



In the Flow

DECEMBER 2009

Produced with Volunteer Help

Issue 58

www.clallam.net/streamkeepers

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360-417-2281

VOLUNTEER TRAINING AT WEST WIND FARM



WELCOME NEW VOLUNTEERS FOR 2009!

NEW TRAINEES SUMMER 2009

Lisa Brown
Dean Childs
David Christian
Carol Evanoff
Crystal Hendricks
Julie Hendricks
Bob Johnston
Sonja Miller
Charlie Nickles
Rowann Osborne
Keith Peters
Marcus Sanford
Valli Sanstrom
Jon Swensson
Leah Vaara
George Will

OTHER NEW VOLUNTEERS BEING TRAINED "ON THE JOB"

Dan Brooks
Justin Brown
Jameson Hawn
Tara Morrow
Rebecca Paradis
Betsy Robins
Amy Ross
Kathe Smith
Colin Stief
Paul Taft
Sarah Truett
Randall Walz
Luke Wigle
Jill Zarzeczny

SK Advisory Meeting

Wed., Dec. 9, from 9-11 a.m.

For all Streamkeeper volunteers and advisors
EOC Training Rm. (070), in the Courthouse
basement just west of the stairwell

The agenda is to review the activities of last year
and discuss any proposed changes for the
following year. PLEASE REVIEW THE FOLLOWING
DOCUMENTS FOR DISCUSSION OR PROGRAM
CHANGES—attached, or linked in the online version:

Work Plan 2010 draft:

WQ Sampling Plan 2010 draft:

Fecal Sites 2010 draft:

Bug Sites 2009:

Farewell to Dry Creek Team?

Both Dry Creek team leaders stepped down this year, and so far no one has volunteered to take their place, so as of now, it looks like there won't be a Dry Creek team in 2010. **If anyone is interested in serving as either field leader or logistical coordinator of this team, please let us know.** In the meantime, **thanks to all who served on the team**, which collected a good baseline of data over the past five years—a "freebie" for Streamkeepers, as Dry Creek was added at the request of volunteers rather than our technical advisors. **Dry Creek team members**, this is a chance to see another part of the Streamkeepers world—**let us know which other teams you might like to join.**

JimmyComeLately Creek– Success Story



Photo taken July 09 at JCL Creek 0.2a in the restored section of channel (note height of the trees planted in 2004). Collecting bugs are Bruenings' friend, Michael, with Janet in the channel with the Surber Sampler.



Streamkeepers' Report: "The Proof is in the Bug Sieve.....and the Fish Net"

[From volunteers, Janet and Phil Oja]

In September of '09, a group of Streamkeepers, made stronger by Janet and Bernie Bruenings' visitors from Germany, Michael and Christina, did bug sampling of the restored part of JimmyComeLately Creek. The first time we sampled this creek, in 2004, it was a bare newly bulldozed channel with some LWD, a few new little alders and no fish. The next year it was beginning to fill with foliage and some fish were seen. We didn't sample in 2008 because we were too late and there were hundreds of fish and many redds and we did not want to upset their chance of hatching some new little chum. This year we went early as soon as the fish were seen returning and it was a completely new place. The stream is for the most part shaded by the young alders and other undergrowth. And at the upper reach, just above the beginning of the restoration site, we found an amazing thing. The fish were active in the stream, a few carcasses but mostly very active swimmers and when we dug our samples there were thousands of little mayfly and stonefly nymphs - thousands! When you poured off the water to remove the organic stuff, the side of the pan was alive with little bugs, you had to scoop them up by the hundreds. Never had any of us who have done this before and in different places seen such a huge number of bugs. Returning the creek to its natural course and its natural state has allowed the habitat to recover and hundreds of fish to return to their historic spawning ground. Tells us much about the ability of the earth to recover from the predations of man.

(2009 Bug Samples will be processed in 2010)

[From Cheri Scalf of WDFW]

On Sept.13th, '09, in an update on JimmyComeLately Creek, Cheri Scalf reported that 908 salmon had already made it back and a daily record of 160 had been set that morning. During the previous week she walked the creek starting from the Wood's incubation site which is about a mile upstream and found a lot of fish in a pool by the big log jam near the incubation site. Summer Chum Salmon hadn't been that far upstream in many many years. Hopefully you can make out the one off to the left in the photo above; actually there were 6 in the pool with more moving in, reaching home. For the supplementation program 8 pair of fish at their trap had been spawned and 20,000 eggs collected. They did this on subsequent Mondays for a total of 100,000 eggs.



Students in Dan Lieberman's Natural Resources class at the North Olympic Peninsula Skills Center collect a benthic macroinvertebrate sample with assistance from Streamkeeper volunteers Marilyn Harbaugh, Adar Feller, and Harley Oien.

Dan Lieberman's Class Learns about B-IBI (Benthic Index of Biological Integrity)

Students comment on their experience with Streamkeepers:

"I enjoyed learning about the different protocols and doing them myself. . . . [B]efore I wouldn't have had any idea how to do them, [but] I learned the protocols, and the health of certain creeks."

-Justine Jangula

"I learned how to tell the chemical, biological and physical health of a stream. I never knew that the Streamkeepers existed before this. I felt it was a good experience because now I know . . . I will be able to do it in the future and it allows me to be more aware of the conditions of the streams in Clallam County."

-Another Natural Resources Student

Why are living things a better indicator than chemical tests?

Why are "bugs" often used as an Indicator rather than fish?

How can "bugs" tell us about the health of a stream?

What is the Benthic Index of Biological Integrity (B-IBI)?

Find answers to these questions on our website:

http://www.clallam.net/streamkeepers/html/biological_monitoring.html

Natural Resources class is for people age 16-21 without a high school diploma. Enrollment for next semester is open at NOPSC, 905 West 9th Street, Port Angeles, WA 98363, 360-565-1892. Contact: dlieberman@portangelesschools.org.

Dungeness River Festival '09

The Dungeness River Festival was an enjoyable and successful event. Students, teachers, parents and principals alike expressed their delight with Friday's education day. 1250 people, including 700 students attended on Friday, and 1150 people came on Saturday. Thanks to Streamkeeper volunteers setting up and manning our booth: Zack and Mike Hovis, Tara Demers, Dianna Cross.

Dungeness River Audubon Center (In partnership with the Jamestown S'Klallam Tribe, Olympic Peninsula Audubon Society, and National Audubon Society)
P.O. Box 2450, Sequim, WA 98382 360-681-4076 rivercenter@olympus.net

Stormwater Monitoring Project

Year 2:

Enter Robo-Sampler!



Stormwater Monitoring Project Year 2: Enter Robo-Sampler!

Streamkeepers is entering Year 2 of monitoring stormwater under an EPA grant aimed at devising a stormwater management plan for Clallam County. After a highly successful Year 1, in which we sampled potential "hot spot" pollution sources (culverts, ditches, parking lots) in the Sequim area between Dec. 2008 and Oct. 2009, we now enter Year 2, which will focus on Sequim-area streams (probably Bell, McDonald, Matriotti, and Dungeness). We'll be borrowing auto-sampling equipment (resembling R2D2 robots) from the City of Port Angeles and the Dept. of Ecology, which will make chasing storm peaks a bit easier, but there will still be a good deal of field work needed, as well as storm-watchers, team-mobilizers, cooks, sample-processors, and data-enterers. RSVP if you're interested in joining us; a training session is expected sometime in December.

Preliminary findings from Year 1: We don't seem to have too big of a problem yet with some of the toxic pollutants that big cities grapple with, such as heavy metals, petroleum products, and pesticides/fertilizers. The biggest problem we do have is with the quantity of stormwater itself, and the associated fine sediment that gets mobilized into our streams during storms. Human development causes bigger, flashier winter floods, which cause visible damage to streams, people, and property. On the other end of the seasonal spectrum, faster runoff means less water available in the summer, in both our streams and aquifers. So reducing winter stormwater runoff should increase summer water availability--something everybody would like to see, particularly in Sequim.

SUPPORT CITIZEN STEWARDSHIP OF OUR LOCAL NATURAL RESOURCES!

Streamkeepers is seeking volunteers to help conduct Phase 2 of a stormwater monitoring project in the Sequim area. Volunteer opportunities offered are:

- ◆ Taking samples in streams during rain events—all shifts needed.
- ◆ Maintaining and operating automatic sampling devices.
- ◆ Driving samples to regional laboratories (reimbursed at \$0.58 per mile).
- ◆ Processing water samples for analysis (indoors).
- ◆ Organizing and managing field-teams and samples before, during, and after storms.
- ◆ Tracking weather forecasts and rainfall data.
- ◆ Inputting data into a database.
- ◆ Performing statistical and graphical analysis of the data.
- ◆ Serving on our Stormwater Monitoring Advisory Committee.

This project provides an important way to become involved in the effort to protect and restore Puget Sound—right in our own backyards. Puget Sound Starts Here!



REMEMBERING LOU MAUPIN

Ex-Streamkeeper Lou Maupin passed away too soon this summer from complications due to diabetes. Lou was sent our way by someone who thought he needed an outlet for some of his excess energy. We hooked him up with John Junell, and the two became an inseparable team, sampling for bacterial pollution all over Sequim and conducting their own little investigations along the way, such as trying to figure out the age-old question: Whatever became of Bell Creek? Armed with John's digital camera, they were forever taking pictures and bringing them our way, documenting the often topsy-turvy development of the Sequim-Dungeness Valley. With their zeal to track down pollution sources, they seemed like deputized sheriffs from an old Western, hightailing it back to headquarters to tell of the bad guys headed into town. A few years before he died, Lou left town to care for an ailing friend, but some of his daughters remain behind, and the waters will carry his laughter continually down from the mountains to the bay.

Water

*What is the vitality and necessity
of clean water?*

*Ask the man who is ill, who is lifting
his lips to the cup.*

Ask the forest.

by Mary Oliver

DOCUMENTARY ON OCEAN ACIDIFICATION TO BE SCREENED FREE OF CHARGE AT COLLEGE DEC. 4

Peninsula College's Magic of Cinema Film Series and nine other peninsula organizations are sponsoring a special screening of *Sea Change*, a major new documentary on ocean acidification and its potentially devastating threat to ocean life, on Friday, December 4. Admission to the 7:00 pm showing in Peninsula College's Little Theater is free of charge.

The film will be preceded by a short reception, beginning at 6:30 pm, which will allow audience members and sponsors to meet each other and share some light refreshments. Immediately following the film, there will be a question-and-answer session with a panel of local experts.

Other sponsors of *Sea Change* include Clallam County Marine Resources Committee; The Feiro Marine Life Center; Huxley College of the Environment on the Peninsulas, Western Washington University; League of Women Voters, Clallam County; North Olympic Lead Entity for Salmon; The North Olympic Peninsula Resource Conservation & Development Council; North Olympic Salmon Coalition; Olympic Environmental Council; and WSU Beach Watchers.

For more information on the film and the events before and after its screening, please call PC English and film professor Bruce Hattendorf at 360-417-6238 and check the college website at www.pencol.edu.

Thanks to SK volunteers: Valli Sandstrom, Marilyn Harbaugh, and Alma Chong for providing an informational booth for Streamkeepers.

DVD of Frontline "Poisoned Waters," PBS Special (available for borrowing and/or showing to groups from Streamkeepers)

More than three decades after the Clean Water Act, iconic American waterways like the Chesapeake Bay and Puget Sound are in perilous condition and facing new sources of contamination.

With polluted runoff still flowing in from industry, agriculture and massive suburban development, scientists note that many new pollutants and toxins from modern everyday life are already being found in the drinking water of millions of people across the country and pose a threat to fish, wildlife and, potentially, human health.

In *Poisoned Waters*, Pulitzer Prize-winning journalist, Hedrick Smith, examines the growing hazards to human health and the ecosystem.

Q: When is it Normal for a Stream to Look Orange and Fuzzy?

A: When there is iron bacteria present. When the bacteria "feed" on iron in water, the dissolved iron reacts with oxygen in the air and forms rust-colored iron oxides. This colorful reaction is common in lakes and streams and often occurs on hot dry days when the water is sluggish. You may also notice an unpleasant odor and an oily sheen, also caused by the bacteria. The process is natural and is not toxic to fish or aquatic life. Iron is a common element found in water and soils. A small movement of earth into the stream can set off the process of bacteria forming deposits, but the next rain shower will likely dissipate them. So, in some cases it is normal for the stream to be orange and fuzzy.

Special Thanks for Special Help!

Stream Fesx



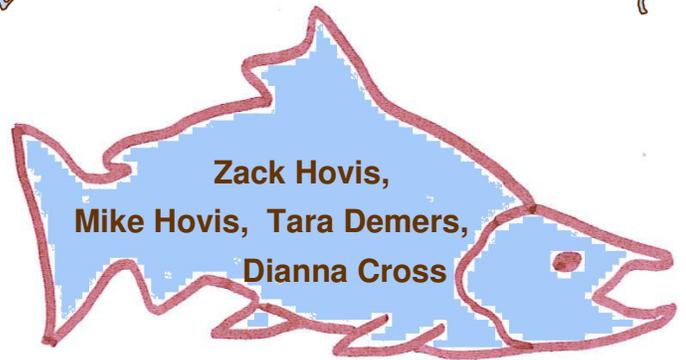
Bull Trout Redd Count



Stream Fesx



Dungeness River Fesx



Bug Sorting Team



NOP Skills Center

