

# Western Washington University

### Western CEDAR

Salish Sea Ecosystem Conference

2022 Salish Sea Ecosystem Conference (Online)

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# Resilient Coasts for Salmon - Empowering Communities with Nature-based Solutions to Adapt to Climate Change

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The Resilient Coasts for Salmon (RC4S) project is a five year collaborative partnership lead by the Pacific Salmon Foundation (PSF), with the Stewardship Centre for BC, Peninsula Streams Society, World Wildlife Fund, the Comox Valley Regional District, and others. This project is funded in part by the Government of Canada. Poster presented at the Salish Sea Ecosystem Conference 2022 by Kyla Sheehan, Resilient Coasts for Salmon project manager (ksheehan@pfs.ca). RC4S is part of PSF's Marine Science Program, Learn more at marinescience.ca.



Photo by Maria Catanzaro



Illustration by Holly Sullivan and Ravi Mahara

#### The Problem: Coastal Modification

The widespread installation of seawalls has allowed us to build right up to the shorelines. However, as our understanding of natural shoreline function improves, there is a growing acceptance that such structural solutions may cause more problems than they solve.



Illustration by





Trainees try their hand at assessing shoreline properties during Green Shores training in Cadboro bay, Victoria, BC.

Climate Change Canada Changement climatique Canada

# **Resilient Coasts for Salmon: Nature-based solutions for climate change**

## Raise Awareness by:

- Engaging directly with the public through outreach events in coastal communities on the eastern shores of Vancouver Island from Victoria up to Port McNeill.
- Delivering presentations to stewardship groups, local municipal and indigenous governments, and community groups.
- Creating educational products like 1) an educational primer on the impacts of climate change, the value of natural shorelines, and nature-based alternatives to hard armouring to protect against sea level rise, and 2) a Toolkit of how-to articles that empower community members to make small and large changes in their life to be more environmentally conscious and reduce their impacts on shorelines.

#### **Build Capacity around Greening of Shorelines by:**

Providing the Stewardship Centre for BC's Green Shores® training to help build a repository of local shoreline professionals like landscape architects, planners, environmental educators, First Nations and Municipal staff who can implement change in their communities. This is the first large-scale education and training initiative in BC for promoting nature-based solutions!

#### **Demonstrate Nature-based Solutions through Restoration through:**

- The creation of at least three Green Shores® for Shoreline Development (GSSD) certified shoreline restoration projects on high value salmon habitat on Vancouver Island to demonstrate a nature-based approach in a community setting. These projects will restore sites in a shore and salmon friendly way through the application of the Green Shores guiding principles.
- Installation of informational signage at each site.
- Creation of a documentary which will showcase the process of building a GSSD site, from site selection to restoration.

#### **Contribute Meaningful Shoreline Mapping Data by:**

- Carrying out boat-based mapping, RC4S will create a meaningful dataset with a focus on mapping the extent of hard armouring, as well as many ecological features of the shorelines of the east coast of Vancouver Island. High resolution photos are captured every 4 seconds along the shoreline from a 360 degree camera.
- Hosting local shoreline workshops to engage community members in getting to know their local shorelines, and their many values. These datasets will be publicly available through the Strait of Georgia Data Centre web portal as a resource for planners. coastal engineers, municipal government staff, and more!



Photo by Mitch Miller

# Illustration by Holly Sullivan

#### The Solution: Nature-based Solutions

A nature-based solution (NbS) is one that develops and implements approaches that are inspired and supported by nature. They are cost-effective, can vary in size, scale and objectives, and may be created with local materials and expertise. Working with nature, NbS provide ways to enhance shoreline resilience to development and climate change, while providing environmental, economic and societal benefits. Ultimately, we are all stewards of the shoreline and all citizens can contribute to the health and wellness of our environment! Our actions, small and large make a difference in how our shorelines will function and thrive.



Project partners meet to view the GSSD demo site in the Comox estuary, BC.



Check out our educational primer. available at resilientcoasts.ca!



Illustration by Holly Sullivan



Users will be able to click on sections of the track lines of the shore to explore the data. Photo by Mitch Miller