

Breaking Barriers:

Advancing nature-based solutions on the South Coast of British Columbia



Authors

Jessie R. Gomberg

Ph.D. Student Peter A. Allard School of Law The University of British Columbia

Kees Lokman

Associate Professor of Landscape Architecture University of British Columbia Living With Water

Vanessa Lueck

Researcher-in-Residence
Pacific Institute for Climate Solutions

Acknowledgments

The authors would like to thank Thy Huynh, Annabel van Eeten, Felicia Watterodt, Mika Davis, Bluedot Environmental, all workshop participants, Living With Water, and the Pacific Institute for Climate Solutions.

Suggested Citation

Gomberg, Jessie R., Lokman, Kees & Lueck, Vanessa. "Breaking Barriers: Advancing Nature-Based Solutions on the South Coast of British Columbia." Living With Water, Pacific Institute for Climate Solutions. September 25, 2025.

climatesolutions.ca

The Pacific Institute for Climate Solutions catalyzes and mobilizes research, partnerships, and knowledge that generate climate action. PICS is hosted and led by the University of Victoria, in collaboration with the University of British Columbia, Simon Fraser University, and the University of Northern British Columbia.









1. Introduction: A New Chapter for Climate Resilience

British Columbia's South Coast stands at a crossroads. Confronted by rising sea levels, intensifying storms, and the cumulative pressures of urban development, communities across the region are looking for adaptive solutions that go beyond conventional infrastructure. Nature-based solutions (NbS)—which harness the restorative power of ecosystems to manage water, stabilize shorelines, and improve climate resilience—are increasingly emerging as vital strategies.

Yet despite their promise, these approaches are not yet widely integrated into mainstream practice. This is not due to a lack of evidence or interest, but often reflects the complexity of existing regulatory systems, funding structures, and planning processes—which have historically been oriented toward engineered solutions. These systems, while effective in many contexts, can inadvertently limit opportunities to work with natural processes and to plan for long-term, landscape-scale resilience.

This report builds on a previous <u>Phase I investigation</u>, which identified key regulatory and equity-related challenges to implementing nature-based solutions across B.C.'s South Coast. That initial study offered a strong foundation by clarifying barriers and surfacing early ideas for change. This next phase moves from problem identification to the co-development of solutions. It is informed by the insights and experiences shared during a participatory workshop held March 7, 2025, which brought together 19 experts and practitioners from various sectors and levels of government.

The workshop discussions were constructive and grounded in practical experience, offering valuable insights into both persistent challenges and areas of opportunity. This report synthesizes those insights to outline potential next steps and identify key areas for coordination and improvement. The aim is to support ongoing efforts to enable the broader implementation of nature-based solutions across the South Coast.

2. Workshop Process

The March 7 workshop was designed as a space for iterative, participant-led exploration. Nineteen participants attended and contributed to the workshop's success. Structured around breakout discussions, it began first by exploring existing barriers to implementing NbS and second, by discussing solutions to overcome these barriers. This future-oriented framing grounded participants in possibility rather than limitation.

During the first half of the workshop, Jessie Gomberg gave a presentation summarizing key findings contained in the Phase 1 investigation report, encouraging participants to imagine the March 7 workshop as a springboard to further action. Mika Davis presented on regulatory processes involved in the Sturgeon Banks Sediment Enhancement Project, shedding light on the local context in B.C. where regulatory barriers have required particularized responses. The second half of the workshop invited participants to self-select into one of three focused conversations:

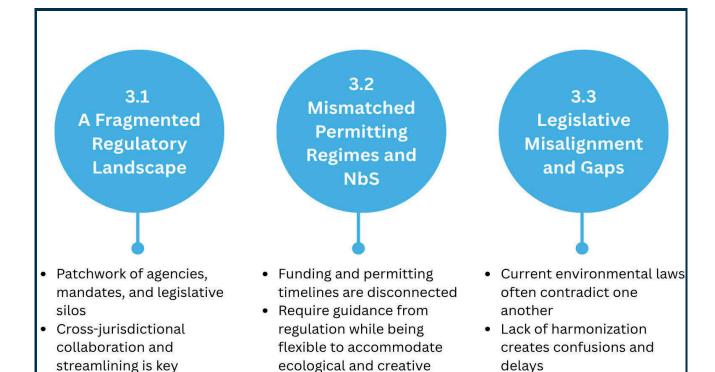
- **Permitting processes**: addressing inefficiencies, timelines, and cost burdens;
- **Outdated legislation**: examining existing laws that conflict with or inhibit NbS; and
- **Envisioning new legislation**: imagining forward-looking legal frameworks that could enable broader adoption.

This structure ensured both breadth and depth, allowing for creative problem-solving while drawing on participants' lived experiences. Importantly, the session also included space for collective reflection, reinforcing shared values and surfacing crosscutting insights.

3. What We Heard: Key Insights and Patterns

The workshop surfaced a number of clear and recurring themes—highlighting both persistent barriers and promising areas for progress. Despite participants' diverse backgrounds, there was strong alignment in the challenges they described and the aspirations they expressed for advancing nature-based solutions across British Columbia's South Coast.

In particular, three interrelated regulatory and legislative challenges stood out: the fragmentation of responsibilities across jurisdictions; permitting processes that are misaligned with the goals and timelines of ecological restoration; and legislative frameworks that are either contradictory or not fully equipped to support the unique needs of NbS. These issues contribute to uncertainty, delays, and a reliance on conventional approaches—ultimately hindering innovation and uptake.



The sections that follow synthesize key insights from the workshop discussions, offering a summary of participant observations and a reflection of their collective thinking on where coordination, policy adaptation, and regulatory improvement are most needed.

processes

3.1 A fragmented regulatory landscape

Participants described the current governance of NbS as a patchwork of agencies, mandates, and legislative silos. This fragmentation leads to duplication of efforts, inconsistent guidance, and an inability to coordinate across jurisdictions.

- "What would we like to see the estuary look like? Where do we go from here, and how do we want it to function? This could guide the permitting process."
- "We don't spend a lot of time aligning projects [...] Generally, governments have kind of moved away from that. Where I see projects being successful is where I see a plan arrived at where goals are already set."

There is little integration between federal, provincial, and municipal regulations. Jurisdictional overlaps lead to delays and conflicting approvals, while the absence of a centralized coordinating body or shared governance platform undermines momentum for implementation. There exists an opportunity for wider systems-

thinking within the current regulatory framework wherein NbS are prioritized and this is reflected through creative policy. Collaboration is a key component of successful regional uptake of NbS.

- "I don't understand why FREMP [Fraser River Estuary Management Program] was [cancelled] [...] It actually would allow everybody to talk to each other. I'd like to suggest something like that be done."
- >> "[For one project] we are having to amend a bylaw to change the zoning for this one project area which is problematic from the point of view for trying to do this anywhere else...it's just kind of a band-aid solution. We don't even have certainly if the by-law amendment will be accepted. There are also costs which basically negates the fact that we are trying to pay the homeowner through the small financial incentive. [We need to understand] that the project is for the greater good and overall what we're trying to accomplish."

3.2 Permitting processes are mismatched with ecological goals

Permitting regimes—designed primarily to prevent harm—are not set up to facilitate ecological restoration or process-based solutions. Instead of encouraging innovation, they often reinforce the status quo through overly cautious or restrictive interpretations.

- "It feels like a lot of the reviews focus on ensuring that projects don't have bad effects on the environment [...] I think it would be nice to see more [planning] work be done so that projects could be easily seen and evaluated through those plans as opposed to just what we are trying to avoid."
- "What I would like to see is nature-based solutions take priority over armouring. You should have to show that the armouring is required. We have to look at nature-based solutions first."

Funding and permitting timelines are disconnected such that proponents of NbS find themselves lacking sufficient information about process timelines to be able to properly allocate resources throughout the life of a project. To encourage widespread and successful adoption of NbS, project proponents must have clear and continuous guidance from regulation.

- "I think there are a lot of opportunities within regulators to streamline consultation [...] Early engagement and often engagement can help streamline that unknown consultation period which can be very vague."
- >> "A lot of [local governments] don't necessarily know the permitting timelines for things like archaeology and the capacity for Nations to engage and having the resources and staff to be able to respond to the referrals [...] It also lengthens the timelines for certain projects which can be a real limiting barrier when we have these funding windows that are three years and you have to finish the implementation in two years, but if you have an archaeology permit that doesn't go through, that can really delay the process, and the funding may not carry over."

Projects face lengthy timelines, high costs, and limited flexibility, particularly when attempting to scale beyond pilot phases. Participants underscored the need for a permitting framework that distinguishes between extractive and restorative practices, offering an expedited pathway for the latter. Expedited pathways ought not be so onerous that they undercut the success of NbS. In some cases, statutory decision makers ought to be allowed to exempt projects from certain permitting processes entirely if the project is consistent with the spirit of the governing legislation.

"Projects have restricted their footprints too high on the shoreline specifically to avoid triggering requirements of fisheries habitat permitting. We need to have some better way of compromising and understanding that nature-based solutions tend to have sometimes larger footprints if we are going to do them properly and done at scale."

Treating each project individually while keeping the spirit of governing legislation in mind will allow for the flexibility inherently involved in crafting creative NbS that aim to produce net positive results for the environment.

"It's a real challenge to try and change the scope and open peoples' minds. If natural processes are designed to come back, it'll be a lot more efficient and better for the environment."

3.3 Legislative misalignment and gaps

Current environmental laws often contradict one another or fail to account for the cumulative benefits of NbS. For example, a project may simultaneously need to comply with the Water Sustainability Act, the Riparian Areas Protection Regulation, and the federal Fisheries Act—each with different priorities and approval timelines.

The lack of harmonization creates confusion and delays, and, more fundamentally, signals that ecological restoration is not yet fully embedded in the legislative imagination. Even legislation with intent to promote NbS can contain provisions that overlook the complexities of complying with onerous provisions. The Environmental Assessment Act requires projects to have a detailed project description, for example, but negotiations involved in consulting stakeholders for a successful detailed project description can take approximately one year. Legislative intent is therefore misaligned with the timing impediment that exists as a barrier to efficiently implementing NbS.

- "The province sometimes is more complex than the federal government. This inhibits innovation in terms of supporting nature-based solutions and co-benefits."
- >> "One of the biggest challenges I experience is confusion [or] overlap between different regulatory instruments [...] One of the big ones is what information belongs in permitting versus what information belongs in an [Environmental Assessment]?"
- >> "Our whole regulatory umbrella is set up under old school thinking."

4. Opportunities for Transformation

4.1 Directions and recommendations

Building on the challenges identified during the workshop, participants offered a series of high-level recommendations to support more effective, equitable, and widespread implementation of nature-based solutions. While the barriers are complex, many are deeply interconnected—suggesting that progress will depend on coordinated, system-wide responses. The following policy recommendations reflect areas where focused effort and collaboration could generate meaningful change.

Recommendation #1

Create a **clear and coordinated permitting framework** that demystifies the permitting process, clarifies roles and timelines, and illustrates successful pathways forward.

Recommendation #2

There is need for **governance renewal**, not only to facilitate inter-agency coordination, but also to provide continuity and long-term visioning.

Recommendation #3

Language shapes outcomes. Policymakers must acknowledge **how NbS are being framed** in policy in an effort to increase acceptance and
normalization of NbS.

Recommendation #4

Central to all of this is **long-term funding**. Funding streams should reflect the true time horizons of ecological processes.

Recommendation #5

Transformation is not possible without **centering Indigenous Knowledges and jurisdictions**. Law and policy makers ought to recognize Indigenous communities, legal systems, and worldviews as equal decision-makers.

Recommendation #1:

The most immediate opportunity lies in creating a **clear and coordinated permitting framework**. A comprehensive guide that demystifies the permitting process, clarifies roles and timelines, and illustrates successful pathways could empower communities, First Nations, and practitioners alike. However, guidance alone is insufficient. Flexibility must also be embedded in law. Amendments to the Environmental Assessment Act, participants noted, could allow for case-specific assessments of ecological restoration projects—recognizing that these initiatives pose unique opportunities, not just risks.

>> "These rules are in place for specific reasons [...] but the Fraser River is a very different specific place. Being able to navigate through the regulations and having these exemptions based on different conditions [is important]. Yes, that was created to be a protective mechanism, but in the grand scheme of things, it's actually detrimental."

Recommendation #2:

Alongside these regulatory reforms, there is a critical need for **governance renewal**. Participants called for a revived regional planning body—modeled on the Fraser River Estuary Management Program—that could unify federal, provincial, municipal, and Indigenous efforts under a shared mandate. "FREMP 2.0" would not only facilitate inter-agency coordination but also provide continuity and long-term visioning.

"I would love to see some legislation or some sort of working group that helps streamline some of those [regulatory] processes for us. Let's think bigger picture and think how we can make [streamlining between bigger levels of government and different departments happen] on a grander scale."

Recommendation #3:

Reform must also extend to how NbS is framed in policy. **Language shapes outcomes**. By redefining NbS as essential infrastructure within legislation and planning documents, governments can signal their priority and shift investment accordingly. In turn, this could help cultivate a cultural shift that supports broader acceptance and normalization of NbS in both policy and practice.

>> "Nature-based solutions are really interesting at a federal and provincial level, but nobody knows how to talk about them."

Recommendation #4:

Central to all of this is long-term funding. Without stable, multi-year financial support, NbS cannot be maintained or monitored over time. Participants emphasized the need for funding streams that reflect the true time horizons of ecological work.

>> "The longer something takes, the more it costs. On major projects, it's a big deal... every month, it's [about] \$200 million in escalation cost."

Recommendation #5:

Finally, none of this transformation is possible without **centring Indigenous Knowledges and jurisdiction**. Supporting Indigenous Nations to lead NbS projects means recognizing their legal systems, funding their initiatives, and including them as equal decision makers in governance structures.

"The duty to consult properly in B.C. is really foundational to any of these successes. Making sure local governments and proponents know that [up front] is probably most essential in terms of barriers and solutions."

4.2 Next steps: Building momentum through action

To support the implementation of nature-based solutions, several potential actions emerged from the synthesis of workshop discussions and related research. These ideas are intended to spark further dialogue and collaboration among governments, communities, and practitioners.



Developing a regulatory toolkit to support communities and project proponents in navigating exsisting systems



Drafting legislative amendments to enable more flexible and restorative permitting mechanisms.



Establishing an intergovernmental working group to identify priorities, support scalability, and enhance cross-sector coordination.



Advancing a policy paper advocating for long-term funding models to shift towards sustained investment in nature-based solutions.

One near-term opportunity is the **development of a regulatory toolkit** to help communities and project proponents navigate existing systems while broader reforms are underway. This could include step-by-step guidance, example exemptions, key contacts, and model approaches to risk assessment.

In parallel, **drafting legislative amendments** could support more flexible and restorative permitting mechanisms. Early attention might focus on the Environmental Assessment Act and related policies that present barriers to beneficial projects.

There is also value in **convening an intergovernmental working group** to identify shared priorities, improve coordination, and support integration across jurisdictions and sectors—particularly where efforts are currently siloed.

Finally, **advancing a policy paper on long-term funding models** could help shift funding approaches toward sustained investment. Drawing inspiration from other jurisdictions, such a paper could outline pathways for aligning financial mechanisms with the time horizons of ecological restoration.

Conclusion: Aligning Regulation with Nature-Based Approaches

As climate risks intensify along the South Coast of British Columbia, nature-based solutions offer a practical and adaptable path forward—working with natural systems to strengthen both ecological and community resilience. Realizing their full potential, however, requires enabling conditions: clearer permitting frameworks, more flexible legislation, sustained funding, and renewed coordination across jurisdictions.

This report, grounded in the March 2025 workshop, highlights a set of interconnected shifts that can help support wider adoption of NbS. These include streamlining regulatory processes, updating policy tools, investing for the long term, and creating collaborative governance structures. Central to this effort is the recognition that Indigenous knowledge, leadership, and legal systems must be foundational to any path forward.

The workshop offered a shared space to explore challenges, surface ideas, and build alignment. Turning these insights into action will take continued collaboration, openness to new approaches, and a commitment to long-term thinking. With shared effort, British Columbia is well positioned to make significant advances in embedding nature-based solutions within the systems that shape its future.