**Although** state law mandates that Thurston County create a shellfish district(s), the details of that district are up to us, collectively, to decide at the local level. The Thurston County Board of Commissioners wants to hear the views of citizens from the potentially affected areas on this important issue.

This table outlines potential options that can be chosen. It is prepared as background for use in a discussion workshop April 12 at the Lacey Community Center, 6729 Pacific Avenue 6:00 - 9:00. These are not the only choices … you may think of others … that is why **we need your help**. Those unable to attend are asked to send their comments:

by mail to Sue Davis, Thurston County Health Department, 2000 Lakeridge Dr. Olympia, WA 98502
by e-mail: Daviss@co.thurston.wa.us
via web: www.co.thurston.wa.us

# *Options for Shellfish Protection District(s)*

## How many shellfish districts should be formed?

| Options | What does this mean? | Outcome |
|---|---|---|
| 1 district | Only 1 district including both Henderson and Nisqually | Coordination of activities that are specific to each watershed<br>May cause lack of watershed identity<br>May blur specific needs / problems of each watershed<br>Efficiency in managing 1 district – 1 tracking system, 1 accounting system, etc. |
| 2 districts | One district for Henderson Inlet and one district for Nisqually Reach | Maintains identity of watershed area<br>Would allow different activities and funding in each watershed |
| All shellfish producing watersheds | District would include Eld, Henderson, Nisqually, and Totten watersheds. Would need additional public notification and involvement. | Flexible enough to address water quality problems impacting shellfish growing areas<br>District already in place for any future downgrades of County shellfish growing areas |

## Where should the shellfish district boundary lines be drawn?

Factors to consider –

- Who benefits from clean water?
- Who contributes to pollution?
- Combination of benefits and causes
- Location of activities needed to improve water quality
- Who pays? (depends on funding option)

| Options | What does this mean? | Outcome |
|---|---|---|
| Entire watershed areas | District would include each watershed area | Watershed identity established<br>Programs applied throughout watershed |
| Selected portions of the watersheds | Boundaries could be based on the following:<br>- surface water travel time to reach the downgraded marine site. If bacteria can survive, then the area would be included within the boundary<br>- areas where surface drainage flows to marine water (could omit areas that have100% stormwater retention on site) | Reduces size of district<br>Might focus strictly on fecal coliform survivability - may exclude other water pollutants, i.e. oil grease, etc.<br>Includes areas that directly impact marine water<br>Would require additional work to determine boundary |
| Shoreline areas | District would include only shoreline properties. Assumes pollution only comes from activities along shoreline | Includes only those areas which have immediate impact to the surface water<br>Work would miss pollution coming from upland areas or activities. |

**How to Approach Shellfish District Work: What is the most logical approach that will improve water quality?**

| Options | What does this mean? | Outcome |
|---|---|---|
| Do minimum requirement of the law | Form a Shellfish Protection District in name only | Do work as opportunity arises, i.e. grants |
| Adopt a phased program | Work could be arranged in phases, such as<br>1 – correct any known sources of pollution; increase sampling to identify other pollution sources<br>2 – report findings<br>3 – develop plan for further corrective actions; implement the actions and secure funding | Make water quality improvements on identified problems and adapt activities based on information gained from testing and results<br>Funding could be flexible and tied to specific work needing to be done |
| Propose a program and implement based on current knowledge | Identify immediate problems and pick a list of actions to go forward with | Gets work started<br>May not know enough to identify the most important problem<br>May spend money on the wrong thing |

**The following** are common categories of likely pollutant (nonpoint) sources. In order to protect water quality from these sources of contamination which of the following activities would help solve the pollution problem, are feasible, can be done in a cost-effective way?

**Agriculture activities that could reduce impacts to water quality.....**

| Options | What does this mean? | Outcome |
|---|---|---|
| Current program | Voluntary farm plan implementation with Conservation District<br>Complaint-driven response with Nonpoint Pollution Ordinance by County | Funding is from grants that come and go<br>Reactive approach to citizen complaints |
| Increased technical assistance / cost share from Conservation District for farm planning and implementation with sustained, on-going program within shellfish district | The Thurston Conservation District would focus their technical assistance, cost share, and work crew within the Shellfish District boundary and would have a permanent program in place to assist farmers in the Shellfish District. | Areas would receive necessary resources to work on ag-related pollution problems<br>Would establish a long-term working relationship with farmers<br>Annual on-site visits with farmers to review farm conservation plan and find out how things are going and if adjustments are needed.<br>New best management practices could be introduced |
| Encourage farmers in a Shellfish District to form an "alliance" | Farmers would join together and work cooperatively with the Conservation District | Farmers take ownership of situation and how to improve water quality |
| Nonpoint Ordinance modifications | Modifications could include:<br>- Increased enforcement of current regulations - becoming proactive in looking for ordinance violations<br>- Set standards for animal densities<br>- Required farm plan implementation for all farm plans developed in Shellfish District<br>- Required compliance with farm plans | Requires policy change<br>Requires a public process to change an ordinance<br>Ease the problems of too many animals on a piece of land.<br>Implementation of and compliance with approved farm plans should result in improved water quality<br>Standards could be easier to understand |

## Land Use activities that could reduce impacts to water quality.....

| Options | What does this mean? | Outcome |
|---|---|---|
| Evaluate new development proposals for potential impact to shellfish resource, and refer these proposals in their respective basins to Henderson Watershed Council and Nisqually River Council for review and comment. | Using current zoning, regulations and policy avoid or mitigate anticipated impacts to water quality of shellfish growing areas | All new development evaluated<br>Councils have the option to review and comment |
| Evaluate ordinances, plans, programs for impacts on shellfish resources | Evaluate County's Comprehensive Plan, Development Regulations, Critical Areas Ordinance, and Shoreline Master Program for impacts on shellfish reuses | May change land use density and intensity.<br>Next major update is 2002 (tentative). |
| Follow-up compliance on project-specific conditions | Many projects during the review process have special conditions placed on the development. This option would assign a compliance officer to determine if conditions have been met. | Provides a check to make certain that conditions put in place in order to protect the environment have actually been implemented. |

## Water quality sampling that could help find pollution sources and measure success or failure.....

| Options | What does this mean? | Outcome |
|---|---|---|
| Current program | The County samples 2 streams (Woodard and Woodland) in both watershed on a routine basis - 6 times per year. Additional sampling happens with one-time grants | County will have no routinely collected data for 4 streams in the watershed that were previously sampled. (Dobbs, Meyer, and Sleepy in Henderson. McAllister in Nisqually)<br>Effects of remediation activities or long-term trends are unknown. |
| Sample all major streams flowing into the marine waters | Add additional streams to the sampling program | Provides data for trend analysis purposes<br>Would know the water quality of main streams influencing the shellfish areas |
| Increase monitoring effort to identify pollution sources and locations | On an as-needed basis expand monitoring to identify pollution problems. Examples would be doing DNA typing analysis, shoreline discharge sampling, stream sampling along entire stream length, and stormwater outfall sampling | Helps identify pollution sources<br>Helps focus what needs to be done<br>Measures success or failure of pollution control efforts |

## Stormwater activities that could improve water quality.....

| Options | What does this mean? | Outcome |
|---|---|---|
| Current stormwater program | Construction schedules, technical assistance, monitoring rainfall and stream flows, and planning efforts remain unchanged | Current construction focus is solving flooding problems<br>Level of environmental protection remains the same - does not specifically address bacterial pollution |
| Focus stormwater activities in the shellfish protection district(s) | Current stormwater activities would be shifted from other areas of the County. | Water quality may improve in shellfish protections districts<br>Level of environmental protection and stormwater management resources may be shifted from other County priorities |
| Increase stormwater management activities in the shellfish protection district without decreasing work elsewhere | Targeted research efforts, experimental technologies, and construction projects may be implemented. Increased technical assistance, monitoring and planning efforts would be designated for shellfish protection districts. | Level of environmental protection may increase in shellfish protection districts.<br>Stormwater management resources would be designated for shellfish protection<br>Other areas of the County would remain at current levels |

**Septic Systems activities that could improve water quality.....**

| Options | What does this mean? | Outcome |
|---|---|---|
| **Maintenance and Testing Program** | | |
| 'Owner will maintain' | Current program - majority of systems have voluntary maintenance. 10% of systems require County oversight and renewable permits for Operation & Maintenance certificates | Few failing septic systems are identified<br>Relies on attentiveness of homeowner<br>Provides little information on functioning status |
| Voluntary participation in septic system testing | Homeowners can request an evaluation of their system or voluntarily participate in an area-wide testing program | Reduces the possibility for neighborhood-wide solutions<br>Determines functioning status of those who participate<br>More failing systems are identified and repaired; success depends on level of homeowner participation |
| Risk-based program | Those systems most likely to cause water quality problems would be tested and repaired. Does not evaluate status of systems in entire neighborhoods / areas. | Should improve water quality<br>Mandatory use in Eld Inlet resulted in improved water quality |
| Test all systems within boundary | An area-wide testing program | Should improve water quality<br>Some systems would be tested that have no surface water impacts |
| **Construction and Permit Standards** | | |
| Current Thurston County sewage regulations | Sets standards and requirements for siting, installation, operation, and repair of all septic systems within county | Provides standards that are at least as stringent as state standards |
| Increase treatment standards for new and repaired systems | Require that higher treatment standards be met before wastewater is disposed to soils, within all or part of the shellfish protection district boundaries | Provide enhanced treatment in sensitive areas<br>Higher cost to homeowners<br>Reduce risk of sewage discharge to surface water |
| Require better construction materials for new and repaired systems | Provide stronger materials that are more apt to withstand the natural and man-induced stress to the systems components, i.e. settling, root invasion, and vehicle traffic. | Reduce future failures |
| **Repairs** | | |
| Current program | Repairs are done to the maximum extent of the site. Doesn't always meet new construction standards. | Will not always protect water quality to highest level possible |
| No discretionary Table 6 repairs if an off-site alternative exists. [Table 6 allows for enhanced treatment to replace soil depth and setback requirements.] | If there is an off-site area (drainfield area) available, system is located farther from surface water and wastewater is treated to a higher standard. | Would ensure that more septic systems meet new construction standards.<br>May cost more for system owner<br>Would provide greater water quality protection |
| Sewer extension for problem areas – where feasible. (Growth management act restricts sewer extensions outside urban growth areas.) | Removes septic systems from vulnerable surface water areas | Provides water quality protection<br>High cost to hook up - cost shared by all who hook up |
| Community drainfields | Consolidates individual septic systems into community drainfields. | May improve water quality<br>May locate drainfields on less vulnerable sites for failure to surface waters<br>Involves increased maintenance requirements |
| **Education** | | |
| Current program | Technical assistance, septic hotline, workshops | No change |
| Enhanced education | Increase the educational effort, i.e. Introduce new homeowners on how to operate and maintain their system | Increased awareness by homeowners<br>May reduce septic failures and improve water quality |