Peninsula Streams Society Newsletter



Dear Readers, **Welcome to the December edition of our newsletter!** We invite you to read through to learn about what we've been up to for the past 12 months. One organizational milestone we were happy to celebrate this year was the 10th anniversary of Stewardship Coordinator Francesca Loro's employment with Peninsula Streams!

We wish you All the Best of the Season, and look forward to working with you in 2019! - Peninsula Streams Society Board of Directors & Staff (Ian, Francesca, Brian and Emily)

North Patricia Bay Beach Nourishment

Phase III* of the Tseycum Beach Nourishment (Restoration) Project was undertaken in March 2018 with Tseycum First Nation (F.N) and Ministry of Transportation. 3,800 tonnes of sand and gravel were added to the beach. **Beach nourishment** supplies sand/gravel to the shore to increase habitat value and/or to secure the beach and backshore against erosion. In this case, nourishment provides backshore and West Saanich Road protection, and provides substrate for forage fish spawning. In early November, we planted the backshore area with Tseycum F.N. members. We planted Arbutus, Garry Oak, Ocean Spray and Red-osier Dogwood, which will help shade the backshore and provide valuable wildlife habitat. *Phase I and II were undertaken in 2012 and 2015.

TenTen Creek

The TenTen Creek Restoration Project has been ongoing since 2016 with the Victoria Airport Authority (VAA). Work to date has involved moving the creek away from the bank of an exposed and eroding landfill site, applying a barrier layer and riprap to the landfill site to curb further erosion, enhancing the creek with with pool/riffle complexes, spawning gravel and large woody debris, and riparian planting. Downstream of the Willingdon Road culvert, about 120 m of creek was daylighted. Large woody debris has been added and a riffle built to provide better pool backwatering. Currently, Cutthroat Trout are present in the creek and the goal is to re-establish Coho Salmon in the creek in the future. Restoration work is on-going with VAA annually investing hundreds of thousands of dollars.

Chalet (Tatlow) Creek

Longtime Chalet Creek watershed resident and stalwart volunteer Mary Cully has been collecting pond water elevation data since 2011 at Gardner's Pond. With wetter winters and drier summers, we are seeing water levels at higher highs and lower lows. In fact, the winter levels are increasing such that the staff gauge has been extended on two occasions over the last few years.



Millstream Creek

Due to contractor unavailability and rising construction costs, the Millstream Fishway Project was postponed to Summer 2019. Fundraising and partnership building continues so that we can secure the remaining funds needed to complete the project. The fishway will allow fish below the Atkins Road Culvert to access an additional 8 km of upstream habitat. Learn more here: <u>http://peninsulastreams.ca/millstream-fishway-project</u>

B.E.A.C.H. Initiative

The B.E.A.C.H. (Beach Education And Conservation of Habitat) Initiative is one that we've been wanting to undertake for many years. The major goals of the Initiative are to engage with the residents in the Capital Region to provide beach education, restoration, monitoring and clean-ups where necessary. In 2018, we hosted 6 beach clean-ups on Reay Creek, Pat Bay Beach, Brentwood Bay Beach, Tsartlip Beach (with the Tsartlip Youth Group), Bazan Bay Beach and Saanichton Bay Beach. In total, over 350 kg of material was removed with about 200 kg of material successfully recycled! At future clean-ups, we will provide demonstrations on how to survey the beach for forage fish* (e.g. Pacific Sand Lance, Surf Smelt) spawning...stay tuned for information on activities on a beach near you!

***Forage fish** are small, schooling species that eat plankton species and are then consumed by bigger fish (like salmon), seabirds, and marine mammals. Forage fish are a critical link in the ocean food web as energy from the sun is transferred to higher trophic (food) levels.

Thank You to our Volunteers, who in 2018 contributed over **1,500 hours** to stream restoration, education and stewardship in the Capital Region!

Water and Sediment Quality Monitoring

We continue to monitor water quality in many streams on the Peninsula. In the KENNES (Hagan) and Tetayut Watersheds, we work with volunteers to collect water samples and collect field measurements on a monthly basis. Sediment quality is measured on a quarterly basis. Findings are reported to the District of Central Saanich in quarterly interim reports and an annual end-of-year report. If the lab reports any exceedances, we communicate these to Central Saanich and the CRD immediately so that water quality issues can be identified and quickly resolved. We also support water quality monitoring in Swan Creek, Goward Springs, Tod Creek and Maltby Lake. Thanks to all the groups involved in monitoring, you are our eyes and ears on the creek! If you would like to join our water quality stewards, contact us!

Education & Outreach

We continue to deliver our very popular environmental education programs in Greater Victoria. In 2018 we engaged over 1200 students in our Gr. 3, Gr. 5 and Gr. 6/7 programs. We also attend community events like Saanich's Music in the Park, AGMs, Farmers Markets and more.



Thank you to our sponsors! (see all @ http://peninsulastreams.ca/about-us/donors-list)

Tetayut (Sandhill) Creek

Creek Tetayut The Culvert Remediation Project was undertaken in September 2018 by PSS, the Transportation Ministry of & Pacific Infrastructure, Salmon Foundation, and Michell Excavating Ltd. A 'perched' culvert under the Patricia Bay Highway at the Saanich Historical Artifacts Society caused a barrier to upstream fish migration. To help mitigate this, we built riffles downstream of the culvert to backwater the culvert, providing habitat and fish access to over 4 km of habitat upstream. Spawning gravel was added to the creek and vegetation was left intact to provide shade. We look forward to both Cutthroat and Coho using this new-to-them habitat!



Building a riffle in Tetayut Creek

Lochside (Blenkinsop) Meadow Project

Planning for the Lochside Meadow began in 2017, with extensive partnership-building with community groups and businesses, and fundraising. Meadow reconstruction began in Summer 2018, with partners Saanich Native Plants and the Pollinator Partnership. With "seed funding" from BC Hydro, we successfully fundraised the remaining project funds from neighbouring businesses including Don Mann Excavating. The 2,000 m² parcel of land is owned by BC Hydro. Using an excavator, the topsoil was removed which contained invasive species including reed canary and quack grasses. Clean topsoil was added and the meadow was replanted with native seeds and over 2400 native plants in late September by 60 volunteers. Native plants were chosen to attract bees and other pollinator species to the area, to the benefit of farmers in the Blenkinsop Valley. The Pollinator Partnership will oversee pollinator surveys with Reynolds High School students over the next few years and additional plants will be added as necessary. A special Thank you to the North Quadra Community Association, BC Hydro and others for supporting us on this project!



Planting the Lochside Meadow in September 2018

Swan Creek

Since 2013, the Friends of Swan Creek Watershed (FoSCW) have added more than 60 metric tons of rock and spawning gravel to Swan Creek by hand! In 2018, FoSCW and PSS built 3 new riffles and replenished spawning gravel at multiple locations along the creek. District of Saanich staff removed sediment under the McKenzie Overpass using their vacuum truck which allowed for the construction of our third riffle. As well, Saanich continued removing sediment and invasive grasses along the Columbine reach of Swan Creek. Working together, Swan Creek is becoming a functional place for fish to live.



Riffle built in Swan Creek

Tod Creek

The Tod Creek Enhancement Project continues with the goal of re-establishing a self-sustaining Coho Salmon population in the watershed. Together, the Friends of Tod Creek Watershed, Peninsula Streams, SeaChange Marine Conservation Society, District of Saanich, the Friends of Maltby Lake Watershed and others have been enhancing habitat which contributes to this overarching goal. In 2018, two new riffles were built in Killarney Creek and spawning gravel was added. The Tod Fishway Camera is currently in operation to monitor fish (and other wildlife) populations in the area. We will be releasing coho with inserted "PIT" tags to study survival in 2019 and will be engaging with students from Camosun College to help fish passage in the lower creek area.

Thank you so much to those who have donated to us this year! If you would like to donate, please consider making your donation before Dec. 31st. You will receive a charitable tax receipt for 2018, and your gift will help us continue to improve and restore salmon and wildlife habitat in Greater Victoria. 2018-2019 Thrifty Foods fundraising goal of \$2,500! Contact us for a Free card.

Help us reach our

Please Donate

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PeninsulaStreams@gmail.com 250-363-6596 (Ian, Brian); 250-363-6480 (Francesca)