



In the Flow

Spring 2021, Issue 71

<https://www.clallamcountywa.gov/901/Streamkeepers>

360-417-2281

Greetings Streamkeepers volunteers and friends,

Here's an update on what's going on with Streamkeepers, and a call to get involved in summer quarterly monitoring.

Quarterly Monitoring in Spring 2021

Last year, due to Covid, we just had three teams and monitored at five creeks. Boy, do I appreciate those folks for their work in maintaining the program through a difficult time! In Spring Quarterly Monitoring this year, we were able to increase this to six teams, and did monitoring at ten creeks. We had 10 volunteers helping.

So a big Thank You to all who participated in spring quarterly monitoring! And thanks to you all for getting the COVID-19 vaccine before going out with your team, and keeping each other safe!



Volunteers Steve Bengtson and Beth Waknitz measuring stream flow at Ennis Creek during spring quarterly monitoring.

What we do during quarterly monitoring

We measure chemical and physical characteristics of water including pH or acidity, dissolved oxygen, turbidity, water temperature, salinity, and specific conductivity. These are important indicators of stream health and condition. We measure air temperature for comparison to water temperature. We measure stream flow. Stream flow is important because if the flow is too low, the water tends to get warmer, and salmon and trout need cool water. Also, dissolved oxygen is often lower when the flow is lower, and salmon and trout need plenty of dissolved oxygen. We do wildlife and fish observations. In the summer, we make observations and record invasive plant species that we see at monitoring sites.

A key part of quarterly monitoring, and actually all monitoring, is that after we do the field work, we check the data for possible errors, and then entering data into the **Clallam Water Resources Database**. In order for our data to make a difference, it needs to be put in a format that can be shared and used by government agencies and the public. So we really appreciate the volunteers who maintain the database, do quality control on the data, and enter the data into the database. The volunteers who have been doing this important work include Ron Sidwell, Bob Fitton, Jane Hutton, and Donna Spence.

Summer Quarterly Monitoring, we need volunteers!

We are gearing up for summer quarterly monitoring, with our first three creeks this coming weekend! Our summer monitoring will go through the month of August. We need more volunteers, so please let me know if you are available, and we can work out the details of which team you will join up with. We are asking all volunteers to be fully vaccinated prior to going out with a Streamkeepers team. You are fully vaccinated two weeks after the second shot (Moderna or Pfizer) or two weeks after the single shot (Johnson & Johnson). Feel free to check out the latest Washington State guidance for vaccinated people [here](#).

Cooperative Agreements with Other Agencies

So, in addition to the Quarterly Monitoring, there are some other opportunities to get involved. The next topic is the cooperative agreements we have with other agencies to do water quality monitoring.

First on the list is the monthly monitoring we do with the **Clallam County Environmental Health Pollution Investigation and Correction program, or PIC program for short**. This is a program designed to improve the water quality of Sequim and Dungeness Bays by investigating sources of bacterial pollution. Poor water quality was causing shellfish bed closures, and something had to be done. The pollution originates in the tributaries to the Dungeness River and creeks draining directly to the bays.

The program has two parts, the Trends Monitoring program and the segmented monitoring program. In the Trends monitoring part, Streamkeepers volunteers monitor water quality in several creeks near the mouth of each creek. When Trends Monitoring identifies a creek as being polluted with excessive bacteria, the segmented monitoring kicks into gear. In the

Segmented monitoring program, environmental health staff monitor water quality at intervals going upstream on the polluted creek, to identify the source of pollution. When the problem is identified, then Environmental Health staff work with landowners to correct the problem and clean up the creek.

Due to Covid, for over a year we had no volunteers working with the PIC Tends Monitoring program. Environmental Health staff and the former Streamkeepers coordinator Noelle Nordstrom carried the ball in 2020, and then I helped in spring of 2021. I am happy to say, as of May 10, we now have our Streamkeepers PIC Team back in action. Our PIC Team at this point includes Sarah Miller, Bob Phreaner, and Peggy McClure. Thanks for your good work, PIC Team!

Another partner project is the **Port Angeles stream water quality monitoring program**.

In this project, Streamkeepers volunteers monitor water quality once per month in Peabody and Tumwater Creeks at several monitoring locations. We monitor fecal coliform bacteria and physical and chemical characteristics of the water. Like the PIC program, the Port Angeles program identifies when and where there are pollution problems, so that they can be fixed. Volunteers currently working on the project include Sue Natinger, Coleman Byrnes, and Paul Rogers. We appreciate your important work, team!

A new partner project this year is the **Dungeness Reservoir ditch monitoring project**. There are plans in the works to put in a new reservoir by the Dungeness River in the next few years. This reservoir will store water from high flows in winter, and then distribute it out to irrigate farm fields during the dry season. This is a project led by the Clallam County Roads and Public Works Department. Streamkeepers is monitoring water quality in ditches that will eventually go to or from the reservoir. The goal is to find out how the reservoir project affects water quality. So far, I just have one volunteer working with me on this (welcome to Miguel Reabold!), so we need more volunteers for this project. Actually we need more volunteers for all our projects, because right now, just a few volunteers are carrying the responsibility for a lot of monitoring.

Finally, Streamkeepers is a participant in the **Dungeness Floodplains Restoration Project**, led by Cathy Lear with the Clallam County Dept. of Community Development. This is a project to set back to east bank levee of the river for about almost a mile near the river mouth. The existing levee along this stretch will be removed, and a new levee constructed further away from the river. This will expand the flood plain by 112 acres, restoring valuable habitat for fish, shellfish, and wildlife. Our role is to do environmental monitoring, analysis, and reporting. We will be working on a water quality report for tributaries of the Dungeness River. For this project, we will need help from volunteers who have experience with data analysis, creating graphs, and creating maps.

Macroinvertebrate monitoring on the Hoko River

Aquatic macroinvertebrate monitoring is a great way to assess stream health, and Streamkeepers has done quite a bit of it, but not in the last few years. So I was happy to hear from Stephanie Martin, the water quality biologist at the Makah Tribe, that they had some funding for

macroinvertebrate monitoring in the Hoko River. Macroinvertebrates are the aquatic insect larvae, worms, and crustaceans that live on the bottom of streams. We are still in the planning stages of this project, which will happen in August or September. We would love to have some volunteers to help with this.

New Volunteer Intake and Training

Clallam County Volunteer Application Process

We now have the new Clallam County volunteer application process in place, so if you are a new volunteer, please reach out to me, and I can provide more information.

If you just want to try out Streamkeepers monitoring for a day, we have a form to fill out, and the County application process is not required. But once you decide to be a Streamkeepers volunteer on an ongoing basis, the County application process is required.

Streamkeepers Training

Our approach to volunteer training this year is mainly on-the-job training. Though things are opening up, due to the fact that some people are still not vaccinated and people's kids are not necessarily vaccinated, we want to avoid too many people crowding in to see how equipment works. With on-the-job training, it will be one-on-one. Within the next year, I am planning to make a set of training videos that can be viewed online. Does anyone have expertise in creating videos?

I expect we will start having field training sessions again next year.

I look forward to seeing you soon, either in the creek or in our Streamkeepers office!

Joel Green

pronouns: he/him
Streamkeepers Coordinator
Clallam County Dept. of Community Development
jgreen@co.clallam.wa.us
Mobile: (360) 325-3979
Office: (360) 417-2281