



A Newsletter, to inform and update you about your Clean Water District.

To: Watershed Resident

**Water Cleanup Activity  
For Bacteria in the  
Lower Dungeness Watershed**  
*Submitted by Department of Ecology*

In June, the Department of Ecology (Ecology) submitted their TMDL (total maximum daily load) Study and Water Cleanup Plan for the lower Dungeness watershed to the US Environmental Protection Agency (US EPA). The study evaluated sources of fecal coliform bacteria, and the amount of bacteria reduction needed for the waters to meet public-health based water quality standards. Study results were used to update Clallam County's Clean Water Strategy,

which is the core of Ecology's Water Cleanup Plan. Ecology accepted public comment on the draft TMDL and Water Cleanup Plan from April 15 through May 13, 2002. Ecology, Clallam County, the Jamestown S'Klallam Tribe, and the Clallam Conservation District held several events to explain the study and its cleanup plan and to hear comments from watershed residents. Two neighborhood meetings on April 27<sup>th</sup> focused on problem areas where streamside residents can work together to improve water quality - Matriotti Creek and its tributary, Mudd Creek, Meadowbrook Creek and the Golden Sands area. The public meeting

and hearing on April 30 offered another opportunity for information and to provide oral comments on the proposed study and cleanup plan.

*Fecal coliform bacteria are used as an indicator of how much waste is in the water.*

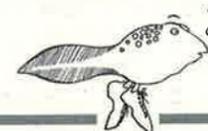
Next, the US EPA will review the TMDL and Water Cleanup Plan. Ecology anticipates approval from US EPA as soon as the end of July!

Ecology has posted the final documents on the web at [www.ecy.wa.gov/programs/wq/TMDL/watershed/dungeness/index.html](http://www.ecy.wa.gov/programs/wq/TMDL/watershed/dungeness/index.html)

For more information on the TMDL and Water Cleanup Plan, please contact Christine Hempleman, Ecology, at 360-407-6329 or at [chem461@ecy.wa.gov](mailto:chem461@ecy.wa.gov)



Clean Water Herald  
Clallam County  
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**Get Your Feet Wet!!!**  
*Some ideas for getting involved in our watershed*

Be sure to visit our surface waters. There are numerous opportunities to walk, hike, bicycle, or poke about. Our family favorites include Railroad Bridge Park, the County parks along Ward Rd., the dike accessed by Towne Rd., the Matriotti Learning Area behind Greywolf School, and the Dungeness Spit. Hiking along Greywolf River or Royal Creek into the Royal Basin area are terrific upper watershed destinations. To find public access spots: look at a map for public parks and inquire at local sports shops, or with walking and birding clubs. Do remember that the water may not be clean — and everyone should wash hands before enjoying a picnic. Sequim Middle School 7<sup>th</sup> graders reported that 90% of their families have hiked along the Dungeness River. Go out and join them! But, those same families reported that fewer than 25% had volunteered for any watershed related activity... So let's change that.

**News Flash! News Flash! News Flash! News Flash!**

WA Department of Health is looking at water testing results from Dungeness Bay and it's not improving! Our community may face yet another shellfish closure. Depending on the outcome of the next three water samples, even the best-case scenario is that the area closed to shellfish harvesting grows next year. We'll know for sure at the beginning of next year, 2003. While we wait for the final results, please do what you can to help reduce the amount of human-influenced bacteria added to the watershed: like checking that your septic system is working properly, picking up after your dog during walks, and keeping the livestock out of the streams and ditches.

**Volunteer Opportunities:**

We know that clean water is the result of a community effort. Participating in the effort is what keeps it clean. It can be as simple as picking up garbage, reducing your fertilizer use, and inspecting your septic system, or it can be more formal. There are many volunteer opportunities which benefit our surface waters — some which require just an occasional morning or afternoon, others may more require more time. The following list of groups and contacts provide volunteer opportunities that benefit our waters.

**Streamkeepers** (see feature article) 417-2281, Hannah Merrill and Ed Chadd

**Cooperative Extension** ( Robin Hill Farm and Master Gardeners) 417-2279

**Four – H** (life skills development for youth) 417 – 2398

**Dungeness River Audubon Center** ( planting and grounds maintenance as well as docent training) 681-4076

**North Olympic Salmon Coalition** (planting and other special events) 389-8051

**Dungeness Wildlife Refuge** (docent training) 457-8451

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**CALENDAR OF EVENTS**

Event	Date/Time	Location/Contact
Streamkeeper Training <i>Great topics</i>	Summer 2002	Please call 417-2281 for program schedule
The Shellfish of Dungeness Bay <i>by Lyn Muench</i>	August 10 10:00 AM	Dungeness River Center
Nearshore Habitat & Resources of the Strait <i>by Anne Shaffer &amp; Dave Shreffler</i>	August 16 7:00 PM	Dungeness River Center
Economic Incentives for Watershed Protection <i>by Cathy Lear &amp; Hansi Hals</i>	August 24 2:00 PM	Dungeness River Center
Large Wood in Pacific Northwest Rivers <i>by Mike Hagen &amp; Mike McHenry</i>	September 20 7:00 PM	Port Angeles Library
Dungeness River Festival! Help us celebrate the watershed that keeps the Sequim-Dungeness Valley alive. There will be activities for kids and adults, informative speakers and lessons, music, art, and much more. We need help planning & organizing this big event, so please contact the River Center at 681-4076 if you wish to help out	Sept. 27 & 28	Railroad Bridge Park
Land Use Decisions <i>by Dennis Yakovich, John Willits, &amp; John Miller</i>	October 18 7:00 PM	Dungeness River Center

**Clean Water Herald**

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(360) 681-4631

**Questions? Comments? Confused?**

Call Val Wilson for the straight scoop and we'll include questions and answers in future updates.

Funded through a grant from WA Department of Ecology

## Sequim 7<sup>th</sup> Graders: Watershed Experts

by Bob Boekelheide and Kim Siebens  
Dungeness River Audubon Center staff

Two weeks in April, 2002, were "Watershed Weeks" for 7th graders at Sequim Middle School. During these weeks, the Dungeness River Audubon Center and Jamestown S'Klallam Tribe, funded by an EPA grant, helped the students map the Sequim watersheds, and to research data provided by experts about bacterial contamination of the watershed and land use around Sequim. The students finished their activities, designing an imaginary homesite for themselves on a two acre lot in Sequim, keeping in mind all that they had learned.

The climax of the activities occurred on Thursday April 11th, when over 230 7th grade students and 7 teachers from the Middle School participated in a day-long field trip to learn first-hand from local experts about the efforts being made to prevent bacterial contamination of the river and bay. The students had lessons at five locations in the watershed: Dungeness River Audubon Center, Railroad Bridge Park, Dungeness Bay Oysterhouse, Robin Hill Park, and Dungeness Valley Lutheran Church. The field trip was a huge success and received praise from teachers and students. The students and teachers were wonderful representatives of their school.

*We feel lucky to have such a large network of wonderful people to help with such an ambitious project.*



### A BIG THANK YOU!

The Dungeness River Audubon Center would like to send a **BIG THANK YOU** to the following docents, speakers, and teachers who participated in the field trip!

Marydee Countryman, Joan Henry, Jennifer Coyle, Curtis Beus, Linda Lenz, Kathy Bush, Joe Holltrop, Clare Hatler, Mary Whitmore, Kim Siebens, Janine Reed, Don Hatler, Amy Dequoy, Bob Boekelheide, Chrilo VonGontard, Laura Anderson, Lyn Muench, Valerie Wilson, Shawn Hines, Stephanie Adams, Jadyne Reichner, Joe Landoni, Isabella Morrison, Tricia Billes, Linda Brown, Gina Hietpas, and Allison Hastings.



## Because streams can't take their own temperature...

Ed Chadd and Hannah Merrill  
417-2281 or streamkeepers@co.clallam.wa.us.

Streamkeepers of Clallam County has a motto: "We do stream monitoring, and we do it really, really well." With a cadre of more than 100 well-trained volunteers, Streamkeepers has reason to boast.

Volunteers receive training and refresher courses for stream monitoring from Streamkeepers staff and professional scientists. They are also introduced to watershed systems and planning. After training, volunteers become part of a team, usually three to ten people, who monitor one or two streams.

Volunteers monitor multiple sites on 12 streams in Clallam County four times a year. The monitoring provides baseline information about stream conditions, tracks trends, and serves as a red flag. Sampling includes 25 different measures of stream health in three categories: biological, chemical, and physical. Once a year, volunteers do a Streamwalk – a general assessment of an entire stream.

To supplement their County funding and provide a valuable service, Streamkeepers conducts special monitoring projects at the request of various water quality data users to assist in watershed planning and restoration. For example, the group has been monitoring irrigation ditches as part of a large pollution control effort. And

Streamkeepers data can assist in evaluating the success of restoration projects over time.

Ask Ed Chadd, co-manager of Streamkeepers, what he thinks makes the program such a success and he'll tell you "The People." The people of Streamkeepers are retirees, working folk and students interested in our water. Volunteers have been as young as 8 and as old as 92.

The group has ambitious plans for the future. "We hope to remain on the cutting edge of citizen monitoring—to demonstrate what a highly motivated and well-organized group of volunteers can do" says Ed Chadd. "We believe we can do quite a lot."



Ian Miller teaches students from the Mt. Angeles Boys & Girl's Club

## Technical Wizards and Tree Planters

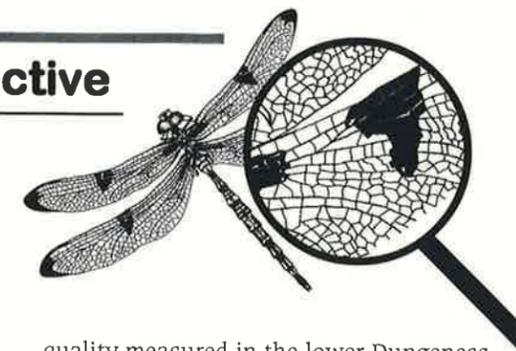
For nearly two years the Sequim Community School's Community Resource Training Class has used student power to assist in salmon habitat restoration in the Dungeness River Watershed. The students dedicate nearly 10 hours each week to learning about and conducting restoration activities. Students have used global positioning satellite (GPS) units to map Bell Creek and the Sequim Prairie irrigation ditch. GPS units are a fairly new technology that triangulate a position utilizing satellites in the sky. The data collected is then transferred to a computer mapping program. In addition, the students have adopted a restoration site located 0.2 miles above the mouth of Bell Creek. In cooperation with the property owner Gary Smith, the students have removed invasive vegetation and begun intensive planting of Douglas Fir trees donated by Weyerhaeuser Corporation. Students have learned to use standard water quality instruments and have been using Streamkeepers' methods for data collection. Their data is available to Streamkeepers and other resource staff. The students have learned to test for total coliforms using exact laboratory techniques.

The instructors orchestrating this wonderful program are Jon Mowe (with a degree and experience in fisheries biology), Kathy Bernhoft (a veteran vocational teacher), and Alan Carman (a cartography expert with years of experience in surveying and engineering). The instructors offer this program through the support and funds of a National Oceanic and Atmospheric Association grant.

## Keeping it in Perspective

A recent state report entitled, *Puget Sound's Health 2002*, was released in May. Published every other year by the Puget Sound Water Quality Action Team (Action Team), some residents received it as an insert in the Peninsula Daily News. Looking closely at the water quality sections on freshwater (page 5) and marine water (page 12) in this document would lead one to believe that the Dungeness River and Dungeness Bay have good water quality. This information appears to conflict with the recent publicity regarding poor water

*Contrary to first glance, the Puget Sound monitoring results actually support the local water quality results.*

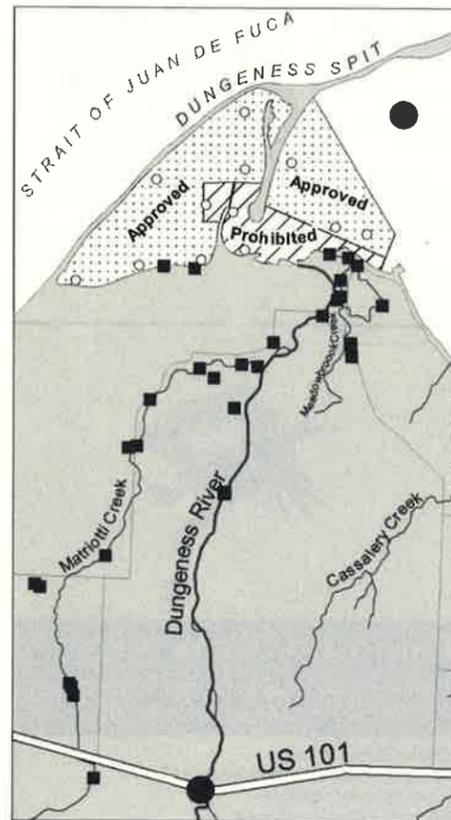


quality measured in the lower Dungeness River watershed and in Dungeness Bay.

In responding to the requests for clarification from several Clean Water Workgroup members (a group of governments and interested parties working on improving water quality), the Action Team prepared a letter explaining how the results presented in their report compare with our local water quality monitoring in the lower Dungeness watershed and bay. Although, the letter was too long to be printed in this newsletter, the essence of their message is below:

On the scale of the entire Puget Sound, the broader Dungeness waters are relatively clean, in particular when compared to many urban waterways. However, there is a serious local water quality problem associated with fecal coliform contamination in the lower Dungeness that has resulted in the closure of shellfish beds. This water quality problem is clearly of primary importance to the community. Many partners have joined forces to reverse this pollution including many citizens of Clallam County, the Washington State Departments of Health and Ecology, the Jamestown S'Klallam tribe, Clallam County, Clallam Conservation District, the Action Team and other partners.

*Contrary to first glance, the Puget Sound monitoring results actually support the local water quality results.* The map on this page shows that the Puget Sound Action Team's data was collected from the upper portion of Dungeness River and outer Dungeness Bay.



- Health fecal sampling stations
- Ecology TMDL sampling stations
- Puget Sound ambient sampling stations

*This map shows where Washington State collected its water samples for the Puget Sound Health report, marked by two large black dots, one in Dungeness Bay and one in Dungeness River. The water samples collected by local governments and organizations are marked with black squares.*

**TMDL:** A total maximum daily load study is a water quality study that identifies polluted reaches or areas of streams, rivers and bays through collecting water samples over a year's time.

The results from the Action Team's monitoring confirm the TMDL results in concluding that the Dungeness River above Woodcock Rd. has good water quality as does outer Dungeness Bay. Here's why:

- The TMDL (total maximum daily load) study, conducted by Ecology, found water quality in the Dungeness River upstream of the Woodcock Road Bridge meets water quality standards, even the more stringent standards for shellfish harvesting. However, the study found that bacterial pollution is being added in the lower River and through tributary inputs so that at its mouth, the River no longer meets the water standards for shellfish harvesting.
- A second TMDL study, initiated for Dungeness Bay, indicates that while most areas of the inner bay fail the shellfish water quality standards, the outer bay meets water standards.
- As compared to Puget Sound monitoring, both of the TMDL studies rely on many more data collection sites, and are therefore able to report on the level of contamination at a much finer scale. The purposes for collecting water data are different. The Action Team is attempting to describe the overall condition of the Dungeness River and Bay within the context of the entire Puget Sound. The TMDL studies define stream conditions at a smaller scale, focusing on specific stream reaches or areas within the Bay.

To receive a complete copy of the letter submitted by the Action Team, contact Val Wilson at Clallam County, 417-2543 or [vwilson@co.clallam.wa.us](mailto:vwilson@co.clallam.wa.us).

