Resilient Coasts for Salmon: Opportunities for Collaboration

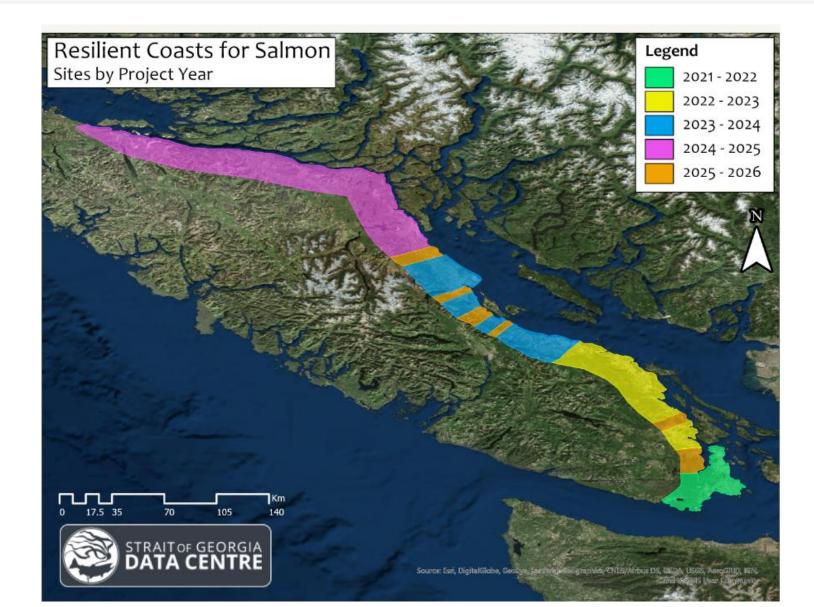


Presented by: Kelly Loch



Connect. Understand. Act.

Resilient Coasts for Salmon: Geographical Scope



Resilient Coasts for Salmon: Key Objectives

1. RAISE AWARENESS

Educate the public on nature-based solutions including the importance of restoring shorelines in response to sea level rise on East Coast Vancouver Island

2. BUILD CAPACITY

Provide opportunities for Green Shores training.

3. CONTRIBUTE MEANINGFUL SHORELINE DATA

Take inventory of the extent of hard armouring on the shorelines of East Coast Vancouver Island

Increasing visibility and application of nature-based solutions

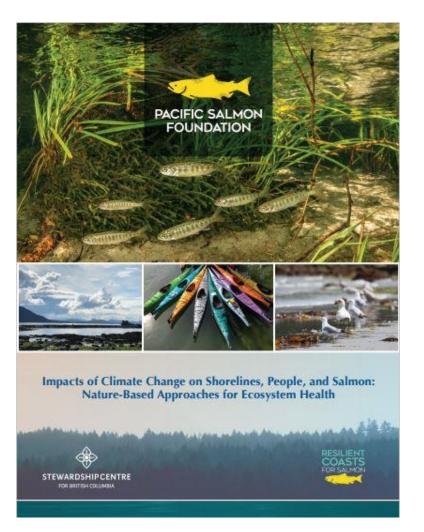


U.S. Army Engineer Research and Development Center: 2021

RESOURCES

-RC4S website: resilientcoasts.ca

-climate change primer (long version for educational settings; short version for outreach)



Resilient Coasts for Salmon: Toolkit

RESOURCES

Collection of materials of 'how to' reduce your environmental impact

•Reduce cumulative impacts

•Utilize salmon-friendly designs for permanent structures

•Assist with environmental stewardship groups and citizen science



GREEN GARDENING - SUPPORTING BIODIVERSITY AND CONSERVING WATER

Eco-friendly garden



GREEN GARDENING - MANAGING PESTS AND SOIL

Eco-friendly garden



USING GREEN SHORES NATURE-BASED SOLUTIONS

Nature-based solutions



SAVING ELECTRICITY

Reducing your footprint



NATURE-BASED SOLUTIONS FOR THE SHORELINE

Nature-based solutions



GREENING YOUR WARDROBE

Reducing your footprint

Outreach Events and presentations 25+ events to date!

Working with homeowners and proponents: shoreline assessments

Demonstration sites

Cobble Hill Fair August 2022









- Outreach Events and presentations
- Working with homeowners and proponents
- Demonstration sites

Piper's Lagoon Green Shores for Homes Project, Nanaimo, BC



STEWARDSHIPCENTRE

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Undated in 2022



- Outreach Events and presentations
- Working with homeowners and proponents
- Demonstration sites

Higson Crescent Green Shores for Homes Project, Qualicum Beach, BC





Connect. Understand. Act.

- Outreach Events and presentations
- Working with homeowners and proponents

Demonstration sites





Demonstration Sites

- Create visibility of nature-based shoreline solutions through demonstration projects on Vancouver Island
- PSF/SCBC team will work with partners to complete at least three shoreline restoration projects with a focus on improving salmon habitat on Vancouver Island
- Demonstrate a nature-based approach in a community setting that can also be used as a hands-on platform for volunteer and shoreline practitioner training





Tentative Project Timeline

2022	 Project design and budget finalization including public consultation Permit acquisition Installation of preliminary signage
2023	 Preparation of site, construction during fisheries window; planting Final signage installation Community outreach events
2024	 Ongoing project site maintenance (e.g. plantings) Community outreach events
2025	 Project completion; transition to future operations
Project Budget	 Project RC4S Budget: approx \$100,000

Resilient Coasts for Salmon: Build Capacity

- Green Shores as a nature-based solution framework
- Shoreline practitioners: advancing knowledge about Green Shores



Resilient Coasts for Salmon: Build Capacity

- Green Shores Training: Green
 Shores for Homes and Green
 Shores for Shoreline Development
- Classroom and field application of Green Shores
- Green Shores Level 1 intro. Being offered free at different locations along East Coast Vancouver Island.



Resilient Coasts for Salmon: Contribute Meaningful Shoreline Data

- Shoreline mapping from boat surveys
- Community shoreline mapping workshops: 6 to date.



Resilient Coasts for Salmon: Funding & Partnerships

- Sunded through the Climate Action & Awareness Fund (Environment & Climate Change Canada
 - Focus on increasing awareness on impacts of climate change in coastal communities and fostering stewardship on shorelines of East Coast Vancouver Island
- 5 year project (April 2021 March 31, 2026)
- Partnership between PSF and the Stewardship Centre for BC (SCBC)
- Numerous other partnerships are also vital to the project e.g. with First Nations, local government/municipalities:
 e.g. Komox First Nation, Songhees Nation, Malahat Nation, Capital Regional District, Township of Esquimalt, Comox
 Valley Regional District
- Partnerships with Stewardship Groups: Peninsula Streams Society, Project Watershed Cowichan Watershed Board?







This project was undertaken with the financial support of: Ce projet a été réalisé avec l'appui financier de :



Environment and Climate Change Canada Environnement et Changement climatique Canada

Next Steps



- Technical team meetings ongoing
- Finalizing design and budget, First Nations and public consultation; obtain permits
- Tie into Nature-based Project Expedited Permit process
- Signage interim and final; incorporate First Nations languages and artwork

New: Nature-based Project Checklist



WEST COAST PILOT

PRODUCED BY THE STEWARDSHIP CENTRE FOR BC, 2022

Appendix A

Nature-based Shoreline Project (NBSP) Checklist

Pilot Edition-November 2021

Preamble: Crown land is a public asset and the Province of British Columbia has a responsibility to manage for the economic, social and environmental benefit of British Columbians, now and in the future. Crown land along the shoreline consists of all land seaward of the natural boundary or high-water mark.

This checklist is intended to provide owners and Crown Lease holders of marine waterfront property a pathway to construct nature-based erosion protection and restoration works (nature-based shoreline projects, NBSP) that avoid or minimize adverse impacts on the environment, navigation, safety, community values, the interests of the public, and the legal rights of First Nations and others. Nature-based shoreline projects have additional benefits compared to sea walls and other hard armour projects and will:

- Support the integrity and connectivity of natural shoreline processes
- Maintain and enhance shoreline habitat diversity and ecosystem function
- Contribute to reducing and reversing cumulative impacts to shoreline systems from development
- Provide improved public access to the shoreline.

With appropriate guidance from Qualified Coastal and Environmental Professionals, nature-based shoreline projects can be designed to be resilient to sea level rise and other climate change impacts. Recognizing the benefits for coastal ecosystems and communities, the Province offers nature-based erosion protection projects an expedited process compared to the process for hard armour projects such as seawalls and rip rap.

This checklist establishes the requirements for project applications to qualify for review under the **Nature-based shoreline project expedited process.** The checklist identifies project technical and design requirements for applicants for nature-based shoreline projects and will assist Crown Lands officers in evaluating applications more efficiently.

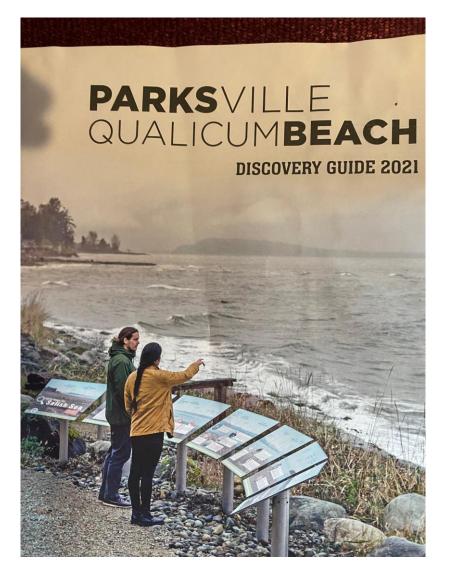
Note that this checklist is in addition to the general application requirements for all Crown land uses

https://www2.gov.bc.ca/gov/content/industry/crown-land-water/crown-land/crown-land-uses/residential-uses/residential and Nature-based shoreline project requirements do not affect the discretion of the Province to grant approval for any application. All blue font content can be found in the glossary of this document.

Public Consultation and Signage

- First Nations engagement: Songhees Nation and Esquimalt Nation
- Signage (preliminary; final)





Thank You! Questions?

