

# PROVINCIAL PERMITTING FOR RESTORATION IN CANADA: PROCESSES AND CHALLENGES

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Disclaimer: The opinions expressed in this report are those of the authors and do not necessarily reflect the views or positions of WWF-Canada.

# SUMMARY

Ecological restoration is a vital response to the global biodiversity and climate crises. The Government of Canada has committed to bringing at least 19 million hectares of degraded and deforested landscapes under restoration by 2030, while several provinces and territories have made their own commitments to nature protection and restoration. Indigenous governments and Peoples have stewarded the lands and waters since time immemorial and are leaders and knowledge holders driving many restoration processes. While the science is clear that restoration is a critical tool to reverse the trend of biodiversity loss and address climate change, permitting processes are widely acknowledged to be a barrier to scaling up restoration work. Many levels of government may have jurisdiction over areas where restoration projects take place, creating complex permitting landscapes. In Canada, provincial and territorial governments play a key role in land-use planning and natural resource management as 76% of the country's landmass is under their jurisdiction. Provincial engagement is therefore essential to meaningful environmental restoration efforts at scale for degraded ecosystems. This report explores the permitting landscapes in two provinces, British Columbia (BC) and Nova Scotia (NS), with a focus on coastal restoration, identifies common challenges faced by restoration practitioners, and highlights ways in which current processes could be improved to facilitate the implementation of restoration projects. Interviews with restoration practitioners in these provinces revealed some common challenges, including a lack of specialized permits for projects that seek to benefit the natural environment, permitting timelines that are incompatible with funding cycles and implementation, and issues with access to information and permit approvals staff. This evaluation highlights a clear need for improvements. Recommendations include

- prioritization of environmental restoration projects, and streamlined permitting pathways;
- having ecological restoration specialists within reviewal departments;
- improved accessibility to approvals staff and information to ease navigation of the permitting process.

While permitting is certainly not the only challenge to scaling up restoration work, issues with existing processes are evident. Addressing these permitting challenges in a timely manner could expedite restoration work at the scale needed to tackle biodiversity loss and help governments meet their restoration commitments under international agreements.

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# BACKGROUND

## INTERNATIONAL LANDSCAPE

International agreement has been reached that restoration practices are a vital response to the ongoing biodiversity crisis. The United Nations recognize 2021–2030 as the Decade on Ecosystem Restoration<sup>1</sup>, and released a call for the world to “prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean.” Alongside this call, the UN published a Beginner’s Guide to Ecosystem Restoration<sup>2</sup> in 2021 to kickstart the environmental movement.

The *Kunming-Montreal Global Biodiversity Framework* (GBF)<sup>3</sup> is a recent global framework that introduces new and specific international targets for environmental conservation and the restoration of degraded areas. It was developed at the fifteenth meeting of the Conference of the Parties (COP 15) to the *Convention on Biological Diversity* and was adopted in 2022. The GBF consists of four international goals for 2050 and 23 global targets for 2030. These targets include conserving 30% of land and waters, completing or beginning the restoration of 30% of degraded areas, and bringing human-induced species extinctions to zero. COP 15 recognized that policy action is required globally, regionally, and nationally to allow for the recovery of natural ecosystems, with net improvements by 2050. Specifically, **Target 2** of the GBF states that “by 2030 at least 30 percent of areas of degraded terrestrial, island water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.”

## CANADA’S COMMITMENTS TO RESTORATION AND IMPLEMENTATION OF THE GBF

Canada is a signatory to the GBF and *Canada’s 2030 Nature Strategy* was developed to address the GBF’s targets and goals in Canada<sup>4</sup>. Within the *Nature Strategy*, Canada recognizes it is “no exception to these trends” when looking at the extent of the global biodiversity crisis.

Canada has also pledged to join the Bonn Challenge<sup>5</sup>, a global initiative aimed at bringing 350 million hectares of degraded and deforested landscapes under restoration by 2030. Specifically, Canada has made an initial pledge to restore at least 19 million hectares through federal programs managed by Environment and Climate Change Canada (ECCC), Parks Canada, and Natural Resources Canada (NRCan) that support on-the-ground landscape and ecosystem restoration activities. However, a number of challenges are recognized by the federal government:

- Canada currently does not have a national definition for key terminology in Target 2, notably, “degraded areas” and “effective restoration”;
- information on restoration efforts is currently fragmented and dispersed among numerous organizations. Establishing a common platform to pull together information from various sources would facilitate information exchange, foster collaboration, promote strategic planning and implementation, and streamline the reporting process;
- organizations have called for additional guidance from the federal government on how to prioritize restoration activities and degraded areas.

The Government of Canada has committed to

- restoring degraded areas;
- investing in ecosystem restoration action;
- undertaking science and research on effective restoration;
- preventing and mitigating degradation through existing regulatory and policy frameworks.

Provincially, both Nova Scotia and British Columbia have signed Nature Agreements<sup>6,7</sup> with Canada. Specific to the coastal zone, BC published its *BC Coastal Marine Strategy* in 2024, highlighting restoration work as a key activity to support the Strategy's Theme 1: Healthy Coastal Marine Ecosystems. NS passed its *Coastal Protection Act* in 2019 and was developing regulations to accompany the Act before abandoning it in 2024 in favor of an action plan. While the *Coastal Protection Act* would have provided some protection from development for coastal wetlands, the action plan more limitedly suggests providing guidance on incorporating protection into municipal by-laws.

Many municipalities across Canada have made commitments to halt and reverse nature loss. For example, at COP 15, Montreal invited cities to commit to taking tangible action to protect biodiversity. Twenty-three Canadian cities signed the *Montreal Pledge*<sup>8</sup>, including Vancouver, BC. Additionally, Vancouver has endorsed the *Edinburgh Declaration*<sup>9</sup>, which recognizes the important role of local and sub-national governments in implementing the GBF at the local level.

## GOVERNANCE AND RESTORATION IN CANADA

Canada's *Nature Strategy*<sup>10</sup> acknowledges that managing the conservation and sustainable use of biodiversity is a shared responsibility in Canada. The strategy states the need for a whole-of-government approach as one of the six pillars to "ensure our path to 2030 is inclusive, adaptable, and evidence based." It also recognizes that embracing the leadership of Indigenous communities is key to effective action and ongoing reconciliation efforts.

As estimated by the Government of Canada, federal lands account for only 6% of Canada's landmass, while 76% are provincial and territorial, 6% are Indigenous owned, and 12% are under private ownership<sup>10</sup>. Provincial and territorial leadership and ambition will therefore be essential to meaningful environmental restoration efforts at scale and successfully achieving the goals of the *Nature Strategy*.

The following text, from *Canada's 2030 Nature Strategy*, provides a snapshot of the various rights holders and levels of government within Canada who may have jurisdiction over specific areas where restoration projects take place.

- **Indigenous governments and Peoples** are Rights holders and landowners, and honour their responsibilities to the lands, waters, and ice of their territories through stewardship and the keeping of Indigenous Knowledge systems. They are essential leaders, experts, and partners in conservation and stewardship. Crown governments share with Indigenous Peoples treaty responsibilities to steward the lands and waters within the context of biodiversity protection and conservation in a way that respects Indigenous Peoples' rights.
- The **federal government's** responsibilities, among many, include migratory birds, species listed under the *Species at Risk Act* (SARA), ocean management, and international trade of wild species. It shares responsibility for fisheries management, aquatic species, and pollution prevention, and plays an important role in scientific research, monitoring, and the sustainable development of natural resources.
- **Provincial and territorial governments** have a critical leading role to play in wildlife and habitat management, including responsibility for terrestrial species on provincial Crown land. They also play a key role in natural resource development and stewardship and land-use planning over most of Canada's land and coastal areas.
- **Municipal governments** have a direct connection to Canadians, are instrumental in connecting them with nature, and are important land managers, local experts, and land-use planners.

Crown government authorization for restoration work in the coastal zone depends on the nature and location of the activities and various permits and approvals may be required under federal, provincial, and municipal laws. Permitting timeframes and complexity are often cited as barriers to timely restoration work. Here, we explore the permitting landscapes in two provinces and ways in which current processes could possibly be improved to facilitate the implementation of restoration activities that contribute to national restoration commitments.

# PROVINCIAL PERMITTING PROCESSES FOR ENVIRONMENTAL RESTORATION

## NOVA SCOTIA

### KEY AUTHORITIES

#### *Government Departments*

The Nova Scotia (NS) Department of Environment and Climate Change (ECC) is responsible for enforcing environmental protection laws and oversees environmental assessment of proposed projects. This department is a key contact if restoration projects impact wetlands, shoreline areas, or water bodies, or if projects are extremely large in scale.

Key Permits:

- Environmental Assessment
- Water Allocation (Storage, Diversion, Withdrawal)
- Wetland Alteration

The NS Department of Natural Resources and Renewables (DNR) is involved in management of the province's natural resources. The DNR is a key contact if restoration projects involve vegetation management, forestry, or habitat restoration.

Key Permits:

- Crown Land Permits
- Wildlife permits (including the Scientific Permit)

#### *Key Legislation*

The following Acts are common legislative authority under which permits would be required for restoration activities in NS.

- [Crown Lands Act](#)
- [Environment Act / Regulations](#)
- [Wildlife Act / Regulations](#)
- [Environmental Goals and Climate Change Reduction Act](#)
- [Endangered Species Act / Regulations](#)
- [Wildlife Habitat and Watercourses Protection Regulations](#)
- [Sanctuary and Wildlife Management Area Regulations](#)

## GOVERNMENT COMMITMENTS

The ECC and DNR published a *Collaborative Protected Areas Strategy*<sup>11</sup>, an action plan for protecting 20 per cent of provincial lands and water by 2030. The plan recognizes restoration as a “foundational ecological priority” when identifying sites for long-term protection on provincially administered lands.

In 2022, ECC also published *Our Climate, Our Future: Nova Scotia’s Climate Change Plan for Clean Growth*<sup>12</sup>. Within the summary of actions in response to climate impacts, the province commits to minimizing climate impacts by restoring natural areas and ecosystems. Commitment #15 within Appendix A states that NS will “invest in ecosystem-based responses like coastal wetland restoration to help manage flooding.”

## PERMITTING FRAMEWORK AND PROCESSES

The *Environment Act*, and its *Regulations*, is the main legal authority for most provincial environmental approvals in Nova Scotia. It is regulated and administered by ECC. The purpose of the *Environment Act* is to promote protection and prudent use of the environment. This notably includes maintaining and restoring ecological processes and biological diversity. The Act does this through

- environmental assessment for large-scale projects, and
- operational approvals for activities listed within the *Activities Designation Regulations*.

There are three primary regulations of note:

1. *Environmental Assessment (EA) Regulations*  
Describe the projects that require an environmental assessment approval process;
2. *Activities Designation Regulations (ADR)*  
Describe which activities require operational approvals;
3. *Activities Designation Regulations (ADR)*  
Describe what information must be submitted and the approval process.

For greater clarity, ECC has published a useful presentation outlining their environmental regulatory approval process<sup>13</sup>, (Figure 1).

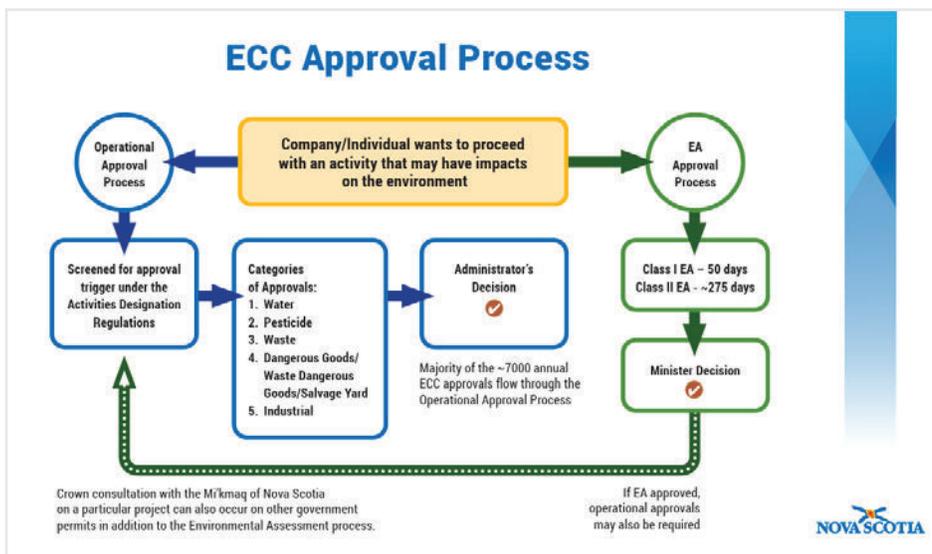


Figure 1. Overview of environmental regulatory approval processes. Source: Nova Scotia Department of Environment and Climate Change (ECC) © Government of Nova Scotia.

## Environmental Assessment (EA) for Large-Scale Projects

The Environmental Assessment process is generally not necessary for restoration projects (see Box 1).

### Qualifying Activities

This scheme is targeted towards large-scale industrial undertakings that have the potential to cause significant environmental impacts. A list of activities that require environmental assessment is listed in Schedule "A" of the *Environmental Assessment Regulations*, divided into Class 1 and Class 2. Though unusual, there is the possibility that environmental restoration may require environmental assessment if it involves large-scale development in wetlands, i.e., under Schedule A, Class 1, F of the *Environmental Assessment Regulations*, an Environmental Assessment is required if either of the following conditions are met:

1. an undertaking that involves transferring water between drainage basins, if that drainage area containing the water to be diverted is larger than 1 km<sup>2</sup>;
2. an undertaking that disrupts a total of 2 ha or more of any wetland.

Work can begin on an undertaking only when the Minister grants an Environmental Assessment approval, and all other necessary approvals, permits, or authorizations required by municipal, provincial, and federal acts, regulations, by-laws, guidelines, policies, or standards are acquired.

### Time and Estimates

In terms of time, the NS government estimates that "a Class 1 environmental assessment typically takes 50 calendar days of process time to complete. However, the assessment may be extended if the Minister decides that more information, a focus report or an environmental assessment report is required. The amount of time it takes the proponent to prepare the registration document will depend on the complexity of the undertaking and the amount of information already available."

## Box 1. NS Environmental Assessment or Operational Approval Processes?

### Environmental Assessment

Large-scale projects in wetlands that involve transferring water between drainage basins, if the drainage area containing the water to be diverted is larger than 1 km<sup>2</sup>, or disrupts a total of 2 ha or more of any wetland.

Guide

[https://novascotia.ca/nse/ea/docs/EA\\_Guide-Proponents.pdf](https://novascotia.ca/nse/ea/docs/EA_Guide-Proponents.pdf)

Fee schedule

<https://novascotia.ca/nse/ea/docs/EAFeeSchedule.pdf>

### Operational Approvals

*Approval* is required for altering a watercourse, a water resource, or a wetland, unless this requires *Notification* or is exempt under the Act (5A(2)).

*Notification* is required for work to improve fish habitat between June 1 and September 30 that involves altering a watercourse for 15 m or less.

Permits and forms

[https://novascotia.ca/nse/resources/permits.asp#nse\\_approvals](https://novascotia.ca/nse/resources/permits.asp#nse_approvals)

## Assessment Process

Should environmental assessment be required, then the restoration practitioner must submit copies of the registration document to the Environmental Assessment Branch within ECC. This will be distributed to government reviewers. Review by some interest groups and First Nations may be required, and public access to the document will be provided, with a review period of 30 days. Following the review period, the Environmental Assessment Branch will provide the Minister with a report summarizing the issues and make a recommendation for the Minister's consideration. The Minister must provide the proponent with a decision in writing.

The Minister has the following decision options:

- a) additional information required;
- b) undertaking is approved;
- c) undertaking is rejected;
- d) focus report required; or
- e) environmental assessment report required.

The following information will be considered by the Minister when making their decision regarding the proposed undertaking:

- the location and the nature and sensitivity of the surrounding area;
- the size, scope, and complexity of the undertaking;
- concerns expressed by the public and the Mi'kmaq of Nova Scotia about adverse effects;
- steps taken by the proponent to address environmental concerns expressed by the public and the Mi'kmaq of Nova Scotia;
- whether environmental baseline information submitted for the undertaking is sufficient for predicting adverse effects or environmental effects related to the undertaking;
- potential and known adverse effects or environmental effects, including identifying any effects on species at risk, species of conservation concern, and their habitats;
- project schedules where applicable;
- planned or existing land use in the area of the undertaking;
- other undertakings in the area;
- whether compliance with licenses, certificates, permits, approvals, or other documents of authorization required by law will mitigate the environmental effects;
- such other information as the Minister may require.

Under Section 138(2) of the *Environment Act*, a decision of the Minister to approve or reject an undertaking for environmental assessment cannot be appealed.

### **Operational Approvals for Restoration Work**

More commonly, restoration projects may require approval from ECC, who have published an [Operational Approval Infographic](#) to provide information about the approval process.

## Qualifying Activities

The Nova Scotia [Activities Designation Regulations](#) provide a list of which activities require approval from the Minister, or written notification. There are five categories of activities:

1. Division I – Water
2. Division II – Pesticide
3. Division III – Municipal Waste
4. Division IV – Dangerous Goods / Waste Dangerous Goods / Salvage Yard
5. Division V – Industrial

Many instances of coastal restoration work will fall under **Division I (Water)** and would then require either approval or notification:

- **Approval** is required for altering a watercourse, a water resource, or a wetland, unless such alteration instead requires notification or is exempt under the Act (5A(2))
- **Notification** would be required for work to improve fish habitat between June 1 and September 30 that involves altering a watercourse for 15 m or less (5B(1)(a)).

The specific process for operational approvals and notifications is outlined in the [Approval and Notification Procedure Regulations](#). The extensive requirements for an approval application form are in section 1(6) of these regulations, and the procedure for submitting notification is under section 24. Note: there is little to no language within these regulations that provides special or unique consideration for ameliorative projects aimed at environmental restoration.

ECC provides [permits and forms for Environmental Approval Applications](#) under each of the five categories. The permits and forms most applicable for restoration practitioners are the Watercourse Alteration Approvals and Wetland Alteration Approvals (see Box 2). None of the forms are specifically or exclusively for environmental restoration activities.

### **Common Permits and Forms for Restoration Practitioners**

#### Watercourse Alteration Approvals or Notifications

Restoration activities that require Approval under *Activities Designation Regulations: Division I – Water* require an [approval application form](#) and [submission checklist](#). Approvals are valid until the expiry date issued on the approval. If a Notification is required instead, a [notification form](#) must be submitted. Notification projects must be completed between June 1 and September 30.

Approvals or notifications for watercourse alteration activities are not required when

- maintaining lands and structures by marsh bodies incorporated under the *Agricultural Marshland Conservation Act*; or
- maintaining alterations or structures associated with watercourse alteration activities, if the work is done above the ordinary high-water mark; or alterations that do not disturb the bed or bank of the watercourse or the flow of water in the watercourse.

All alterations planned for a project surrounding a watercourse must also abide by the NS [Watercourse Alterations Standards](#).

## Box 2. Nova Scotia ECC: Common Forms for Restoration Practitioners

### Operational Approval Process Infographic

<https://novascotia.ca/nse/dept/docs/EA%20Timelines%20Presentation%20Slide%2010D.pdf>

### Watercourse Alteration

#### *Watercourse Alterations*

#### Submission Requirements

<https://novascotia.ca/sns/paal/nse/paal181.asp>

#### *Water Allocation (Storage, Diversion or Withdrawal)* Submission Requirements

<https://novascotia.ca/sns/paal/nse/paal182.asp>

#### Water Approval Application Form

<https://novascotia.ca/nse/water/docs/Application-WaterApproval.pdf>

#### Water Approval Submission Checklist for Watercourse Alteration

<https://novascotia.ca/nse/water/docs/Application-WaterApproval-Checklist.pdf>

#### Estimated waiting period

Approvals: 60 business days or less

Notifications: 5 days after receipt of a completed notification form

### Wetland Alteration

#### Submission requirements

<https://novascotia.ca/sns/paal/nse/paal586.asp>

#### Wetland Alteration Approval Application Form

[https://novascotia.ca/nse/water/docs/Wetland\\_Alteration\\_Application\\_Approval.pdf](https://novascotia.ca/nse/water/docs/Wetland_Alteration_Application_Approval.pdf)

#### Wetland Alteration Approval Submission

Checklist [https://novascotia.ca/nse/water/docs/Wetland\\_Alteration\\_Application\\_Checklist.pdf](https://novascotia.ca/nse/water/docs/Wetland_Alteration_Application_Checklist.pdf)

Estimated Waiting Period: 60 days (unless Environmental Assessment Process is triggered)

Price: \$311.45 (additional costs if Environmental Assessment Process is triggered)

## Wetland Alteration Approvals

ECC requires a different approval form and process for those seeking Wetland Alteration Approval (Box 2). More information regarding Wetland Management is also contained within the [Nova Scotia Wetlands Conservation Policy](#), including the scope of what constitutes a wetland, and which kinds of wetland require approval to alter. Activities requiring approval include, but are not limited to, infilling, excavating, draining, or flooding of wetlands. Within the application form, there are sections for two different site types: alteration or compensation. Compensation sites include restoration, enhancement, creation, expansion, research, study, or educational uses of the wetland. Based on project size, either a simplified or standard application will be required, under the direction of the Inspector (see Box 3).

Before submitting an application, applicants meet with the local NS ECC Inspector who will ask various questions about the site and may require a site visit. It is suggested that applicants come prepared with photographs of the site, a location description (with maps if available), and a basic description of the proposed project.

### Box 3. Application types and criteria for wetland alteration

- Simplified Application (Alterations smaller than 0.5 ha to a single wetland)
- Standard Application (Alterations between 0.5 and 2.0 ha and any alteration that affects more than one wetland)

If the expected impact to wetlands is larger than 2 ha, it will be referred to the Environmental Assessment Process.

## Special Considerations

### Working in Wilderness and Protected Areas (ECC)

ECC has a Protected Areas Branch, which is responsible for planning and managing Nova Scotia's [Wilderness Areas](#), [Nature Reserves](#) and [Heritage Rivers](#). Wilderness areas are significant natural areas designated under Nova Scotia's *Wilderness Areas Protection Act* and administered by ECC. Within the Province's more than 70 [Wilderness Areas](#)

- commercial resource development, such as forestry, energy infrastructure, and road building, is not permitted;
- other activities, such as vehicle use, building structures or trails, and damaging or removing plants are also prohibited, except in certain circumstances;
- scientific research is encouraged, provided research activities do not degrade a wilderness area.

A licence is required to conduct research or conservation work in wilderness areas. To obtain a licence, practitioners must contact the ECC [protected areas ecologist](#).

### Crown Land (DNR)

Crown land is owned by the Province and managed by the DNR. It is defined as all or any part of the land under the administration and control of the DNR. This includes most of the submerged land around Nova Scotia. An [application](#) is required for environmental restoration work on Crown land. There is a single application form for use by individuals, registered companies, registered societies, and municipalities seeking to use, sell, or donate Crown land to the Province. All applicants are required to prepare a [site map](#).

The Province owns other land across NS, including wilderness areas, protected areas, highways, roads, and provincial buildings. These parcels and structures are managed and administered by other departments and are not considered Crown land.

### Wildlife (DNR)

DNR is charged with permitting related to activities concerning wildlife. If restoration practitioners will be interacting closely with wildlife during their project, or need to keep them in captivity, certain permits may be required under the [Wildlife Act](#) (see Box 4).

#### Box 4. Permits for Possession of Live Wildlife (DNR)

- [Captive Wildlife Permit](#)  
To keep live wildlife, either native or "exotic" (i.e., not native to NS), in captivity in NS.
- [Endangered Species Permit](#)  
To conduct research on a species listed under the NS Endangered Species Act Regulations or anyone with a health or safety concern associated with a listed species. For more information: see Section 14 of the [Nova Scotia Endangered Species Act](#).
- [Rehabilitation Facility Operation](#)  
Registration of a facility to rehabilitate sick, injured or orphaned wildlife that has been brought in by the public or government officials.
- [Scientific Permit: Wildlife](#)  
Permit to hunt, capture, or export wildlife animals, nests, or eggs that may not otherwise be legally taken in NS.

## Municipal Approvals

Municipal approvals may be required depending on the municipality in which restoration practitioners plan to work, even if conducting work on privately owned land. For example, Lunenburg has adopted new [Coastal Protection Regulations](#)<sup>14</sup> that affect development proposed within a Designated Coastal Protection Area. The [Municipal-wide Land Use By-Law](#)<sup>15</sup> identifies development setbacks that are tied to different areas within the Designated Coastal Protection Area, and prohibit development within 30 metres of coastal wetlands. Setbacks also limit how much coastal vegetative buffer can be cleared from private property.

## IDENTIFIABLE ISSUES / PRACTITIONER INSIGHTS & CONCERNS

The following challenges and concerns were identified by restoration practitioners in NS.

### Specialization

The same application package and process is used for a wide range of activities (Figure 2) with no separate application pathway available for restoration practitioners for projects that seek to benefit the health and well-being of the natural environment.

**Section 4 - Activity**

Proposed Activities - Check (✓) all that apply

Activity	Complete Sections	Activity	Complete Sections
<input type="checkbox"/> Boat launch	5A, 6A	<input type="checkbox"/> Removal of beaverdam	5G, 6A
<input type="checkbox"/> Bridge/open bottom structure	5B, 6A	<input type="checkbox"/> Removal of material	5D, 6A, 6D
<input type="checkbox"/> Culvert/closed bottom structure	5C, 6A	<input type="checkbox"/> Storage of water	5H, 6A, 6B
<input type="checkbox"/> Dam	5A, 6A	<input type="checkbox"/> Water intake/dry hydrant	5I, 6A
<input type="checkbox"/> Dredging	5D, 6A	<input type="checkbox"/> Watercourse diversion	5D, 6A
<input type="checkbox"/> Erosion protection	5E, 6A	<input type="checkbox"/> Water withdrawal	5J, 6A, 6C
<input type="checkbox"/> Instream structure	5E, 6A	<input type="checkbox"/> Wharf	5A, 6A
<input type="checkbox"/> Pipeline or other utility	5F, 6A	<input type="checkbox"/> Work to improve fish habitat	5K, 6A

Other Alteration       Yes     No      If yes, complete Section 5L.

Variance requested?     Yes\*    No      \*If yes, fill out a request for variance form.

Is this a Pilot Activity?     Yes     No

Figure 2. Proposed activities checklist. Source Application for Approval Division I - Water. Nova Scotia Department of Environment and Climate Change (ECC) © Government of Nova Scotia.

Staff assessing environmental remediation projects are often not knowledgeable about the nature of ecosystem restoration. These projects are complex, and practitioners are often asked to provide additional information when submitting applications, which results in excessive delays. Permitting staff may also lack knowledge about the potential restorative and ameliorative effects of projects. The considerations for whether or not to approve restoration projects should be different to those for harmful building activities.

### ***Timing***

Permitting timelines are not compatible with restoration work. Practitioners are seeing wait times in excess of three months for permit approval. Restoration activities are often seasonal and permits are only useful if available before the end of the season. Permits given based on information for one year may not be useful for implementation of activities the following year.

### ***Prioritization***

NS ECC has no prioritization process for permit approvals. As there is no special pathway for ameliorative projects, all permit approvals are simply done in the order they are received, regardless of whether they are particularly time-sensitive or might be considered more important due to the nature of the work. When local teams are specifically advised to prioritize a project, permits are approved quickly, so a prioritization process is possible

### ***Access to Information***

Lack of access to information and permit approvals staff is a concern. There is no government-provided site that compiles probable permit requirements for environmental restoration projects within the Province. Additionally, government websites are disjointed, sometimes have broken permit links, and permits are not all condensed on one site. The most common complaint from practitioners is receiving no reply when submitting questions. Other issues are the unresponsiveness of departments in general and an inability to reach any point of contact to discuss prohibitive issues with the process.

# BRITISH COLUMBIA

## KEY AUTHORITIES

### *Government Departments*

#### Ministry of Environment and Parks

The Ministry of Environment and Parks is responsible for the protection, management, and conservation of BC's water, land, air, and living resources. The ministry administers the Province's parks and protected areas, recreation sites, and trails; monitors and enforces compliance with environmental laws and regulations; manages discharge to the environment from human activities; protects BC's biodiversity, ecosystems, native species, and natural habitats in parks and protected areas; and administers the provincial environmental assessment process through the Environmental Assessment Office.

Within the Ministry's [2025/26–2027/28 Service Plan](#)<sup>16</sup>, a key strategy to achieve the Ministry's goal of effective protection of the environment is

- “Work across the ministry and the Natural Resource Sector, and with First Nations and stakeholders, to implement service transformation initiatives to streamline permit application, submission and reporting, while upholding environmental protection. continue to engage with First Nations to incorporate Indigenous knowledge and perspectives into service and digital transformation initiatives.”

#### Ministry of Water, Land, and Resource Stewardship

The Ministry of Water, Land, and Resource Stewardship (WLRS) is accountable for integrated land and natural resource management, including objective setting for land and marine environments, effectively managing cumulative effects, and advancing reconciliation with Indigenous Peoples, environmental sustainability, and economic growth. WLRS works with other natural resource sector ministries to achieve BC's goals of reconciliation, economic development, and environmental sustainability.

WLRS is directly responsible for the effective development of water, land, and marine use policy and planning as well as biodiversity and ecosystem health, species-at-risk policy and program management, and developing a new vision for water, land, and resource management with First Nations. The ministry is responsible for the administration of water, lands, fish, and wildlife, while also directing work across natural resource ministries to develop solutions for sector-wide challenges in permitting, policy, data, and technology and improving the management of cumulative effects. WLRS is the lead on flood, drought, landslides, and dams and dikes.

Within the WLRS [Service Plan](#),<sup>17</sup> objective 2.3 is to advance permitting solutions that increase predictability, transparency, and public trust in the permitting regime. A key strategy is to “Reduce permitting backlogs across the natural resource sector through legislative, policy, and systems changes.” The ministry has largely focused on making the permitting process more accessible via [Permit Connect BC](#), which provides a navigator service for Electrification, Connectivity, and Housing permit processes.

#### Ministry of Forests

The Ministry of Forests (MOF) is responsible for supporting a sustainable and competitive future for BC's forest sector, while taking action to keep forests healthy and protect communities in the face of climate change and extreme weather events. MOF provides collaborative management of forest, range, and archaeological resources, supporting BC's forest sector, and leading BC's wildfire response and mitigation.

## Key Legislation

Key legislation under each of these ministries that is applicable to coastal restoration is outlined in Table 1.

Table 1. Key legislation in BC that may be applicable to coastal restoration projects

<b>Ministry of Water, Land and Resource Stewardship</b>
<a href="#">The Creston Valley Wildlife Act</a>
<a href="#">Dike Maintenance Act</a>
<a href="#">Drainage Ditch and Dike Act</a>
<a href="#">Environment and Land Use Act</a>
<a href="#">Flathead Watershed Area Conservation Act</a>
<a href="#">Forest and Range Practices Act</a>
<a href="#">Land Act</a>
<a href="#">Land Title Act</a>
<a href="#">Libby Dam Reservoir Act</a>
<a href="#">Ministry of Lands, Parks and Housing Act</a>
<a href="#">Ministry of Environment Act</a>
<a href="#">Ministry of Forests and Range Act</a>
<a href="#">Muskwa-Kechika Management Area Act</a>
<a href="#">Skagit Environmental Enhancement Act</a>
<a href="#">Water Protection Act</a>
<a href="#">Water Sustainability Act</a>
<a href="#">Water Users' Communities Act</a>
<a href="#">Water Utility Act</a>
<a href="#">Wildlife Act</a>
<b>Ministry of Forests</b>
<a href="#">BC Wildfire Regulation</a>
<a href="#">Forest Act</a>
<a href="#">Forest Practices Code of British Columbia Act</a> (largely replaced by Forest and Range Practices Act)
<a href="#">Forest and Range Practices Act</a>
<a href="#">Heritage Conservation Act</a>
<a href="#">Oil and Gas Activities Act</a>
<a href="#">Riparian Areas Protection Act</a> and Regulation
<a href="#">Water Sustainability Act</a>
<a href="#">Wildlife Act</a>
<b>Ministry of Environment and Parks – Environmental Assessment Office</b>
<a href="#">Environmental Assessment Act</a>

## GOVERNMENT COMMITMENTS

BC's [Nature Agreement](#)<sup>7</sup> with Canada and the First Nations Leadership Council outlines clear commitments on funding, nature conservation, and nature protection. BC has recognized the importance of habitat enhancement and restoration, and the commitments within this agreement include

- consult and cooperate with First Nations on planning and implementation of restoration initiatives;
- collaborate with local communities, stakeholders, and other government agencies, and coordinate across organizations to share information regarding restoration;
- Canada will fund new restoration activities in BC, including through the [2 Billion Trees Program](#) and the [Nature Smart Climate Solutions Fund](#);
- BC will consult and cooperate with First Nations to restore or enhance at least 140,000 ha of wildlife habitat across the province by 2024/25;
- BC will consult and cooperate with First Nations to develop a longer-term restoration framework.

BC published a [Coastal Marine Strategy](#)<sup>18</sup> in 2024, highlighting restoration work as a key activity to support the Strategy's Theme 1: Healthy Coastal Marine Ecosystems.

## PERMITTING FRAMEWORK AND PROCESSES

BC has grouped their permits for activities involving natural resources into an online web portal [FrontCounterBC](#). Recently, the Province also piloted an expedited permit system designed specifically for nature-based shoreline protection projects (see details below). [Ecological Restoration Guidelines](#)<sup>19</sup> are provided by the BC government, however, these are outdated, formed based on information published no later than 2001. BC does offer a [summary](#) of the information within the guidelines, which may be helpful for practitioners planning an environmental restoration project, although it seems likely that it needs to be updated. With respect to the permitting process, the restoration guidelines acknowledge the following points:

- applicants may get redirected several times in the permitting process, and permits can sometimes take weeks or months to obtain. Reviewing plans or conducting site visits with the appropriate agency is recommended to reduce the number of surprises and improve the project. Developing a positive relationship with the regulating body is also recommended to make the process easier;
- it is important to realize that even if a project is on private land, government authorization is needed for working around water or for a prescribed burn. First Nations should always be contacted, as the land in question may be part of a larger land claim.

Table 2. Overview of key contacts for restoration projects, adapted from BC's 2001 Ecological Restoration Guidelines (updated)

Activity	Local Government	Provincial Ministry	Federal Department
Fisheries management and restoration		Water, Land and Resource Stewardship (WLRS)	Fisheries and Oceans Canada (DFO) – marine and anadromous fish
Wildlife management and restoration		WLRS	Environment Canada (conservation)
Forestry and forest restoration	Planning (urban)	Forests (crown land only)	Canadian Forest Service
Grasslands		Forests; Agriculture and Food (crown land only)	Canadian Forest Service
Gravel Pits, Mines	Engineering and Operations	WLRS	Natural Resources Canada
Land Development	Planning	WLRS; Environment and Parks (environmental assessment office)	
Prescribed Fire	Fire department, Engineering and Operations	WLRS (air quality), Forests (crown land only)	
Road stewardship and restoration	Engineering and Ops	Transportation and Transit; Forests	
Enforcement	Bylaw enforcement	Environment and Parks (conservation officers); Forests (compliance and enforcement)	Environment and Climate Change Canada (ECCC) (protection); Fisheries and Oceans Canada (fisheries officers)
Flood control	Engineering and Operations	WLRS (water management)	ECCC (conservation)
Water use (including restoration), supply, drinking water	Public health, regional water district	WLRS (water management)	
Streamside zoning and land use	Planning	WLRS (all streams); Forests (crown land)	DFO
Water Quality	Engineering and Operations	WLRS	DFO
Air Quality	Engineering and Operations	Environment and Parks	ECCC

## FrontCounter BC: Natural Resource Services Applications

BC has streamlined provincial permitting processes by creating an online portal, FrontCounter BC, for clients of provincial natural resource ministries and agencies. Practitioners can search [Natural Resource Online Services](#) for an activity that matches the project they wish to conduct. Activities will likely require multiple authorizations, and the system on FrontCounter aims to streamline the application, review, and submission of authorizations for certain activities (Box 5).

BC advertises that FrontCounter BC staff act as advocates for timely decisions and responses, and can help a client navigate—from start to finish—what can sometimes be a maze of licences, permits, and registrations. Clients are asked to think of the staff at the counter as their direct link to BC’s natural resource ministries and agencies.

### Box 5. FrontCounter BC Process

The general process using FrontCounter is as follows:

- 1. Receiving the application**  
Applications are submitted and received by FrontCounter BC staff. Poor quality or incomplete applications can result in substantial delays. Requests for additional or missing information are expected to be answered within 2 weeks. Applications may be rejected due to deficiencies, and applicants can then reapply at their convenience.
- 2. Consultation and Referrals**  
Applications may be referred to other provincial and federal regulatory agencies for comment. [Consultation with First Nations](#), community groups, or other parties may be required if existing rights could be affected by the application.
- 3. Review**  
Once FrontCounter BC has received all comments and objections from potentially affected parties, and any additional information provided by the applicant or affected parties, applications undergo a technical review.
- 4. Decision**  
On the basis of this review, a recommendation is made for the consideration of a statutory decision maker, who is authorized to grant approval.

*Fee Estimates* outlined within [Payment Guidelines](#).

Categories of permits often used by restoration practitioners include:

- [Crown Land Use](#)
- [Environment](#)
- [Fish and Wildlife](#)
- [Forests](#)
- [BC Parks - Park Use Permit](#)
- [Water](#)

FrontCounter BC has a page [dedicated to environmental restoration permits](#) as part of the Northeast BC Restoration Permitting Pilot Project. However, this activity guide is vague and does not provide any resources specific to restoration projects. Instead, practitioners will likely need to look for more specific activities that are involved in their work project.

### Shoreline Projects

Ecological restoration projects will often affect BC shorelines. The permitting process for shoreline projects depends on the impacts of the project activities and the scale of the work.

### Shoreline Work and the Environmental Assessment Act

BC’s [Reviewable Projects Regulation](#) makes some types of projects automatically reviewable under the BC [Environmental Assessment Act](#) if they meet certain criteria. Shoreline modification projects fall under the Water Management Category of the Regulation. If projects meet certain thresholds (outlined in Table 3), the project is reviewable under the BC *Environmental Assessment Act*.

Table 3. Water management projects under the Reviewable Projects Regulation (Part 5, Table 9)

Project Category	New Project	Modification of Existing Project	Dismantling and Abandonment of Existing Project
#5 Shoreline Modification Projects	<p>Criteria:</p> <ol style="list-style-type: none"> <li>1. Subject to subsections (2) and (3), a new project that:               <ol style="list-style-type: none"> <li>a) results in changes in or about a stream, marine coastline or estuary, and</li> <li>b) entails dredging, filling or other direct physical disturbance of                   <ol style="list-style-type: none"> <li>i) <math>\geq 1\,000</math> m of linear shoreline, or</li> <li>ii) <math>\geq 2</math> ha of foreshore or submerged land, or a combination of foreshore and submerged land, below the natural boundary of a stream, marine coastline or estuary.</li> </ol> </li> </ol> </li> <li>2. Area flooded is not included in the calculation of area directly disturbed under subsection (1) (b) (ii).</li> <li>3. The following are not reviewable under subsection (1):               <ol style="list-style-type: none"> <li>a) periodic shoreline cleanup projects;</li> <li>b) periodic maintenance dredging of the foreshore or submerged land, or a combination of foreshore and submerged land, below the natural boundary of a stream, marine coastline or estuary;</li> <li>c) a ferry terminal or marine port project.</li> </ol> </li> </ol>	<p>Criteria:</p> <ol style="list-style-type: none"> <li>1. Subject to subsection (2), modification of an existing project if               <ol style="list-style-type: none"> <li>a) the existing project, or the project after modification, were it a new project, would meet the criteria set out opposite in Column 2, and</li> <li>b) the modification results in an increase of <math>\geq 35\%</math> in                   <ol style="list-style-type: none"> <li>i) the length of linear shoreline that is directly disturbed by dredging, filling or other physical action, or</li> <li>ii) the area of foreshore or submerged land, or a combination of foreshore and submerged land, below the natural boundary of a stream, marine coastline or estuary that is so disturbed.</li> </ol> </li> </ol> </li> <li>2. Area flooded is not included in the calculation of area directly disturbed under subsection (1) (b) (ii).</li> <li>3. The following are not reviewable under subsection (1):               <ol style="list-style-type: none"> <li>a) periodic shoreline cleanup projects;</li> <li>b) periodic maintenance dredging of the foreshore or submerged land, or a combination of foreshore and submerged land, below the natural boundary of a stream, marine coastline or estuary;</li> <li>c) a ferry terminal or marine port project.</li> </ol> </li> </ol>	<p>Criteria:</p> <ol style="list-style-type: none"> <li>1. Dismantling or abandonment of an existing shoreline modification project that, if it were a new project, would meet the criteria set out opposite in Column 2</li> </ol>

For projects that come close to these thresholds for an environmental assessment, practitioners are required to submit a project notification to the Environmental Assessment Office (EAO). This requirement applies if the project meets the notification criteria, even if it does not meet the reviewable project criteria. Notification criteria are set out in section 5, but notably include:

- projects designated under the Canadian *Impact Assessment Act* and are not located wholly within federal lands or *Indian Act* reserves;
- projects that will result in peak employment by the proponent of at least 250 full-time employees;
- projects that will emit at least 125,000 tonnes of GHGs (as measured in CDEs) directly from project facilities;
- projects that would meet various thresholds listed in the Reviewable Projects Regulation if those thresholds were reduced by 15%; and
- certain types of projects that would include clearance of:
  - i) at least 40 km in length of land that is not alongside and contiguous to an area previously developed for a linear development, or
  - ii) 450 hectares of land (unless already authorized by the minister under the *Resort Timber Administration Act*).

An Initial Project Description must be submitted in order to start the [Environmental Assessment process](#). An Environmental Impact Assessment is time consuming and costly, and will need to be scheduled in the planning of restoration work. Shoreline projects that do not meet the criteria for Environmental Assessment or Project Notification must still acquire any other permits and approvals required under other regulations.

### Nature-Based Erosion Protection: Expedited Permit Process

BC recently piloted an expedited permitting process for *eligible* shoreline projects\*. This pilot provided a different pathway for nature-based erosion protection projects that was separate from that for hard armoring approaches like seawalls. The process was intended to provide owners and Crown Lease holders of marine waterfront property a pathway to construct nature-based erosion protection and restoration works 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. The province partnered with the Stewardship Centre for BC, through its Green Shores program\*\* to develop a Guide to the Expedited Process for Nature-Based Shoreline Projects in BC<sup>20</sup> and a Nature-based Shoreline Projects Checklist<sup>21</sup>, which detail the requirements and help residents of the province navigate the process. A general framework for what should be addressed when looking to start a shoreline project is provided by the Stewardship Centre for BC (Figure 4). Professional involvement is required for such projects; they must be designed and supervised by Qualified Coastal and Environmental Professionals with relevant expertise (see Box 6).

\* At the time of publication, this pilot has ended and the authorizations team has transitioned away from expedited processing for these applications. Applications that align with Green Shores and other best practices are still encouraged but are no longer expedited.

\*\* Green Shores is an initiative of the Stewardship Centre for BC that provides science-based tools and best practices to help people minimize the impacts of new developments and restore shoreline ecosystem function of previously developed sites

**Box 6.** In order for projects to qualify for the expedited process using the Checklist, project proponents must use Qualified Professionals who meet the following definitions:

Qualified Coastal Professional: an engineer, geoscientist, or geotechnical engineer in good standing with their professional organization with demonstrated experience and/or training pertaining to shore protection and coastal processes and acting within their professional abilities.

Qualified Environmental Professional: a professional biologist, landscape architect, environmental land use planner or other suitably qualified professionals in good standing with their professional organization, acting within their professional abilities with expertise in shoreline ecology and habitat function and are members of BC professional associations governed under the BC Professional Governance Act.

## IDENTIFIABLE ISSUES / PRACTITIONER INSIGHTS & CONCERNS

Interviews with restoration practitioners in BC highlighted that permitting is considered one of the single biggest impediments to restoration projects. Existing processes are costly, unpredictable, and introduce high levels of risk to projects.

### *Specialization*

A lack of expertise and opportunities for relationship-building with permitting approval staff were reported. Government staff may lack the experience to properly deal with complex restoration projects, and it was proposed that a specialized team for restoration could alleviate this issue.

The nature-based pathway is onerous, with extensive requirements for necessary documentation for applications, regardless of project size. Despite the long checklist, the nature-based pathway is acknowledged by practitioners as much faster than the crown land tenure process. The consulting burden is also high, however, and the requirement to engage qualified professionals for every project increases the time and cost.

### *Prioritization*

No prioritization or expedited process is in place for restoration permits over infrastructure development in coastal areas.

### *Timing*

Restoration grants often provide just a few years of funding to complete project activities. Projects are often delayed or even cancelled because permit applications are not reviewed in a timely manner. The expectations for application deadlines are often unrealistic within funding timelines, as is the time given between receiving permit approvals and project anticipated start dates. The mismatch between funding and permitting timelines creates significant obstacles for project proponents who may already be working with limited capacity and resources.

### *Access to Information*

Often the most difficult part of beginning a restoration project is identifying what permits are needed and practitioners noted that they frequently do not hear back when asking questions.

### *Consistency*

There is a lack of provincial uniformity as different regions within BC have different requirements, despite using the unified FrontCounter BC portal. While BC states the need for practitioners to develop relationships with regulating bodies, this is difficult given that government staff turnover is high. A lack of experienced staff also means that the knowledge required for difficult and complicated projects is lacking. Practitioners reported that staff turnover with respect to FrontCounter BC Natural Resource Services Applications has negatively impacted difficult projects.

# INTERNATIONAL CONTEXT AND BEST PRACTICES

The issues faced by restoration practitioners in Canada in terms of complicated, inefficient, and unspecialized environmental permitting for restoration projects are not unique. Environmental permitting for ecological restoration projects has been well-studied in the United States and Australia<sup>22-26</sup>, and there is general consensus among researchers and practitioners that there is need for improvement. Below are a few examples of studies that have addressed this problem, and a brief summary of relevant recent findings in the literature.

## AUSTRALIA

In Australia, the legal permitting process is influencing restoration outcomes<sup>22</sup>. Proponents are turning away from sites with the greatest restoration potential and are instead choosing sites based on the ease of obtaining permits. Bell-James *et al.*<sup>22</sup> interviewed a small cohort of restoration practitioners and found similarities across projects—the permitting process in Australia is complex, time-consuming, costly, and difficult to navigate. The study also revealed that post-approval conditions were creating challenges, for example, the issue of ongoing liability for restorative projects.

Australian practitioners noted that existing permitting process are designed to limit harmful development rather than facilitate restoration. Applications for environmental projects join the same queue as every other type of development, with no priority given for 'public good' projects. This finding was echoed by practitioners in NS and is one of the challenges that BC attempted to address through the implementation of their 'Nature-based Shoreline Projects' expedited pathway for permitting.

As possible solutions, Bell-James *et al.* suggest that a change in government will and an enabling attitude from regulators are the most crucial factors for success. Governments and regulators should want to help facilitate restoration work as it is in the public interest and helps governments meet their commitments under international agreements. There is a need for accessibility, flexibility, and understanding that the permitting framework currently available to practitioners is not fit for purpose for restoration, and exceptions or accommodations may be needed. A practitioner in the study called for more "collective conversations" across all levels of government to increase understanding and appreciation of the need for restoration.

Bell-James *et al.* also highlight that the knowledge and experience of restoration practitioners could be relied upon to streamline the process. In Australia, there is currently no pathway to recognize a project as being managed by a "trusted" organization. One possible solution, as suggested by the Society for Ecological Restoration, is to have professional certification of restoration practitioners and a register of approved providers of restoration projects. Engagement of these professionals could then expedite approvals. This is similar to what was seen in British Columbia for the expedited process pilot, where qualified experts were required to assess restoration projects, but Nova Scotia has no such pathway.

Bell-James *et al.* also suggest that developing a dedicated approvals process for restoration would facilitate better outcomes and reduce transaction costs. There are clear differences in intent between restoration and development projects, and consensus that they should be treated differently. For example, in the United States, there are examples where restoration projects are excluded from development assessment requirements, which significantly streamlines the process.

## UNITED STATES

In a study of the regulatory challenges faced by large-scale ecosystem restoration (LSER) projects in the United States, Auger<sup>26</sup> reported that projects suffer from the same issues as those in Canada. These restoration projects are often viewed as having adverse environmental effects similar to filling in a wetland for constructing a building, whereas the intent and outcome is to remedy environmental concerns. Research suggests that holding this class of restoration project to regulatory standards formulated to address adverse environmental impacts is illogical, and regulatory agencies need to make better-informed decisions when evaluating these projects.

Adaptive governance and adaptive regulation are suggested as mechanisms to address these uncertainties in restoration project management. Adaptive regulation enables learning and modification of policy over time through adjustments informed by data.

California has faced many of the same problems seen in BC and NS, with environmental laws designed to prevent harm but which are inadvertently hindering habitat restoration and enhancement. Habitat restoration projects often go through the same permitting processes as traditional development projects. In 2021, California launched the 'Cutting the Green Tape' initiative, which introduced a suite of tools to support and increase restoration, including streamlined permitting pathways, permit exemptions, and dedicated agency staff to oversee permitting. The initiative is considered to have been extremely successful at addressing some of the key challenges of restoration project permitting, with reduced processing times for permit applications and millions of dollars of savings for the state and project proponents.<sup>27</sup>

A recent study of California's permitting landscape<sup>24</sup> provides policy recommendations for permit reform that are likely applicable to Canada's permitting landscape:

1. create permitting pathways specifically for coastal marine restoration projects. California has already done this for other types of restoration projects by combining multiple permits into one streamlined process;
2. establish specific restoration permitting teams within regulatory agencies. This was done in support of the Cutting the Green Tape Initiative, where the California Department of Fish and Wildlife created a specific team dedicated to providing technical assistance to project proponents on permitting and funding;
3. create a multi-agency permitting working group. A centralized working group that includes staff from key permitting agencies to facilitate coordination;
4. establish a publicly accessible, statewide permitting hub. Including information on permits issued by each regulatory agency, guidance documents for permit applicants, and a database of all permit applications for proponents to track the status of their permits.

The study also highlights that other states in the US have recently taken steps to streamline the process for environmental restoration permitting. Massachusetts, Washington, and Florida have established streamlined permitting for voluntary habitat or ecological restoration projects:

- the Massachusetts Environmental Policy Act (2023) has created a [streamlined review](#) for ecological restoration projects;
- Washington established a four-year [Habitat Recovery Pilot Program](#) (ended June 2025), designed to ensure that 36 habitat restoration projects that benefit freshwater, estuarine, or marine fish, or their habitats, were implemented as quickly and efficiently as possible by streamlining local and state environmental permitting;
- Florida adopted a [General Permit specifically for small-scale oyster reef restoration \(2013\)](#) and a [General Permit specifically for seagrass restoration \(2024\)](#) to streamline project approval.

## INTERNATIONAL CONSENSUS ON THE NEED FOR UPDATED PERMITTING FRAMEWORKS

In a global synthesis of the legal issues affecting the implementation of ecological restoration<sup>23</sup>, the need for permitting reform was identified as an international issue. Some key identifiable issues align with those faced by practitioners in Canada.

Existing environmental laws are focused on protection, which may not necessarily support restoration. Current protection-based laws generally seek to passively preserve ecosystems, and are designed to restrict development impacts. This framework of 'preserving the status quo' may be insufficient to counter modern environmental challenges and facilitate restoration work that has longer-term ameliorative intent. Non-intervention requirements are likely to constrain restoration efforts, and activities in designated protected areas are likely subject to greater scrutiny, despite being areas that may benefit from restoration work. Foster and Bell-James<sup>23</sup> identified that protection-based laws are premised on the assumption of natural recovery, i.e. that if left alone, ecosystems will remain essentially unchanged if intact or recover without intervention. Canadian restoration practitioners interviewed for this report identified that this is not always the case. Areas in need of restoration have already been negatively influenced by human activities and baseline environmental data collected in recent years likely reflects an already altered ecosystem. Further, this 'natural recovery' assumption is challenged by climate change and ecosystem responses to prevailing conditions. For countries to meet their global environmental commitments, protection-based laws are likely insufficient. Active restoration will clearly affect an ecosystem's state. Canadian legislation should identify that in an ecological restoration context, affecting an ecosystem's state is not necessarily a bad thing. Specific restoration policy instruments are needed to prioritize and scale up restoration efforts.

Foster and Bell-James also suggest that laws should incorporate specific definitions of restoration that are implemented consistently. Ecological restoration should have a specific and distinct legal meaning; currently, there is no universally accepted definition. Clear definitions would facilitate consensus and consistency in environmental legislation, and may be useful in promoting the development of specific legal instruments that facilitate environmental restoration and distinguish ecological restoration from other intervention-based activities.

# RECOMMENDATIONS AND INSIGHTS

Evaluation of the current permitting landscapes in NS and BC, and discussion with restoration practitioners regarding their experiences working with government regulatory agencies, revealed a clear need for improvement. This need is echoed in the international literature assessing permitting and environmental legislation barriers for ecological restoration projects. Below are the most clearly identified recommendations.

## **1: Specialization and Prioritization: streamlining pathways for restoration permits.**

- Shift of permitting framework for restoration out of protection against interference, and into facilitating action
- Prioritization of projects with ameliorative intent as they are in the interest of the public good.

## **2: Knowledge and Experience: ecological restoration specialists.**

- Opportunities for development of relationships between practitioners and approvals staff is considered key for permitting often complex and specialized projects.
- Hiring of specialists with an educational background and experience in environmental restoration to handle the permitting of ecological restoration projects.
- Separation of teams dedicated to evaluating permits with an ameliorative intent versus industrial / development focus.

## **3: Accessibility: to government and to information.**

- Clear, realistic timeframes for approval to facilitate planning and implementation within funding timelines
- Flexibility and access to a point of contact to discuss the unique nature of environmental restoration projects, including the possibility to negotiate exceptions to inflexible timelines or prioritization of certain projects to meet timing requirements.

Permitting obstacles have led to practitioners being unable to start projects or do restoration work in locations that would be best suited for ecological restoration, or projects being cancelled altogether (pers. comm.). Practitioners have also been forced to go ahead with setting up equipment for projects while there is uncertainty over whether or not their permit will be approved. This can be costly if there are setbacks in the approval process.

The timelines of government permitting have also created significant barriers for practitioners to work with and consult Indigenous Peoples that are potentially affected by projects. In some instances, First Nations are opting to proceed with projects without permits, asserting an inherent right to act on certain lands. This approach, while effective, is risky should the government take issue with the project. First Nations would then be forced to prove their inherent rights in court, which is extremely difficult under current Canadian jurisprudence, or face penalties for acting without proper permits. This risk should not be necessary for ecological restoration projects with ameliorative intent, especially when they facilitate Canada's international commitments to environmental restoration and to reconciliation with Indigenous Peoples.

The expedited permit for nature-based shoreline projects in BC was a step towards creating a specialized pathway for coastal restoration. While this was limited in scope and, at the time of publication, had been paused, it does provide an example of what could be done for all restoration projects with ameliorative intent.

While permitting is not the only challenge to scaling up restoration work, issues with existing processes are widely acknowledged to be a critical barrier. There is no lack of expertise, will and desire to conduct effective coastal restoration work at scale and, as noted, there are good examples of effective changes in permitting processes internationally that Canada can learn from. Clear recommendations for paths forward are available and addressing permitting barriers in a timely manner could expedite restoration work at the scale needed to help governments meet their restoration commitments under international agreements.

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