site systems in several areas along the west bank of McAllister Creek and Nisqually Reach are known or potential sources of bacteria (WDOE, pg 50). Thurston County is required to reduce forms of nonpoint pollution in the area.

Please note the Nisqually River Basin Fecal Coliform and Dissolved Oxygen Total Maximum Daily Load (TMDL): Water Quality Implementation Plan is only part of the entire TMDL. There is also a study <http://www.ecy.wa.gov/biblio/0503002.html> and a submittal report <http://www.ecy.wa.gov/biblio/0510040.html> that have more detailed information on how the recommendations to look at septic systems as part of the problem came about.

(Response provided by Washington Department of Ecology, Nisqually TMDL Coordinator, 2/7/11)

17. Do studies done by the Department of Health support what the Advisory committee is proposing?

We, at the Washington State Department of Health, are responsible for the classification of all commercial shellfish growing areas. The classification process includes the collection of marine water data at permanent marine water stations and a thorough evaluation of all shoreline and upland pollution sources. Currently, marine water quality at the majority of stations in the Nisqually Reach growing area meets acceptable standards; however, shoreline pollution sources have resulted in the closure of portions of the marine shoreline.

The growing area has over 1,600 acres, between Johnson Point and the Nisqually River delta, classified as Approved for commercial shellfish harvesting. Within the same area there are four areas, representing 1,850 acres, where commercial harvest has been prohibited: Baird Cove area, south of Mill Bight, near Beachcrest, and the Nisqually River delta. The Prohibited classifications are based on potential impacts from boats, failing marine water quality, and upland pollution issues.

There are 32 marine water stations within the Nisqually Reach shellfish growing area. These stations are sampled between six and twelve times each year for fecal coliform bacteria, salinity, and temperature. Annually, we evaluate the bacteria levels at each station looking at a minimum of the

last 30 samples. Marine water quality is acceptable when the station has a geometric mean value of 14 fecal coliform bacteria per 100 milliliters of water or less and an estimated 90th percentile of 43 fecal coliform bacteria per 100 milliliter of water or less. Today, 31 of the 32 stations meet state water quality standards. This data is reflected in our recent trend analysis (last three years) that shows improving marine water quality. Marine water quality in the nine years prior to the recent analysis showed elevated and static trends. Stations located near the Nisqually River and McAllister Creek have historically had poor water quality and are also showing an improving trend. One station on the river delta continues to fail the marine water standard.

In 2005, we completed an evaluation of the shoreline and upland activities. We surveyed nearly 200 shoreline on-site sewage systems and evaluated 132 freshwater drainages entering the growing area from the uplands. Nearly 20% of the on-site sewage systems evaluated during this survey were listed as “potential sources of pollution” based on their age, type, and location. Upland failing on-site sewage systems in the Luhr Beach area, identified by Thurston County, were impacting the growing area and required the closure of a portion of the growing area. Bacteria samples collected from a number of freshwater drainages were extremely elevated and resulted in the closure of large portions of the growing area. In response to the shoreline survey findings, Thurston County Public Health performed a dye tracing project in the area between Walnut Avenue NE and 78th Avenue NE. Eighteen out of the 36 homes were dye tested and 6 were found to be failing. The county identified an additional system that was failing during shoreline sampling. All seven of these systems have been repaired. The remaining 18 home owners chose not to participate in the project. Follow up sampling has shown that high bacteria levels persist in the drainages and impact the marine shoreline. The area remains closed to commercial shellfish harvesting based on upland pollution sources.

Our routine evaluations of marine water quality and shoreline conditions near the shellfish growing area will continue. We anticipate that a successful on-site sewage system operation and maintenance program will allow the recently upgraded areas of the Nisqually Reach shellfish growing area to remain open, help maintain the current classification, and make it possible to reopen areas that are currently closed.

(Submitted by Office of Shellfish & Water Protection, Washington State Department of Health, 2/9/11)

18. In viewing the density and proximity of the many properties along the northeast shore of Johnson Pt., and no evidence of where all the sources of coliform bacteria are, how do you justify including properties well inland? Do we have studies that show contributions of inland systems? How do we know septic systems are still causing problems? Water quality has been improving.

The US Environmental Protection Agency describes nonpoint pollution as follows: “Nonpoint source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources. NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water.”

Because the pollution in Nisqually Reach and McAllister Creek is nonpoint pollution, --- small amounts coming from many sources and locations throughout the watershed, no single big pipes--, it is very difficult to identify and account for every bacteria. For that reason, most water quality clean-up approaches, including this one, initiate actions such as agriculture and livestock-keeping improvements, stormwater treatment facilities, pet waste education, restroom facilities for people fishing, and septic

systems inspection and correction programs to address all likely sources. The water quality improvements that have been documented in McAllister Creek and at the marine water sites are a direct result of this multi-pronged effort that has been going on in Nisqually since the first shellfish downgrade in 1992. However, McAllister Creek still does not meet the water quality standard, there are still drainages with high bacteria pollution, and there are still miles of shoreline closed to shellfish harvest.

In 2002/03, Thurston County tried an experimental technique called microbial source tracking, which uses DNA-typing of E. coli bacteria to identify what animals the contamination came from. The results of that study showed that bacteria associated with wildlife, especially birds and rodents, livestock, pets, and humans were all present in McAllister Creek, freshwater tributaries and the marine water. Human sources were present in the two drainages that collect water from residential upland areas, as well as in other sites. Unfortunately this method is not able to quantify how much pollution is from which sources.

Septic systems along the Nisqually Reach shoreline that were dye tested by Thurston County Public Health and Social Service from 1994 – 1996 had a 26% overall rate of septic system failure with 78% of owners participating. Systems located within 50 feet of the shoreline had a 43% rate of failure; systems 50 – 100 feet from the shoreline had a 36% rate of failure. Surveys conducted between 1996 and 1999 had an overall 29% rate of failure with only a 37% participation rate. Systems within 50 feet of the shoreline had a 58% rate of failure; systems 50 to 100 feet from the shoreline had a 40% rate of failure. These rates of failure along the Nisqually Reach are at least twice as high as the overall failure rate of 13% for Thurston County shorelines. Within 100 feet of the water, at a minimum 1 in 3 systems is failing. These surveys documented the contribution of shoreline septic systems to the fecal contamination of the Reach.

We also know that runoff, from developments in the upland areas, does discharge into McAllister Creek or the Nisqually Reach. As part of the County stormwater utility's efforts to reduce pollution from stormwater, an inventory of stormwater facilities has been completed in the Nisqually watershed. Within the proposed project area there are at least 27 stormwater facilities from 13 neighborhoods that have connections to surface water. A few that you may recognize include Beachcrest, Hogum Heights, Luhr Beach, Hidden Forest, The Meadows, Meridian Heights, McAllister Creek, and Nisqually Heights. Failing septic systems in neighborhoods with stormwater facilities that are hydraulically connected to surface waters have the potential to directly impact water quality.

19. What are the water quality criteria that will be used to measure whether this program is successful? What is the baseline for measuring water quality improvement?

One measure of success is when the creeks, drainages, and marine water meet the state water quality standards for freshwater and marine water. Washington Department of Health, Washington Department of Ecology, and Thurston County all have monitoring programs to track water quality. Another measure of success will be when the septic systems within the watershed have been inspected and identified problems and failures have been repaired. If adopted, these measures will be tracked by Thurston County Environmental Health.

20. Is anyone planning to conduct more studies to prove that nonpoint pollution is impacting the Nisqually watershed area?

The nonpoint pollution problems impacting the Nisqually Reach have been well documented. The Washington Department of Ecology conducted the Nisqually River Basin Fecal Coliform and Dissolved Oxygen Total Maximum Daily Load Study in May 2005. That study documented violations of the state surface water quality standards and determined the sources to be nonpoint in origin. Also in 2005, the State Department of Health conducted a sanitary survey of the Nisqually Reach shoreline, and found numerous drainages with high bacteria levels which are also from nonpoint sources. There are also numerous earlier studies completed by Ecology, the Nisqually Tribe, and Thurston County documenting nonpoint source pollution problems in this watershed.

There is on-going monitoring by Washington Departments of Health and Ecology and Thurston County to track water quality trends. In addition the Department of Ecology conducts effectiveness monitoring at intervals in watersheds where water quality restoration activities have been done following total maximum daily load studies. The first effectiveness monitoring project for Nisqually is anticipated in 2012, however Ecology has already completed additional sampling on Medicine Creek (See Publication No. 09-10-083) and on McAllister Creek (See Publication 09-10-094 at www.ecy.wa.gov/pubs/0910094.pdf).

Washington Department of Health produces annual shellfish growing area reports which summarize the marine water quality in comparison with the water quality standards. Those reports are available at <http://www.doh.wa.gov/ehp/sf/default.htm>

21. What are the intertidal pathways in the Nisqually Reach Watershed? Where is data from monitoring wells? What are the assumptions in the hydrologic model for the area? What is your scientific evidence to back up your claims about pollution sources?

Although Ecology's total maximum daily load study did document nitrate contamination of the groundwater, the proposed program is designed to protect surface water and public health from the potential impacts from surfacing septic system failures. As a result there has not been ground water monitoring or modeling done in association with this project.

There have been ground water models built in association with other projects such as the City of Lacey and Olympia water system plans. Some information can be found at <http://olympiawa.gov/en/city-utilities/drinking-water/groundwater-protection/groundwater-protection-publications-and-plans.aspx>.

22. DNA testing in 2004 did not go NW up Johnson Point past the Luhr Beach outfall. There are no data in that report giving the fraction of human sewage in the coliform counts. How do you conclude that humans contribute a significant contribution in marine waters compared to birds, and other animals? If all septic treated sewage successfully, by what fraction would you expect the total coliform count to be reduced?

DNA source tracking technology is still under development, and can only provide information about which sources are contributing to a water quality problem, but not how much. When and how nonpoint pollution occurs is affected by many factors that make quantifying the exact amount from every source nearly impossible. For example, stormwater is affected primarily by rainfall. But how much pollution the stormwater carries is affected by when the storm occurs – summer when it's dry, fall when the first big storms arrive, winter when the soils are saturated and can't take any more water. How intense the storm is – slow days-long drizzle allowing water to seep into the soil or a 4-inch

Pineapple Express. How the lawns, roads, parking lots are maintained – is there pet waste being washed in, are the parking lots full of oils and greases, did someone just fertilize their lawn, are there treatment facilities that ‘retain’ the stormwater allowing pollutants to sink / float before discharging to our surface waters.

This same complexity is true of all sources of nonpoint pollution including septic systems. Did a single owner just sell to a large family who use lots of water; did the delivery truck drive over the drainfield leg and crush a pipe; did that concrete distribution box finally corrode and collapse after 30 years, did the earthquake pull the building sewer pipe joints apart, did the pump fail but it’s an old system with no alarm, etc. Things that influence how long and how well septic systems work change constantly in ways that are not predictable and often go unnoticed. But when they fail, the water quality and public health close to that failed system are at risk.

We do not have studies that project how much water quality will improve if this program is implemented. We do know, however, that just two failing systems kept the commercial shellfish beds in the Luhr Beach area closed for four years. These properties were high-bank waterfront, but the sewage effluent was leaking inland into the buried road drainage system and transported hundreds of feet away across several properties. The sewage finally flowed out of a large storm drain and onto the beach.

*We do know that **success in reduction can be reached** with a comprehensive septic O&M program. In January 2010 the Washington State Department of Health reopened to commercial harvesting Henderson Inlet shellfish beds that had restricted harvesting since the early 1980’s. Part of the reason for this improvement in water quality is a septic system operation and maintenance program for all septic system owners in the Henderson Watershed Protection Area – a program that has been in place since 2007. Years earlier in the 1990’s a similar improvement was seen in Eld Inlet after a major pollution reduction effort was undertaken.*

Studies in Nisqually have shown that human sewage is a source of nonpoint pollution there too. Septic system dye testing along Nisqually Reach showed a significant number of septic systems failures – ranging from 26 to 37% of those systems tested. The dye testing was usually done for shoreline homes, but did include upland properties as well. For example upland homes in neighborhoods such as Beachcrest and Luhr Beach were found to be failing and leaking sewage into drainages that flow to the beach. The County has completed over 2,000 dye test surveys and found consistently that the rate of failure is around 13 – 14%. The high failure rates found in the Nisqually area shows that human sewage is a significant source of fecal coliform pollution.

23. Since nonpoint means the percentages of the sources are not identified, what is the plan to spend more funds on specific DNA testing to get the percentages? What is City of Lacey doing to control growth in high density areas? How do they educate or penalize those on sewers about storm water and pet waste pollution?

The DNA-typing methods are still under development by scientific researchers. If a standard method emerges from the research that is approved by agencies such as EPA and DOE, DNA-typing would be considered for use where needed.

Regarding the question on growth, ...the State Growth Management Act requires local governments to designate urban growth management areas. The intent of the Growth Management Act was to promote in-filling of the urban areas and prevent urban sprawl. The resulting high density

development occurring inside the designated urban growth areas and city limits would be served by municipal sewer and water, and is following the requirements of the State Growth Management Act.

While it is acknowledged that we, as a society, have not yet discovered how to build “zero impact” developments, the current development regulations are much more rigorous than they were in the past. Current stormwater requirements, critical area ordinances, and land use regulations are intended to prevent pollution and impacts to water resources.

Thurston County, the cities of Olympia, Lacey, and Tumwater, and the Conservation District cooperatively provide numerous public education and outreach activities related to stormwater pollution and protection of water resources. The educational activities and materials are for the general public, homeowners, businesses, developers, contractors, engineers and other industries. Some of the more visible activities include: the annual county stormwater utility newsletter, “Splash”, with a distribution to 44,000 households; a volunteer storm-drain marking program; the Stream Team citizen involvement program, which provides workshops on a variety of water resources topics and coordinates volunteers for monitoring and restoration projects; a pet waste program that includes “Don’t Let Your Pet Pollute” signs, brochures and pet waste bag dispensers; community messaging for the used motor oil and hazardous waste recycling program; presentations at school assemblies and classrooms on storm water and water quality concepts; and sponsorship of the South Sound GREEN, Nisqually River Education Project and Chehalis Basin Education Consortium watershed/water quality monitoring programs in area public schools.

To learn more about the county public outreach activities go to www.co.thurston.wa.us/stormwater. City of Lacey public outreach activities can be found at www.ci.lacey.wa.us/city-government/city-departments/public-works/water-resources/storm-and-surface-water-programs/stormwater-education.

24. What do you recommend we do with pet waste? Is it wrong to bury it?

The current recommendation is to pick up pet waste, bag it, and dispose in the trash. Composting is not recommended for safety reasons, and flushing is not ideal because pet waste is different enough from human waste to cause problems with the septic system or sewage plant functions.

Burying pet waste is also generally not recommended, mostly because of the wide variety of soil conditions, yard sizes, and dog waste amounts. The estimated sewage produced by licensed dogs in Thurston County is about the same as the amount of sewage produced by Tumwater. So, while burying the waste from one small dog on a 5 acre parcel with good soils and a deep water table might be reasonable, burying the waste of 2 large dogs on a city lot could contribute to water quality problems.

There is continuing research on this issue across the region. As we learn more, these recommendations may change.

25. When are we going to have a sewer system to hook up to?

Sewer extensions are not part of this proposal. This is largely because state law makes it very difficult to extend sewer into rural areas; the cost to extend sewer into developed areas is great; and there are few sources of funds available to make sewer extension affordable.

The State Growth Management Act requires local governments to designate urban growth management areas. The intent of the Growth Management Act was to promote in-filling of the urban areas and prevent urban sprawl. The resulting high density growth occurring inside the designated urban growth areas would be served by municipal sewer and water. The cities' sewerage general plans also state that the cities intend to eventually serve sewer to all of the properties inside their urban growth areas. Municipal sewer service is not planned, nor is it legally allowed, to be extended outside of the urban growth areas.

Funding is a major barrier for conversion from septic systems to sewer in existing developments within the urban growth areas. For new construction, developers pay for sewer line extensions. The developer's costs and the sewer hookup fees get melded into the cost of the new houses and are paid by the purchasers over 20-30 years via the mortgage. This doesn't work for converting existing neighborhoods to sewer, where the initial investment was for the on-site sewage system, i.e. they "already paid".

The city sewer utilities rarely fund installation of new sewer lines, and they do not have a pipeline construction capital program to assist with conversion of existing neighborhoods from septic systems to sewer when needs arise to protect water quality. The 1990 "Sewerage General Plan" for north Thurston County envisioned a program of utility-financed sewer line extensions – and specifically anticipated we could revise pipe construction schedules to accommodate extensions to protect water quality. However, this strategy was not implemented.

So at this time, the property owners in neighborhoods within the urban growth boundary would need to initiate sewer extension by petitioning the City of Lacey to form a utility local improvement district (ULID) and vote for approval of the ULID. The ULID would then be the mechanism to charge each property owner for the cost of engineering and constructing sewer lines into a neighborhood and paying the sewer connection fees for each residence.

Inspections

26. Why do septic tanks need inspecting every three years when pumping every 8-10 years seems adequate? What is the scientific basis for every 3 years? Why not 4 or 5 years? Did the State Department of Health ever advise pumping every 7 years?

*Septic System operation and maintenance is a major factor that contributes to proper system performance and longer system life. The primary purpose of the system **inspection** frequency is to detect problems in the early stages before they become serious and expensive to correct. In addition, the inspection provides the opportunity to complete preventive maintenance as needed.*

State law (WAC 246-272A-0270) requires that systems consisting solely of a septic tank and gravity drainfield are designed to require minimum management – require an inspection once every 3 years.

For systems that use pumps, alarms, floats, and other equipment, including proprietary products, the homeowner is responsible for assuring that a complete evaluation of the system

components and/or property takes place annually to determine functionality, maintenance needs and compliance with regulations and any permits.

*The State Department of Health advises the frequency of septic tank **pumping** be dependent on the amount of sludge and scum in the tank. How often the tank will need to be pumped varies greatly based on the number of people living in the home and what goes down the drain. Because tanks are living environments that require biological activity, the state Health Department does not recommend pumping a tank too soon. State Health has never recommended pumping every seven years.*

(Response provided by Washington Department of Health, [Wastewater Management Section](#), 2/8/11)

27. Can you self-inspect a sand filter system? What about how to clean a biofilter – is this part of most newer systems? Why not a separate class for sand filter system owners, even if just do's and don'ts, a basic understanding of sand filter systems.

Under this proposal, owners of sand filters are not eligible to inspect their own system. Sand filter systems are complex and would need to be inspected by a septic professional under the current proposal. Information about septic systems, including a video about sand filters, is available on the County's septic system webpage at www.co.thurston.wa.us/health/ehoss/index.html

How to clean biofilters, or effluent filters, is covered in the class for those homeowners that are eligible to be certified to self-inspect their own systems.

28. Will a pumper's report provide enough information to satisfy inspection requirements?

No. A pump report does not include an inspection of all components of a septic system or a reporting of their condition. So a pump report cannot take the place of an inspection report.

As of January 1, 2011, all pump reports must be filed electronically with an online management service - OnlineRME. (The public may view their own reports at www.OnlineRME.com .) The pumping firm pays a \$15 filing fee to the County for each report they submit. Thurston County Sanitary Code requires that a pump report is filed whenever a septic tank is pumped.

29. Is the cost of the three year inspection included in the annual fee? If not, what is the additional cost?

No, the septic system owner is responsible for the costs of the three year inspection. The typical price to have a professional complete the septic system inspection, if dug up and ready, ranges from \$120 to \$230 plus tax. See answer #31 below.

Incentives are proposed that would enable homeowners of gravity, pressure distribution, mound, and Glendon systems to enroll in a free 5.5 hour class to be certified to conduct the system inspection on their property. Doing so would reduce the inspection cost to \$0. (See answer to next question regarding cost range to hire a professional to do the work.)

30. What is the cost to have a professional do the inspection?

Every company in the septic industry sets their own prices for their services. In addition to the cost constraints for their company, the prices are also dependent on the site and system conditions and

the services rendered, such as “Did the professional dig up the tanks, or did the homeowner dig them up?”, “How deep were the tanks?”, “How complex was the system, and how many components needed to be inspected, i.e., pumps, alarms, sand filters, monitoring ports, etc?”

The typical price for a septic system inspection, if dug up and ready, ranges from \$120 to \$230 plus tax.

31. What does it cost to have a septic tank pumped?

At this time, the typical cost to pump an 1100-gallon two-compartment septic tank is between \$300 and \$400 plus tax. Charges can vary with tank size. The pumping of a pump chamber usually is an additional cost.

32. I called several septic tank pumpers in the county and more than one said you are charging them \$25.00 per pump in additional cost because you have to in put the information to the data base but in reality the septic tank companies are in putting the information. Is this true?

*There is NO additional county charge to the pumpers to submit an **inspection** report.*

*Septic tank pumping companies are charged \$15 when they submit **pump** reports on-line. This charge provides funding for the Department to follow up on systems that are failing or have some reported problem. There are an estimated 70,000 septic systems in Thurston County. Approximately one-third of all the pump reports received show a deficiency with the septic system. These deficiencies range from drainfield failures, to failed pumps, to leaking tanks. The local health department has a legal responsibility to respond to conditions that pose a health risk and that are violations of the sanitary code. Fees are the primary source of funds for the septic system program; the program receives little general fund support.*

33. I live in a 3 bedroom home with my wife. We go south each year for 4-5 months. A neighbor lives in a 3 bedroom house with 4 generations of people, a total of 7. My system is run with a pump. His is gravity. Will we both be held to the same standards? In the past I have inspected my own system. Can I continue to do the same?

*Under this proposal, gravity systems and pressure distribution systems would have three-year operational certificates. Before the certificate can be renewed the septic system has to be inspected and a report has to be submitted to the department. State law WAC 246-272A-0270 actually requires owners of all systems, **except** gravity, to inspect **annually**. Under state law, gravity systems are the only systems that have a 3-year inspection. While the County health department encourages homeowners to inspect annually, this proposal would only require professional inspection and reporting every three years for most types of systems. There are some very complex systems that already have an annual inspection requirement.*

If the septic program for Nisqually is adopted as proposed, training would be offered to homeowners to become certified to self-inspect their own system, for those simpler types of systems. Otherwise the inspection must be done by a septic professional. It has been found that without training, most homeowners are not sufficiently familiar with how septic systems work to conduct a proper and thorough inspection.

The requirements for inspection are the same for everyone:

- *inspect the entire system,*
- *pump on an as-needed basis,*
- *complete any repairs or maintenance needed,*
- *return signed inspection to Health Department*

Clearly, your system has less use than your neighbor's. While this program requires you to inspect it as often as they do, it is unlikely that you will need to pump your septic tank as often as your neighbor will. The intent of this program is to help assure that septic systems are regularly inspected, but pumped and serviced only as needed. With heavy use, systems require more frequent pumping and close attention to household habits, i.e. no use of garbage disposals, no dumping of oils and fats down the sink, no more than 2 loads of laundry per day, installation of low flow fixtures, etc.

34. Can a "certified homeowner" inspect (for no charge) a neighbor's septic tank, to help build community effectiveness and save money for those with limited resources living near you? Where can we find a list of resources to purchase risers and perhaps get installation options? How long will this program likely be in place, before next phase of sewer extensions occur (if any)? Are there provisions to assist low-income home owners to participate with septic tank upgrades/reviews? Could a "price list" be created from a survey of commercial inspectors, to reduce "calling around" by all property owners? Will online pump report be expanded to include inspection data?

On a case-by-case basis, a neighbor or family member can take the homeowner training and be approved as the certified inspector for an elderly or disabled neighbor or relative. If a person intends to go into business and charge to conduct inspections for others, they must apply to the Health Department and pass an examination to become a certified septic monitoring specialist.

Septic system owners are encouraged to install risers to make access for inspections and maintenance easy. Within the Henderson and Nisqually Shellfish Protection Districts, there is currently a riser rebate program for properties. The riser rebate form can be found on the website at www.co.thurston.wa.us/health/ehoss/loan_program.html. Local suppliers of riser materials are listed on the rebate form. The rebate program is considered for funding on an annual basis. Instructions for how to install risers can be found at www.co.thurston.wa.us/health/ehoss/education.html

Within the shellfish protection district there is also a small grant program to assist low income property owners with the cost of inspections, maintenance activities, and minor repairs.

The County health department has a financial assistance program to provide loans and grants for repairing failed septic systems. Information about that program can be found at the website www.co.thurston.wa.us/health/ehoss/loan_program.html The department competes for the funds for these financial assistance programs. While the department will continue to pursue funding for them, it is uncertain how long funding will be available.

Regarding electronic reporting of pumping and inspections on www.onlineRME.com, pumpers are now required to submit pump reports electronically through that system. Inspection reports CAN be submitted via that system; however, it is not currently required to be reported that way. It is an option that may be considered in the future.

Please see the answer to question #25 under Water Quality for a discussion of sewer extensions.

35. In this day and age why don't you set up a web site that people can log into (using their tax id number and have their own pass word) to in put their information in then? There would be little cost to the home owner.

There is a web-based system for submittal of septic operation and maintenance records and reports. It is www.onlinerme.com. Over the past two years Thurston County has been working with the septic industry to use this online record submittal system to improve efficiency and keep costs down. As of January 1, 2011, septic tank pumpers must submit their pumper records via this online system rather than in the paper form. This saves the County considerable staff time converting the paper records to an electronic version that are then posted and accessible to the public.

Right now, posting of septic reports in OnlineRME can only be done by septic professionals and government agencies. But there is a need for others, such as homeowners who are certified to self-inspect, to be able to post septic reports. This option is being developed. It is likely that in the near future, what you suggest will be possible.

36. Henderson Watershed has a lot of cliff side property. Much of Nisqually property is on the valley floor where flooding might occur. Could this be a problem if owners install inspection risers above their septic tanks? I've been told this has occurred.

A properly installed riser must be attached to the septic tank with a water-tight grout or seal. The lid that fits on top of the riser pipe has a water-tight gasket. So a properly installed septic tank riser provides more protection against flooding than the standard concrete tank lids that just sit on the top of the tank.

37. Have County inspectors been certified before allowing them to check septic systems in homes for sale. Our home was approved and the pipe from the house was never cemented at the tank.

County staff who permit and inspect the installation of septic systems are state-licensed On-site Wastewater Treatment System Inspectors or Registered Sanitarians. However, inspections conducted for home sales are typically performed by private on-site sewage system industry professionals. County staff evaluate inspection reports prepared by on-site professionals, compare what is reported against county records, and issue reports to the applicant. But they seldom conduct field visits. The exception is when someone applies for a Loan Certification. Then county staff will conduct an inspection of the septic system. Unfortunately, no matter who conducts the inspection on an existing system, it is difficult to completely see all of the system components because only portions are dug up and made visible.

We are sorry that the building sewer pipe into your tank wasn't properly sealed. Fortunately you discovered the problem. Small leaks from loose fittings and cracked pipes are the cause of about half of the failures found through dye testing of shoreline systems. The intent of the proposed Nisqually program is to ensure that septic systems are regularly inspected so small problems like these can be identified and repaired.

38. Does everyone have to repair / replace their system? Do the program rates help waterfront owners 'fix' their systems?

This is an inspection and maintenance program. Maintenance activities, such as pumping, or repairs or system replacement, are only required when the inspection or dye test shows that it is necessary.

Most people will not need to repair or replace their septic system as part of this proposal. This was a concern voiced by Henderson citizens when their program was being proposed. The results from 4 years of the Henderson program have shown the following:

- *46% of the 6,000+ owners **had** to pump their tanks because the tank was more than 2/3's full of sludge and scum*
- *More than 400 homeowners had to do minor repairs – repair baffles, patch tank side, level distribution box, replace pump, repair broken pipes, etc. These repairs range from \$10 for a bag of QuickCrete to a couple hundred dollars to replace a pump.*
- *67 owners had to get a permit to install a new septic tank because the old one was beyond repair. Cost depends on location of tank, how much landscaping needs to be moved, etc.*
- *62 owners had to replace their septic systems. All failing septic systems must be permitted and repaired as per the Thurston County Sanitary Code. There are grants available to replace any Biomax system and for shoreline systems. There are low-interest loans available for all county residents.*

The program charges do not “help waterfront owners ‘fix’ their systems”. The charges cover the county’s costs to manage the program and pay for the activities such as sending inspection notices, reviewing inspection reports, issuing operational certificates, conducting quality assurance inspections, ensuring compliance on failing or deficient systems, doing dye tests, and offering homeowner workshops. There is, however, a financial assistance program which provides a combination of grants and loans to waterfront homeowners to repair failed septic systems.

Cost

39. Environmental justice question: high risk – 200, 4.8%, low risk – 3913, 94.1%, rest 43 about 1%. Why 95% low risk users are asked to subsidize 5% high risk users which are the houses on the waterfront?

*The program rates are calculated starting with a **base rate** – the cost of what it takes to issue one septic system operational permit from start to finish including certificate administration, data management, quality assurance inspections, technical assistance, and compliance. That is calculated as \$60. High risk systems require a dye test every six years. The cost of these intensive tests is \$450—divided by 6 equals an annual additional amount of \$75. Thus the \$135 high risk rate. Community drainfields, schools and restaurants which are required by law to have annual renewals pay the current new County certificate fee of \$145.*

Using this proposed rate structure ensures that no one is subsidizing anyone else. Each is paying the costs of the program related to their category of septic system.

40. Rates aren't fair – inland subsidize shoreline. This is not just. This is an Environmental justice issue. Should focus on shoreline septic.

The rates proposed reflect the County's costs associated with managing the program. Because of our experience with the pilot program adopted in the Henderson watershed in 2005, we have a fairly accurate estimate of the funding needed to manage a similar program for the Nisqually area. The costs for the proposed program were broken into two categories—elements that are needed for all septic systems, and those that apply only to shoreline (“high risk”) properties. Data management, education and outreach, mailing inspection notices, reviewing inspection reports, follow-up on septic failures, incentives and program administration costs are basic program elements that are necessary for all septic systems. The costs for these activities were calculated and found to be \$60. This is the fee proposed for inland and low-risk systems. Shoreline and other high risk systems require dye testing every six years. It costs approximately \$450 to dye test a septic system, which requires an additional \$75 per year to cover the cost of a system dye test evaluation

The county and advisory committee recognize that the charge for supporting this program can be a financial burden for some homeowners. So the proposal includes some financial incentives and assistance, such as rebates for installing septic tank risers, classes to certify homeowners to inspect their own systems, and small grants to low income property owners to help pay for inspections, maintenance, and minor repairs.

41. What mechanism will be implemented to constrain “fee creep” of the O&M annual fee?

The ordinance that created the Henderson Watershed Protection Area included a fee adjustment and control section (See below). We expect and recommend that a similar requirement be established for Nisqually.

“For each subsequent year, the charges shall be automatically adjusted each January 1 by the percentage increase, if any, in the June Consumer Price Index for the previous year. The maximum increase shall be 3.5%. “Consumer Price Index” for the purposes of this section shall mean the Urban Wage Earners and Clerical Workers Index for the Seattle-Tacoma-Bremerton area. All adjustments to the rates and charges based on the Consumer Price Index shall be rounded to the nearest whole dollar. An alternative calculation for automatically adjusting the charges may be adopted by further action of the Board of County Commissioners.”

42. How do we know the process developed is the most cost efficient? Why are we building an organization which costs us more, not less? What do we have to give up to make this cost neutral?

In order to even consider any watershed-wide Septic System Operation & Maintenance Program, a number of ‘efficiencies’ have to be available. The county has a geodata system that provides us with quick and thorough demographic and geographic detail, including aerial photos, about all parcels within the county. The program boundary can be drawn on the county map enabling users to determine if they are in or out of the program.

The Sanitary Code provides a transparent legal framework to administer the program.

AMANDA, a permit tracking database system, implemented in 2003, enables all permitting departments in the county to track all activity, current and historical, on any given parcel.

An Access database system ‘works with’ the AMANDA system to issue renewal notices, send reminder letters, inform owners of compliance issues, print inspection forms for each individual system, and issue renewed certificates.

An online management system, OnlineRME, receives electronic reports from septic system professionals. OnlineRME then sends the pump, inspection, and monitoring data to the county's tracking system. When submitted reports show 'no deficiencies', the tracking system automatically sends out the renewed certificate.

A tested and proven dye test methodology is highly sensitive and accurate in finding surfacing sewage system effluent.

Environmental Health staff is professional and each has more than 20 years of program experience. This program is as efficient as possible, and ways to become more efficient are always implemented. The costs cover the staff time and equipment needed to do the work included in the proposal. The septic system program receives little general fund or discretionary funding, so if implemented, the program needs to be paid for by septic system owners within the area boundary.

The stakeholders who developed this proposal will review these comments and decide if elements in the program should be eliminated or modified to reduce cost.

43. Why is a small group of landowners paying the full cost of a general public good? If this is such an important program why are only OSS owners paying? Clean water is important for all.

Please see the very first answer ...

44. Has anybody taken in consideration of new homes being built? WE are paying for the homes in the area. If we keep building how will this affect the water?

See Response to Question #23 in the Water Quality section

45. How are program charges collected? Why are the charges included on stormwater line on the property tax statement?

The proposal is to collect the rate via the property tax statement. Charges for the Henderson program are included on the stormwater line because there was not sufficient room on the statement to have a separate line for the septic program charge. If this proposal goes forward, we will work with the Treasurer to see if this practice will continue or if the charge will be noted differently.

46. What happens if people refuse to pay?

Citizens must pay the entire amount on their property tax statement. Partial payments are not accepted. If the charge is not paid, the septic system is in violation of the sanitary code and subject to compliance.

47. If this was truly designed to help the environment why does it cost so much money? Why not just fine people who don't conform?

\$60 per year may seem a bit costly to some for 'septic system insurance'. During the Henderson open houses for a similar program, residents assured us that they were taking 'good care' of their systems and were being penalized by those who weren't. The data shows that 46% of the systems were in need of or past due for maintenance and repairs. Some systems had been neglected so long that

they were failing. Many caught their systems 'in time' to avoid serious problems. They told us they probably wouldn't have done the inspection without the program requirement. Many people also said that they believe the rules should apply equally to all septic system owners.

The charges proposed would generate enough revenue to carry out the program, which includes sending notices, reviewing inspection reports, issuing operational certificates, conducting quality assurance inspections and dye tests, offering workshops and assistance to homeowners, and following up on failing systems and those with deficiencies. The health department receives very little general fund or discretionary revenue, so fees are the only mechanism available to finance the necessary compliance activities.

48. Who pays for 10% quality control check on low-risk system inspections? What is the proposed process to conduct quality control checks on "certified homeowner" inspections?

The 10% quality control is included in the base rate of \$60. A random process is chosen to follow up on the 'certified homeowners', as well as professionals. Quality control inspections are also conducted when a submitted inspection form notes problems.

49. Please provide on the web a breakdown of the true costs associated with the dye testing.

These tests cost, on average, \$450 each; the test involves:

- at least four trips to each site – background, dye day, week 1 pickup, week 2 pickup, and follow-up water sampling as needed. [Note: most of these sites are 15 – 30 minutes one way from the courthouse. All efforts are made to schedule the same shoreline on any given day.]*
- special materials – fiberglass screen, activated charcoal, dye, lab equipment and supplies, field equipment to secure test packets on site*
- bacteria samples – collection and analysis of fecal coliform samples by certified lab*
- laboratory analysis – confirm presence and amount of surfacing dye by certified lab*
- staff time – identify systems to be tested, make appointments, research septic system detail, conduct field dye test and sampling, process charcoal packets in lab, follow-up diagnostic work as needed*

50. Also from what I can tell the rates for the Nisqually watershed are more than double what the Henderson watershed program are. WHY?

Henderson was a pilot program, and the budget and supporting rates were established based on our best estimates. The projections and assumptions fell short in several areas (see below), so the Henderson program has been supplemented with about \$100,000 per year of grant funds from WA Department of Health and the Shellfish Protection District.

Due to the current state budget crisis, it is unlikely that those additional resources will be available in the future. So the Nisqually proposed rates reflect what would be needed to fully fund the program without supplemental funds.

One example of an area of unanticipated expense in Henderson: The budget included 2 homeowner training workshops per year. But the demand for the owner-inspector certification training

was so great, that we actually held 42 workshops in that first year. To date almost 2000 homeowners have gone through the training. This homeowner response was unanticipated.

Another example of an under estimated area was the number of septic systems per parcel. The assumption was one system per parcel. The reality is that in Henderson about 10% of the parcels have more than one septic system, and in some cases a complex combination of several. This required considerably more staff time to work with the property owner to determine what was on site, build the septic records and review the inspections.

These shortfalls in the Henderson budget will be examined during the 5-year review. The Board of Health (Commissioners) will decide whether to modify the Henderson program based on the review findings.

51. How much is it projected to cost Thurston County to staff up and monitor this program?

The development of this proposed program is being funded by a grant from Ecology. If the proposal is adopted by the Board, the grant will also pay for setting up the program.

To staff the program, if adopted, would be 2 full time environmental health specialists.

52. This is just a statement I feel that this is just a revenue-generating program not an environmental program, this program is designed to MAKE MONEY and that's it. The septic tank people will make money, the county will make money, and the shell fish company will make money. WE THE PEOPLE GET SHAFTED AGAIN..That's why you have attached it to our taxes so we have to pay it. There is no data that shows my sewer is getting into the water (it would show up in my well first) if my septic fails then my toilet won't flush or my drain field will fail. Now I will agree that it is my responsibility to maintain my septic system but I shouldn't have to pay you people for having it, if I don't take care of my system then it will cost me money to repair it. Also the county created this problem in the first place stop building so many houses. Make developers pay for the infrastructure first before they build and not just impact fees. Why you are at it remove all of the cows from the Nisqually delta. If this program goes it to effect make it sunset in 5 years or when the water cleans up, whichever comes first.

Your comments will be forwarded for consideration by the committee and commissioners.

This type of program has been shown to have made a difference in Henderson Inlet water quality. And it has likely saved many homeowners thousands of dollars. There were hundreds of minor septic problems found and fixed in Henderson. By finding and fixing minor septic system problems that cost only tens or hundreds of dollars, many homeowners likely avoided the thousands of dollars it would cost to replace a failed system. The Henderson program also showed that, while many people like you, were routinely maintaining their systems; many more were not.

You are right, septic systems are not the only source of pollution. Farmers are also making changes and improving their practices. The state now regulates the county and cities through a stormwater permit. Because of the new stormwater requirements, development standards are now much more rigorous. You can read more about these requirements at <http://www.co.thurston.wa.us/stormwater/utility/utility-npdes-home.html>

53. Last but not least how does a person get involved and become part of the board.

The committee was appointed by the Board of Health (Commissioners), and at this point in the project the committee membership will not likely be modified. The next meeting date is February 15th. The topic will be to discuss the public comments and determine if modifications to the proposal should be recommended to the Commissioners. The committee schedule and agenda is posted on the website, and members of the public are welcome to attend the meetings.

Comments:

- Need maps for meeting places – couple was lost coming from Seattle.
- Think that the one size fits all inspection frequency requirement is not reasonable.
- Think the water quality argument is weak. The Public Health hazard argument OK.
- We need to develop baseline condition report at start of program and indicators to use to evaluate program success over time. Need to define what success or compliance looks like or means.
- Compliment: (From two people.) This was the best run meeting of this type they have ever been to.