



Peninsula Streams Society Newsletter October 2022

Hello firstname!

Welcome to our fall issue! We hope you enjoy reading about some of our current projects, ways we've been engaging with community groups, and upcoming events.

This newsletter covers:

- Thank you Francesca and Welcome Sue!
- Volunteer appreciation night wrap up
- Project Updates
 - o Millstream Creek
 - o Chalet Creek
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 - o Colquitz Restoration
 - o Ecocultural Goose Exclosures
 - o Beach Restoration
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- Work Parties
 - o Swan Creek
 - o Goldie Park
 - o Millstream Fish Ladder Cleaning
- PSS in the Community
- Upcoming Events
 - o 20th anniversary and Donor/Sponsor celebration

- Stay tuned for Beach Cleans and planting events!

- 2022 Memberships

Thank you for following along! We hope you enjoy reading about what we have been up to over the last couple months and how you can get involved!

Wishing you a wonderful and safe Fall,

~The Peninsula Streams and Shorelines Team

Ian, Francesca, Kyle, Katrina, Tamara, Shelly, Austin, Sue

P.S. If you'd like to support our efforts to restore our vital creeks and marine environments, please consider a [monthly donation](#)

Thank you, Francesca!

Since 2008, Francesca has overseen administrative operations, organized environmental education programming, and coordinated volunteer and stewardship activities for PSS. A core part of PSS for the last 14 years, we are sad to announce that Francesca will be leaving us this fall but we are so excited for the new chapter in Francesca's life working with the Department of Fisheries and Oceans Canada! Thank you, Francesca for all of your hard work, dedication, passion, humor, and friendly smiles over the last 14 years! While she will be greatly missed, she will always be part of the PSS family!



Welcome, Sue!



We would like to give a warm welcome to Sue Jaillet who will be taking on the role as the Administrative and Stewardship Coordinator from Francesca. Sue has a BA in Geography with a Specialization in Resource Studies from the University of Alberta, as well as courses in Urban Planning and GIS & Cartography from UVic. She has extensive administrative experience and has worked in a wide range of industries such as local government, military, sales and distribution, contract administration, and executive level support. We are very excited to have Sue join the PSS team!

Volunteer and Member Appreciation Wrap Up

In celebration of our 20th anniversary, we hosted a long overdue social for our fantastic long-term and regular volunteers and members on August 18th. Thank you for everyone that attended, we were so pleased with the excellent turnout and the engaging conversation, big smiles and sense of community that filled the room.





For all of our wonderful volunteers, whether you have been with us for 20 years or newly joined, thank you so much for your dedication, hard work, and passion. You are the heart and soul of Peninsula Streams and Shorelines and we are excited to see where the next 20 years take us!

Project Updates

Millstream Creek

Culvert Spillway Flood Damage Repair & Fish Habitat Rehab

The November 2021 flood event caused significant damage to the Atkins Rd. Culvert Spillway and fish ladder by dislodging some of the boulders that make up the rock armouring. There were also some leaks in the ladder weirs which affected the water levels during low flows. Funding for these repairs has not been completely secured but had to be undertaken before any future large rainfall events - these repairs are partially supported by our friends at [The Pacific Salmon Foundation](#).

On August 29th, work began in collaboration with Chew Excavating, NHC Hydraulic Consultants, the City of Langford and CRD Parks to repair the Culvert Spillway in a timely manner to prevent further damage. This involved repairing the rock armour with additional boulders, drilling and 'bolting' the Spillway armour boulders into the bedrock and injecting concrete to support the rock armour. As well, concrete was used to seal up the weirs in the fishway. The stream area immediately downstream of the Spillway pool was

remediated by removal of 25 m3 of sharp rocks that had accumulated from the gradual collapse of the original spillway over many years. A fish-friendly boulder run, a 'riffle' and spawning gravel were installed instead!



Future phases will look at enhancing instream and riparian habitat. This will include floodplain grading, bank erosion protection, riparian habitat enhancement (removing invasive species and planting native species), site cleanup and replanting.

Ongoing thorough stream habitat assessments are being undertaken by PSS staff and associates. This helps us plan an inventory of restoration activities to mitigate threats and support and expand fish populations and overall ecological integrity.

Stewardship

On Thursday, September 8th, the new Friends of Millstream Watershed Stewardship group met in

West Shore for its first Annual General Meeting. On the new 9-member Board of Directors there is representation from all 4 municipalities that are within the watershed: View Royal, Colwood, Langford and the Highlands!



The Board of Directors for the newly established Friends of Millstream Watershed.

Chalet Creek

Since 2002, PSS has been working with the Friends of Chalet Creek (formerly the Tatlow Streamkeepers) and Deep Cove Elementary students to improve fish habitat in Chalet Creek to support diminished populations of chum, coho, and coastal cutthroat. In November 2021, massive storms washed out Chalet Road in North Saanich. The culvert below the road failed, the road embankment collapsed, a section of the water main was carried away, and debris was dumped into the creek bed.

PSS staff were invited by the District of North Saanich to collaborate on this exciting project over the summer of 2022. During our construction preparation, our technicians found juvenile cutthroat and coho that had survived the flood!

In addition to adding fish habitat, the project included:

- Creating pools where salmon can rest as they swim upstream and forage for food as juveniles
- Addition of spawning gravel
- New debris stumps and overhangs
- Building a bypass channel to divert high water levels so it doesn't scour out the new habitat
- Removing parts of an old dam to make the passage more welcoming for fish
- Removing sandstone at the entrance of the creek to create easier access for spawning salmon
- Planned in-stream incubators for chum and coho eggs for February 2023.



Extensive riparian plantings will also be installed over the fall

Volunteers will be needed so look out for a call!

Bowker Creek Chum Reintroduction



Together with the Friends of Bowker Creek and PSS volunteers, we've been repairing the gravel shoal for this year's round of chum salmon egg incubators. This is the second year of volunteer efforts to reintroduce chum to Bowker Creek (Thaywun). Around 30,000 eggs will be out-planted to the site in January and monitored by volunteers until their emergence in the spring as they did successfully last year (~75%).

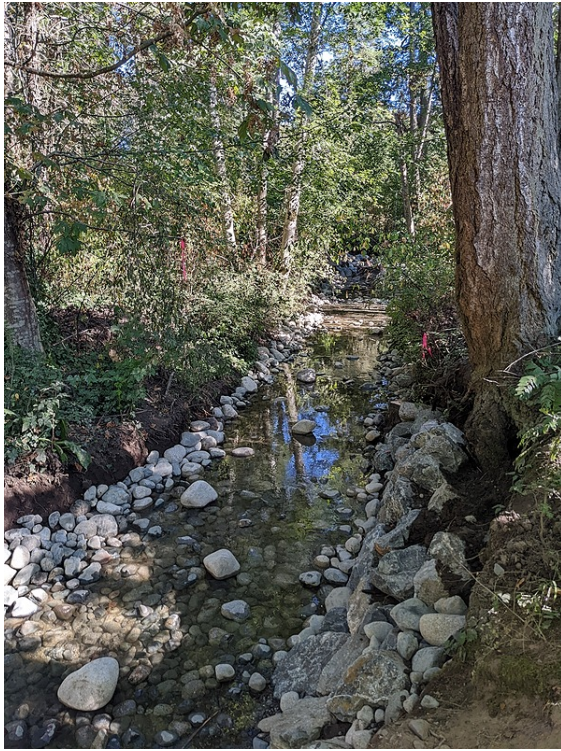
This year was the first time in decades - maybe 100 years - that juvenile salmon have hatched in Bowker Creek! This would not be possible without the thousands of volunteer hours of and the Bowker Creek Initiative as well as support from Fisheries and Oceans Canada, Goldstream Hatchery Salmonid Enhancement, and the Pacific Salmon Foundation.



Colquitz River Salmon Habitat Restoration Program - Phase 3

In August, PSS in collaboration with Saanich, and with funding from [Pacific Salmon Foundation](#) completed a beautiful restoration of ~100m of the Colquitz River in Copley Park East. The work resulted in creating excellent habitat for coastal cutthroat and coho salmon, along with other wildlife. We created several riffle-pool structures, added several spawning beds as well as installed lots of wood/rock which is important for fish habitat.

This is a continuation of restoration work that was done in 2019 and 2020 further upstream, which in turn resulted in over 800+ salmon fry being found in



the section prior to work commencing this year, so we know the restoration is working!



Stay tuned for upcoming volunteer planting work parties, community tours and salmon enumeration programs later this fall!

Ecocultural Goose Exclosures

Located at the head of Portage Inlet, Hospital Creek Estuary contains a highly degraded salt marsh complex, due largely to the encroachment from local housing and the grazing from hyperabundant resident geese and waterfowl. Similarly, the tidal marsh of Mermaid Creek in Roberts Bay has been affected by pedestrians and hyper-abundant Canada geese who graze intensively on the salt marsh vegetation. To address these issues, a goose exclosure was built in both Hospital Creek and Mermaid Creek to protect the salt marsh meadows from waterfowl grazing and grubbing.

Hospital Creek *(Completed August 2022)*



Mermaid Creek (*Completed September 2022*)



Using a technique developed and formalized by the Mid-Island Guardians, we used willow whips and alder stake fencing known as "Eco-cultural Restoration". This will help to stabilize the bank and sediments while creating an "exclosure" made entirely of biological materials to protect future plantings of Lyngby's sedge.

Lyngby's sedge is a keystone marsh species that effectively help to grow banks of tidal marshes by actively capturing and depositing sediments from the water column. This tested treatment will actively and rapidly work to increase the blue carbon storage capacity of the system, help to secure and stabilize eroding marsh banks, and revitalize critical geochemical and nutrient processes to the slough contributing to the health and recovery of these marshes.

Beach Restoration

Songhees Walkway Pocket Beach

On Friday, September 23, we finished Phase 1 of our beach restoration project on the Songhees Walkway Pocket Beach! This project is in partnership with the City of Victoria, Songhees Nation, Esquimalt Nation, and [Pacific Salmon Foundation's Resilient Coasts for Salmon](#). The small pocket beach is located along the Songhees Walkway in the City of Victoria's Lime Bay Park and is an important part of the traditional territory and history of the Lekwungen People.

Using a [Green Shores](#) approach, this project will see the armoured rock and concrete debris removed and replaced with a fish-friendly sand and gravel mix primarily suited to provide spawning habitat for surf smelt

and Pacific sand lance, both of which support salmon species in the area. Phase 2 of the project, planned for spring 2023, will see the creation of public access to the site, a sandy backshore area, further shoreline stabilization, and native vegetation plantings.

In addition to ecological benefits, the project also has a large cultural component, providing opportunities to share and promote the rich Lekwungen history and values associated with the area. PSS continues to work with [Explore Songhees](#) tours to ensure the site is compatible with landing canoes on the beach.



Portage Inlet Linear Park

On August 11, we finished bringing in over 400 tons of surf-smelt friendly sand and gravel to restore the beach at Portage Inlet Linear Park. This project was funded through support from the [Ralmax Group](#), Pacific Salmon Foundation, and the Town of View Royal.



Stay tuned for backshore planting parties being planned for this fall with volunteers and View Royal Parks

Rain Gardens for Head Waters



Rain garden at Monterey Middle School

Since 2019, we have identified sites for rain gardens and developed partnerships with schools, stewardship groups, and municipalities. We help communities by providing tools and knowledge to design, plan, fund, install, and maintain their own rain gardens.

This summer, we completed four Rain Gardens that are ready for planting by students this fall with ongoing outreach in the community. The completed rain gardens include one at Monterey Middle School and three at Campus View Elementary.

Work Parties

Millstream Creek Fish Ladder Cleaning

On August 13th and 14th as well as on September 10th, volunteers came out to Millstream Creek to clean and prepare several fish ladders for the fall spawning. The ladders needed to be cleaned as they get filled with gravel and debris over the winter and need to have enough depth for the fish to jump over the steps. This would not be possible without the hard work and dedication of our volunteers!



Invasive Species Removal at Goldie Park, Langford

We had 12 volunteers out to Goldie Park to help with invasive species removal on August 30th. The volunteers were excited to learn about native and invasive species and remove invasive plants such as English Ivy, Himalayan Blackberry, and Daphne while in a cool forest on a hot summer's day. Thank you to the City of Langford and its staff for ease of access and pick up of removed invasive plants



Outreach Events

Over the summer, PSS staff and volunteers have attended several outreach events! This has been a great opportunity to engage with community members, collaborate with other environmental organizations, and share the stories of the work that we have been up to thanks to our volunteers!

- **Central Saanich Music in the Park**
 - July 6th - Pioneer Park
- **Saanich Music in the Parks**
 - July 19th - Beckwith Park
 - July 26th - Hyacinth Park

- August 23rd - Brydon Park
- July 20th: Pauquachin Outreach Event
- July 30th: Eats and Beats-Esquimalt Lagoon
- August 13th: North Saanich Farmer's Market



PSS at the Saanich Fair for the First Time!

On September 3 - 5, over 20 PSS volunteers led a double booth at the Saanich Fair with information on our latest projects and ways to get involved. It also featured a salmon roulette wheel with PSS sticker prizes and a fish pond game designed and created by Dagmar Wanke and Mike Derry.

Over the weekend, we engaged with over 750 visitors, signed up 20 new members and made \$285 in donations. Thank you so much to everyone who made this event possible and we look forward to making the Saanich Fair part of our annual outreach events!





Upcoming Projects and Events

SAVE the DATE! 20th Anniversary and Donor/Sponsor Celebration

Join PSS staff and members in celebrating our 20th year serving all municipalities in the Greater Victoria area. Enjoy a fun evening at the stunning new Esquimalt Gorge Pavillion where you will be treated to a selection of local food and drinks including a Wild Seafood bar, local craft beers, a selection of fine wines, and non-alcoholic beverages. Stay tuned for more information and how to register to attend.



Day: Saturday, October 29th, 2022

Time: 7:00 - 9:00 PM

Location: [Esquimalt Gorge Pavillion](#), 1070 Tillicum Road, Victoria, BC V9A 2A1

B.E.A.C.H. Program Update

Hello Beach Education And Conservation of Habitat (BEACH) volunteers, past and present! Peninsula Streams and Shorelines has been busy on the beach this summer, although Forage Fish (FF) Surveys have

been reduced during the spring/summer off-season for most forage fish spawning in the area. We will be in touch with our FF volunteers very soon with instructions on how the fall/winter program will unfold. If you are interested in becoming a new BEACH volunteer please contact Sue at peninsulastreams@gmail.com.

We have a few beach clean ups in the planning for this fall. Stay tuned for more details of locations, dates, and how to participate coming soon!

Riparian Planting Parties

This Fall, we will have several riparian planting events at Colquitz, Chalet and Portage Inlet Linear Park/Hospital Creek. Stay tuned for more information on event dates and how to get involved!

Purchase your 2022 Membership today!

Renew or join us now and your membership will be good until December 31, 2022! Our annual membership is only \$10 (\$5 for students) and you'll be added to our insurance for volunteer work parties.

Help to build our network of watershed protectors throughout Greater Victoria by becoming a member. Your membership matters because it shows the grassroots support we have in our community. This helps us when we apply for grants or other funding. This means more money for our local restoration projects. Becoming a PSS member is one simple way to have a meaningful positive impact.

Renew or Become a Member today

Thanks for reading this far~! We hope to see you in the field soon.



Our mailing address is:

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