

PENINSULA STREAMS & SHORELINES

NEWSLETTER FEBRUARY
2023

FALL HIGHLIGHT

SPAWNING COHO

A beautiful pair of spawning coho spotted this fall in the Colquitz River

*Streams
&
Peninsula
Shorelines*
Since 2002



LATEST UPDATES

- Chalet Creek Completion
- Colquitz Coho Count
- Millstream Updates
- Forage Fish and Beach Updates
- Roberts Bay Restoration
- Rain Gardens
- Completed Work Parties

Peninsula Streams would like to wish all of our members a Happy New Year, and would like to extend warm wishes coming into 2023!

This issue will provide highlights from the last 4 months from our ongoing projects, both in the stream and on the beaches, community engagements, and upcoming events.

WHAT'S HAPPENING IN OUR STREAMS?

CHALET CREEK RESTORATION COMPLETE

In conjunction with a major culvert repair, extensive fish habitat restoration occurred in Chalet Creek this past summer. In November, a group of volunteers helped PSS with riparian plantings around the creek. During the high flows just before Christmas, we could see the newly restored creek functioning well, with the constructed side channel filling with the overflow water.

Chum and Coho egg incubators will be installed in February.



FALL '22 SALMON SPAWNING IN THE COLQUITZ RIVER

After the restoration of an additional 100 m section of Colquitz River within Copley Park this summer, PSS was excited to see if it would be used by coho spawning this fall - and it was! Several redds (or nests) were found in the newly placed gravel, and spawning coho were also spotted in the newly constructed pools.

A total of 465 coho were seen going through the fish counting fence near Tillicum Mall. A huge thank you to Dorothy Chambers from Salmon in the City for her dedication at the fence and throughout the watershed.

Swan Creek, which flows into the Colquitz, also had spawning coho spotted by the Friends of Swan Creek this fall. Spawning cutthroat were also seen in a reach that had undergone restoration this past fall.

TOTAL COHO COUNT:

465

A coho redd, or nest, indicated by the light gravel found in Copley Park



MILLSTREAM WATERSHED

FISHY UPDATES

A habitat assessment of Millstream was completed this summer along with a fish distribution study, which focused on Coastal Cutthroat Trout (CCT) distribution throughout the Millstream Watershed. Results showed that CCT are widely spread throughout Millstream, and were found well past Mary Lake Sanctuary. Genetic samples were taken, and are currently being analyzed for genetic variability above and below barriers. The two assessments will be combined to determine where there are restoration opportunities within the watershed that would provide the best opportunity to enhance fish populations.

A big thank you to the Freshwater Fisheries Society of BC, Pacific Salmon Foundation and Provincial Fisheries Biologists for their support on this project.

Down near the mouth of Millstream, volunteers from the Goldstream Volunteer Salmonid Enhancement Association were busy this fall counting coho coming through the first fish ladder. They counted a total of 168 coho this year!



A young coho, likely a jack, returning to Millstream in late October



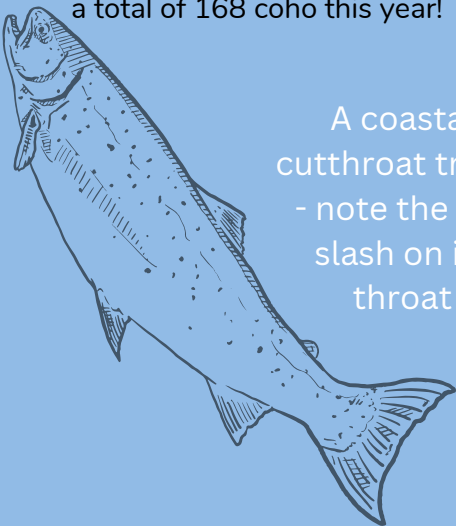
PSS staff member, Austin Nolan, measuring a cutthroat trout

A coastal cutthroat trout - note the red slash on its throat



TOTAL COHO COUNT:

168



FORAGE FISH UPDATES

FORAGE FISH EGGS FOUND ON NEWLY RESTORED SONGHEES BEACH!

Songhees Beach, a pocket beach located adjacent to the Victoria International Marina underwent restoration this fall. Phase 1 was completed which involved removing 5 tons of debris and the addition of 500 tons of gravel suitable for forage fish spawning. Three weeks after restoration was completed, the beach was sampled with Songhees and Esquimalt partners and, amazingly, surf smelt eggs were found! The beach will be monitored over the winter and Phase 2, which will include backshore planting, will occur in the spring.



FORAGE FISH SAMPLING

Our dedicated volunteers have continued to sample beaches throughout Greater Victoria for forage fish eggs. Over the past year, they have collected 234 samples, with 54 samples having eggs present. Of these 54 samples 42 have been surf smelt, and 12 have been sand lance. Both species have been found at Royal Beach. From June 2018 until present, 800 samples and counting have been collected with 141 positives!

BC FORAGE FISH MONITORING NETWORK ESTABLISHED

The BC Forage Fish Monitoring Network has just recently been established with various stakeholders and rights holders with the aim of coordinating monitoring of forage fish and their habitats in an integrated manner throughout BC.



SURF SMELT POSITIVES
FOR 2022:

42

SAND LANCE POSITIVES
FOR 2022:

12

If you are interested in taking a part in forage fish monitoring, email austin.nolan@peninsulastreams.ca

ROBERTS BAY RESTORATION

SALT MARSH RESTORATION IN MERMAID CREEK

Mermaid Creek, a small stream flowing into Roberts Bay, contains highly important and rare salt marsh habitat which is undergoing serious damage from hyper abundant geese and other impacts. To help prevent further loss of habitat, eco-cultural fencing, which is a specialized technique formalized by the Mid-Island Guardians, was installed. This technique utilizes willow whips and alder stake fencing and helps to stabilize the bank and sediments while creating a goose "exclosure", all made using biological materials.

UPCOMING WORK

Upcoming work for Roberts Bay will occur this year in partnership with Tseycum First Nation and Seachange. Activities will include:

- Lyngbye sedge will be planted this spring in order to help with sediment retainment, bank stabilization, and marsh expansion.
- During the summer, the Mermaid Creek Delta will receive extensive beach nourishment.



PSS staff member, Austin Nolan, assessing the eco-cultural fencing in Mermaid Creek



The salt marsh along the outlet of Mermaid Creek into Robert's Bay



Volunteers collecting willow to be used as fencing materials

RAIN GARDENS

TOTAL NUMBERS OF
PLANTS :

1000

MONTEREY MIDDLE SCHOOL

On November 4, Kyle Armstrong, our Restoration Coordinator, with support from Satinflower Nurseries and the Friends of Bowker Creek, worked with educators and students from Monterey Middle School to plant the newly installed rain garden on school grounds.



CAMPUS VIEW ELEMENTARY

The planting of the rain garden on the grounds of Campus View occurred on November 2, and had over 50 students and educators helping out. This included students from Mt. Doug Secondary School who helped the younger elementary students in placing and planting the native plants. What a team effort!



VOLUNTEER EVENTS

CHALET CREEK PLANTING

In early November, 25 dedicated volunteers showed up and helped to plant over 500 native plants around the newly restored Chalet Creek. Additional planting occurred in Early February with the installation of willow stakes at the site as well. Continued monitoring will occur over the next few years, and more plants will be installed next Fall.



PORTAGE INLET LINEAR PARK PLANTING

The restoration of the small beach located in the Portage Inlet Linear Park occurred in September to improve beach habitat. In October, we had 15 volunteers from the local community come out and plant the backshore with appropriate native species. This will help with stabilization and sediment retention.

UPCOMING EVENTS

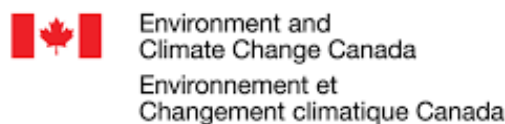
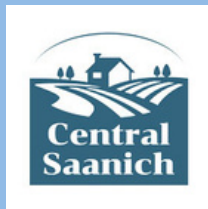
- Community event for the KENNES Stewardship group revitalization - Feb.21
- Riparian planting and invasive removal at Copley East Park - March 11.

If you are interested in volunteering, please get in contact by emailing peninsulastreams@gmail.com



Planting of Portage Inlet Linear Park

THANK YOU TO OUR SPONSORS AND PARTNERS



This is not an exhaustive list of our partners - we apologize if any logos are missing