

For information...

...about the Septic System Operation and Maintenance Advisory Committee report, visit www.co.thurston.wa.us/shellfish, or call Thurston County Environmental Health at (360) 754-4111.

...about caring for septic systems, visit: www.co.thurston.wa.us/health/ehoss/index.html or call the Thurston County septic system helpline at (360) 357-2490.

To ask questions or make comments...

...attend the Nov. 18 open house.

...e-mail environmental_health@co.thurston.wa.us.

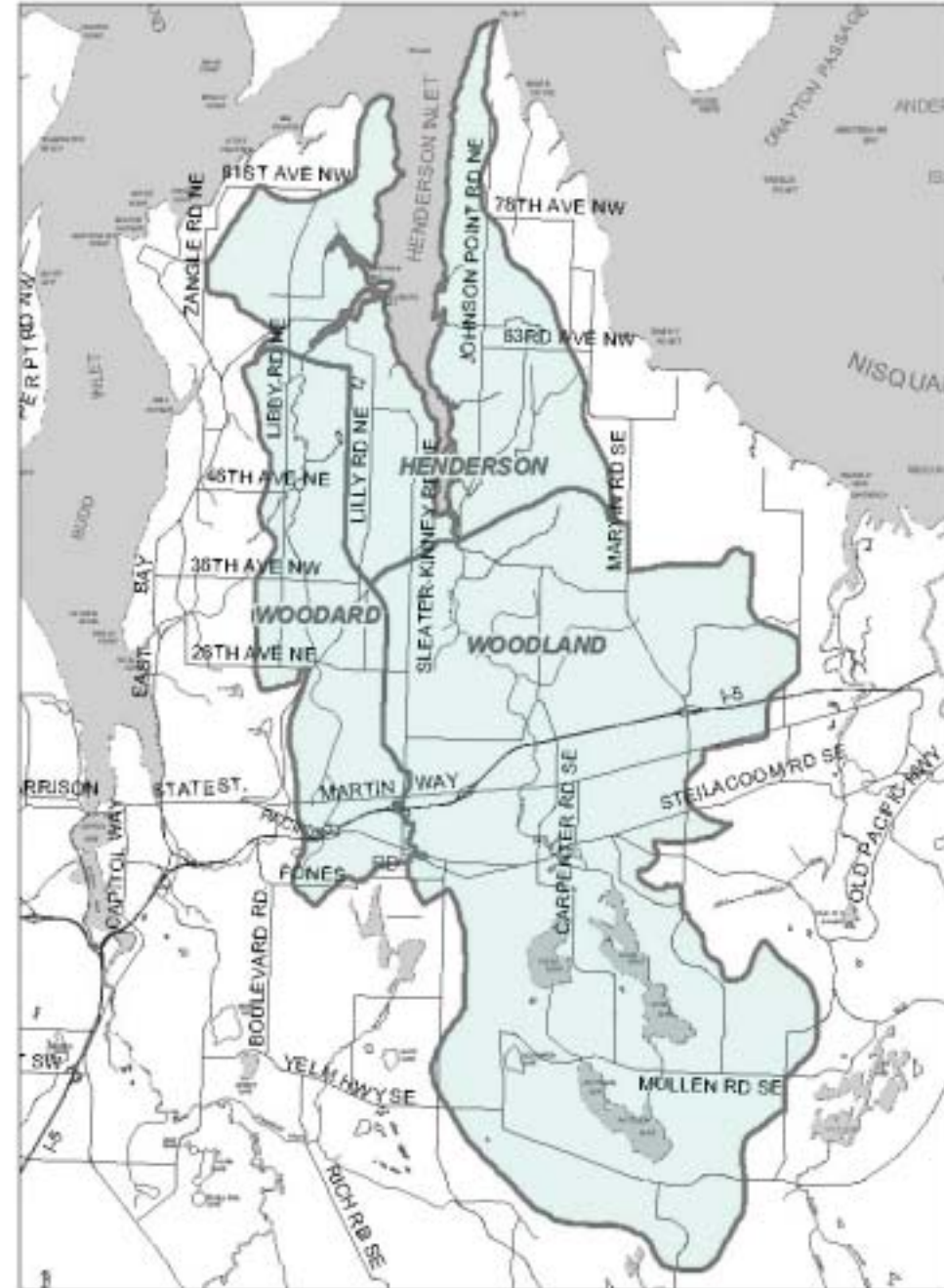
To receive future mailings...

This newsletter is the last mailing you will receive on this subject, unless you request to be placed on a special mailing list. If you wish to receive future mailings, please e-mail: environmental_health@co.thurston.wa.us with your name and address, or call Thurston County Environmental Health at (360) 754-4111.



SEPTIC SENSE

Pollution isn't caused only by shoreline homes. Pollution is also caused by everyone else upstream who shares the same watershed. (A watershed is all the land that drains into a common body of water.) Like water itself, pollution flows downhill and into streams, lakes, estuaries, and inlets.



Own a septic system in the Henderson Inlet Watershed?

If so, read inside to learn how a proposed septic system operation and maintenance proposal could affect you!

Mark your calendar for our November 18 meeting. Details inside!



Septic System Operation and Maintenance Proposal for Henderson Inlet Watershed

Thurston County
Public Health and Social Services Dept.
Environmental Health Division
921 Lakeridge Drive S.W.
Olympia, Washington 98502

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**Septic System Operation and Maintenance Proposal
Henderson Inlet Watershed**



October 2004

Join us November 18!

To learn more about this proposal, attend an open house gathering:

Thursday, Nov. 18
Thurston County
Fairgrounds Expo Center
3054 Carpenter Road S.E.
Olympia
6:30 p.m. to 8:30 p.m.

Do you own a septic system in the Henderson Inlet Watershed?

Learn about a septic system operation and maintenance proposal for your watershed

Henderson Inlet is a precious water resource in a fast-growing area of Thurston County. The

waters of Henderson Inlet sustain our community in many ways: fish and wildlife depend on Henderson Inlet for their survival, while shellfish growers count on clean, healthy marine water for their livelihoods. Local residents find peace and beauty at the Inlet – whether paddling over the water in a canoe or enjoying the view from the shoreline.

Henderson Inlet also serves as the gathering place for all of the water that flows downhill from the surrounding land, and for all the pollutants that are swept along in the water.

This newsletter focuses on a key pollutant that is endangering the quality of water in Henderson Inlet: human fecal bacteria.

The levels of fecal contamination in Henderson Inlet have gotten so high, the state Department of Health closed and restricted shellfish harvesting on hundreds of acres in Henderson Inlet in 2000.

The department's actions triggered a state law that required Thurston County to form a shellfish protection district. County commissioners formed the district, and appointed the Henderson Inlet Shellfish Protection District Stakeholders Group to recommend ways to improve the health of water in the Inlet. In its final report in 2003, the stakeholders group recommended that a septic system program be created for the Henderson Inlet Watershed so that less human sewage seeps into the water. A citizen committee was then formed to tackle the details of this difficult task.



Courtesy of Puget Sound Water Quality Action Team

In this newsletter, you'll read about the committee's proposal for a septic system operation and maintenance program for the Henderson Inlet Watershed. The group's job was complex: It involved analyzing DNA research, studying different types of septic systems, and gathering ideas from people with very diverse points of view on the subject. Perhaps the committee's biggest challenge was to write a plan that recognizes that while all septic system owners share a common responsibility to protect Henderson Inlet, some septic systems are more likely to cause pollution than others.

We invite you to get involved, share your views, and help make a difference on an issue of great importance to the health of Henderson Inlet.

How septic systems work: a gallon in, a gallon out

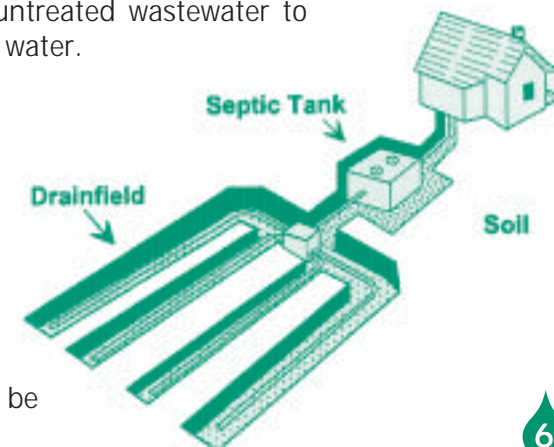
Each septic system is like a small sewage treatment plant, owned and operated by the owner.

In a typical septic system, sewage and wastewater from a household or business is flushed down the drain and flows through sewer pipes to a septic tank. For every gallon of water flushed into the septic tank an equal amount flows out and into the drainfield. In the septic tank, the solid material settles to the bottom and the soaps and oils float to the top. The liquid in the middle flows out to the drainfield where the unsaturated soil does the final job of filtering, treating, and removing bacteria and viruses. Some systems rely on gravity to distribute the flow of sewage throughout the drainfield, while others use pumps to accomplish this task.

A septic system can fail in a number of different ways, causing untreated wastewater to contaminate surface waters (such as Henderson Inlet) or ground water. Common causes of septic system problems include:

- ◆ Broken pipes and cracks in tanks caused by vehicle traffic, or by the shifting and settling of the ground.
- ◆ Too much water use in the house.
- ◆ Inadequate septic tank pumping, which allows solids to flow out and clog the drainfield.
- ◆ Broken baffles in the septic tank.

To learn more, attend a free workshop in the spring. Details will be posted on www.co.thurston.wa.us/health/ehoss/index.html.



So what's the problem?

Henderson Inlet and its tributaries might look pristine to the naked eye, but their waters are contaminated with fecal bacteria. A bacterial DNA study completed in January 2002 found that human waste is contributing to the problem.

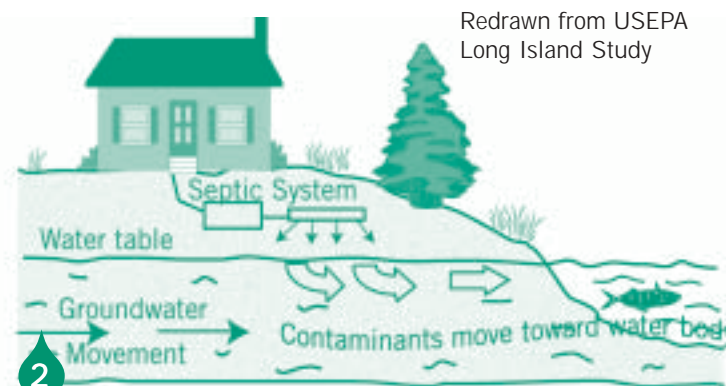
Fecal pollution has already taken its toll on the quality of water in the Inlet: at the time this publication went to press, the state Department of Health had prohibited, or conditionally closed*, shellfish harvesting on some 480 acres in Henderson Inlet because of unacceptably high levels of fecal bacteria.

The state Department of Ecology has placed Henderson Inlet and four of its tributaries – including Woodland and Woodard creeks – on the list of "impaired" water bodies of Washington State. The Department of Ecology is required to prepare and submit the list to the U.S. Environmental Protection Agency to help the agency determine which communities must enact cleanup plans.

** One-half inch of rain closes commercial shellfish harvesting for five days in Henderson Inlet.*

What evidence proves the fecal bacteria comes from humans?

In 2002, Thurston County staff took samples of surface water, sediment and shellfish from designated areas within Henderson Inlet. A total of 600 samples were then shipped off to a University of Washington lab to be analyzed and processed for DNA typing. The study found that human waste is contributing to the pollution in Henderson Watershed streams and marine water. Human fecal sources were identified in eight out of 14 sampling events.



Doesn't animal waste also pollute?

Yes, the DNA study also found that a variety of animals contribute to the fecal contamination in Henderson Inlet. These include pets, birds and wild animals. Efforts are underway to curb some of these sources of pollution. For example, Thurston County has launched a program to encourage people to properly dispose of pet wastes.

Why should I care?

Water is a treasure for Thurston County and one of the reasons our region is such a desirable place to live. How we choose to protect the streams and inlet within the Henderson Inlet Watershed affects our community and the environment, now and in the future.

The proposal offers a way to help clean up Henderson Inlet for the health of our environment and the community.

Who drafted this proposal?

The proposal was written by a septic system advisory committee. Its members represent watershed residents, the real estate community, the shellfish industry, master builders, and the on-site sewage profession. The committee also includes representatives of the state Department of Health, the Henderson Inlet Shellfish Protection District Stakeholders Group, the cities of Lacey and Olympia, and the Water Resource Inventory Area 13 Planning Committee.

Is this plan a "done deal"?

No, the proposal is still in draft form. Thurston County wants to hear more from residents before proceeding. Attend the Nov. 18 meeting or visit www.co.thurston.wa.us/shellfish for information.

A final version of the proposal will be brought to the Thurston County Board of Health, which will consider the plan no sooner than the first quarter of 2005. The Board of Health must issue a public notice and schedule a public hearing before changing any county regulations.

All septic systems in Henderson Inlet would be certified

The proposal would require all septic system owners in Henderson Inlet to have a current septic system operational certificate from Thurston County. To obtain the certificate, the owner would have the septic system inspected to determine whether the system is working properly and if it needs to be pumped. The type, and frequency, of inspection would vary, depending on whether the system is more or less likely to cause water pollution.

SEPTIC SENSE

Operational certificates are already required for about 4,000 septic systems in Thurston County, namely: complex on-site systems, community systems, experimental systems, ATUs (aerobic treatment units) and food establishments. Washington State law requires all counties to have some form of operation and maintenance program for septic systems; however, counties have a great deal of latitude in determining what those programs will require.

Maintenance requirements would depend on site conditions and the type of system

Thurston County would review the features of each septic system – such as the type of system, the soils surrounding the drainfield, and the proximity to shorelines – to determine certificate requirements. The features would be tallied on a point scale; the lower the points, the simpler the requirements for certification.

The point system was designed to recognize that while all septic system owners share a common responsibility to protect Henderson Inlet, some systems are more at risk of causing pollution than others.

To view the point-based scale, see the advisory committee report in the "quick links" area of www.co.thurston.wa.us/shellfish.

Certificate requirements

To obtain an operational certificate, all septic system owners would follow these steps: (Most operational certificates would last for three years.)

- ◆ Either pump the septic tank or have it measured to determine if pumping is necessary.
- ◆ Conduct a walkover inspection of the drainfield area.
- ◆ If the system has a pump chamber, check to determine if pumping is necessary. Inspect the pump and other components as required.
- ◆ Send the information and fees to Thurston County.

The advisory committee proposal calls for certified professionals to do the inspection work; however, the proposal includes an option to have homeowners trained, and certified, to do the job themselves.

For lower-risk systems: Most inland, single-family homes with traditional gravity or pressure distribution systems would fall into the low end of the point scale and therefore be considered lower-risk systems. These systems would undergo the above procedures only – every three years.

For higher-risk systems: This category might include systems such as: those located on shorelines or waterfront property, or on property with clay, hardpan, or wet soils. It might also include septic systems that are located next to drainages (ditches, stormwater pipes, french drains, etc.). These higher-risk systems would undergo the above tasks every one to three years. However, every sixth year, the systems would also be dye tested either by Thurston County, or if the owner prefers, a private contractor. In either case, Thurston County would use revenue generated under the operation and maintenance program to pay for the dye tracing so the septic system owner would not face additional out-of-pocket expenses for the tests.

SEPTIC SENSE

A typical septic system inspection involves:

- ✓ Locating the system.
- ✓ Uncovering septic tank lids.
- ✓ Flushing the toilets.
- ✓ Checking for signs of backup.
- ✓ Measuring scum and sludge layers in the septic tank.
- ✓ Identifying any leaks.
- ✓ Inspecting mechanical components.
- ✓ Pumping the tank, if necessary.

SEPTIC SENSE

What's a dye test?

Dye testing involves placing a nontoxic tracer dye in a toilet, flushing the dye into the system, and placing a charcoal packet downhill to collect any dye that is leaking with sewage from the system.



Fees

Under the proposal, all septic system owners would pay the current \$25 renewal fee for an operational certificate. (For *most* septic system owners, this certificate would last three years before it had to be renewed.)

The proposal also calls for septic system owners in the Henderson Inlet Watershed to pay an annual fee that would appear on property tax statements:

- Lower-risk systems: \$16 to \$22 per year.
- Higher-risk systems: \$60 per year.
- Community systems: \$160 per year.

Four months to comply

The proposal would give septic system homeowners four months to comply with the requirements of the operation and maintenance program. The schedule would be as follows:

- > 60 days before certificate expires: renewal notice sent to homeowner.
- > **Certificate renewal due date arrives.**
- > 30 days after expiration: first warning letter sent.
- > 60 days after expiration: notice of violation sent.

Accountability measures included in the proposal

The advisory committee's goal is to make sure any operation and maintenance program adopted for Henderson Inlet remains flexible, accountable, and open to public scrutiny. The proposal calls for:

- ◆ A thorough evaluation of the program after five years.
- ◆ The expiration of the program in 10 years unless the Thurston County Board of Health votes to continue it.
- ◆ An annual report to be published and made available to Henderson Inlet residents.