Overview of the Conservation Implementation Plan

for the Prince Edward Island Forested Landscape Priority Place

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Land Acknowledgement

We acknowledge that the Prince Edward Island Forested Landscape Priority Place is in the unceded Mi'kmaq territory of *Epekwitk*, which is covered by the historic Treaties of Peace and Friendship. We pay our respects to the Indigenous Mi'kmaq peoples who have occupied the Island for over 12,000 years; past, present and future. Through this acknowledgement it is our intent to show respect for the people who have stewarded these lands and waters since time immemorial and those who continue to care for them. We do this to reaffirm our commitment to learn and work together in the spirit of reconciliation.

Acknowledgements

Thank you to all members of the PEI Forested Landscape Priority Place Core Team for their contributions to this initiative. Because of their efforts, a great deal of work has been accomplished in this Priority Place to date, resulting in conservation actions that benefit species at risk and other biodiversity, such as migratory birds and species of importance to Indigenous peoples.

PEI Forested Landscape Priority Place Core Team Members

Abegweit Conservation Society
Atlantic Conservation Data Centre
Ducks Unlimited
Eco-PEI - MacPhail Woods Ecological Forestry Project
Environment and Climate Change Canada – Canadian Wildlife Service
Island Nature Trust
Lennox Island First Nation
Mi'kmaq Confederacy of PEI
Nature Conservancy of Canada
Nature PEI
Parks Canada Agency
PEI Federation of Agriculture
PEI Invasive Species Council
PEI Watershed Alliance
PEI Woodlot Owners Association
Province of Prince Edward Island – Forest, Fish, and Wildlife Division
Sustainable Forest Alliance
UPEI Climate Lab

In addition to the core team members, many partners, community members, landowners, and subject area experts have delivered or participated in project activities to advance the goals of the Priority Place.

Thank you all for your participation!

Photo © Macphail Woods Ecological Forestry Project

Introduction

Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada

Canada's biodiversity is a cornerstone of our way of life. As human impact on the planet grows, more habitat is lost and more species are at risk of extinction. We need to take innovative action to protect and recover the animals, plants, and places we love. The Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada (Pan-Canadian Approach) shifts from single-species approaches to conservation to approaches that focus on multiple species and ecosystems. Focusing our effort in specific locations with high biodiversity and concentrations of species at risk helps conserve habitat that benefits many species at the same time. It also brings together partners with common goals to improve collaboration and promote shared leadership. Through partnership, we will work to achieve sustainable protection and recovery of species at risk.

Important principles guide collaborative work under the Pan-Canadian Approach:

- shared priorities and leadership
- Indigenous engagement
- strengthened evidence-base for decision making
- aligned investments

We identify priorities using defined criteria, followed by:

- cooperative action planning
- investment and implementation of actions
- monitoring and reporting of results

The results and benefits of action under the Pan-Canadian Approach are:

- better conservation outcomes for more species at risk
- improved return on investment
- increased co-benefits for biodiversity and ecosystems

Priority Place for Species at Risk

Under this approach, 12 Priority Places have been selected across Canada. These places have significant biodiversity, high concentrations of species at risk, and opportunities to advance conservation efforts. In each Priority Place, the federal and provincial or territorial governments are working with Indigenous peoples, organizations, and partners to develop integrated conservation implementation plans.

The Priority Places are at different stages of cooperative planning and implementation of conservation actions under the Pan-Canadian Approach. In many of these areas, important conservation work has been ongoing for a long time, and in some of these places collaborative approaches and conservation planning were already underway before they were chosen as Priority Places. Other Priority Places are new initiatives and

are in earlier stages of engagement and collaborative conservation planning. All of these Priority Places build on existing work by implementing coordinated, multi-partner conservation actions in these places, but there is no one size fits all approach to collaborative planning across these diverse places. To learn more about the Priority Places initiative and the work undertaken by our partners to recover species at risk within these Priority Places, please visit our interactive website.

Conservation Implementation Planning in the PEI Forested Landscape Priority Place

This document presents an overview of the Prince Edward Island (PEI) Forested Landscape Priority Place for Species at Risk and a summary of the planning that guides the implementation of conservation work in the Priority Place. This document represents a snapshot in time and will be updated as work in the Priority Place continues to evolve. You can find more information on the Priority Place here: PEI Forested Landscape Priority Place for Species at Risk.

Information in existing planning documents were used to inform this document, which takes a broader ecosystem approach. This document does not replace action plans or management plans under the *Species at Risk Act*.

Conservation actions in the Priority Places are funded by contributions under the Canada Nature Fund as well as multiple federal, provincial, and municipal government and non-government partners and other partners. All strategies that may benefit species at risk conservation in the PEI Forested Landscape Priority Place are incorporated into the collaborative planning process. However, the implementation of strategies is subject to appropriations, priorities, and budgetary constraints of the participating jurisdictions and organizations.

A core team has been established for the PEI Forested Landscape Priority Place including Indigenous organizations, federal and provincial governments, institutions, and non-government organizations. The team takes part in visioning, planning, implementing, and assessing the initiative, and works with many partners, knowledge holders, and interested people to develop and carry out actions in this Priority Place.

The core team is working towards using the Conservation Standards as a framework for collaborative action planning. This internationally recognized tool helps conservation teams provide a clear, systematic approach to designing, managing, implementing, monitoring, and adapting conservation efforts. For more information, please see: conservationstandards.org.

PEI Forested Landscape Priority Place for Species at Risk

Prince Edward Island is part of Canada's Wabanaki-Acadian Forest region. In the original, pre-European contact forest, most of the Island's Wabanaki-Acadian Forest was made up of mixed species with a high percentage of shade tolerant species. This forest type has a rich biodiversity, as many plant and animal species are near the northern or southern limits of their natural ranges. PEI forests are home to a wide range of biodiversity including hundreds of rare species such as plants, birds, mammals, insects, and lichens. Based on the Province of Prince Edward Island's 2020 forest inventory, approximately 43% of PEI's total land area is forested and approximately 2% is forested wetland, which represents a 0.8% overall decrease from 2010 due to several pressures on the forested landscape.

Partners in Prince Edward Island have been working towards watershed and forest habitat and species conservation goals for many years. Given the high biodiversity values, strong conservation partners, and conservation need, the forested landscape of PEI was well positioned to be designated as one of the 12 Priority Places for Species at Risk across Canada under the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada.

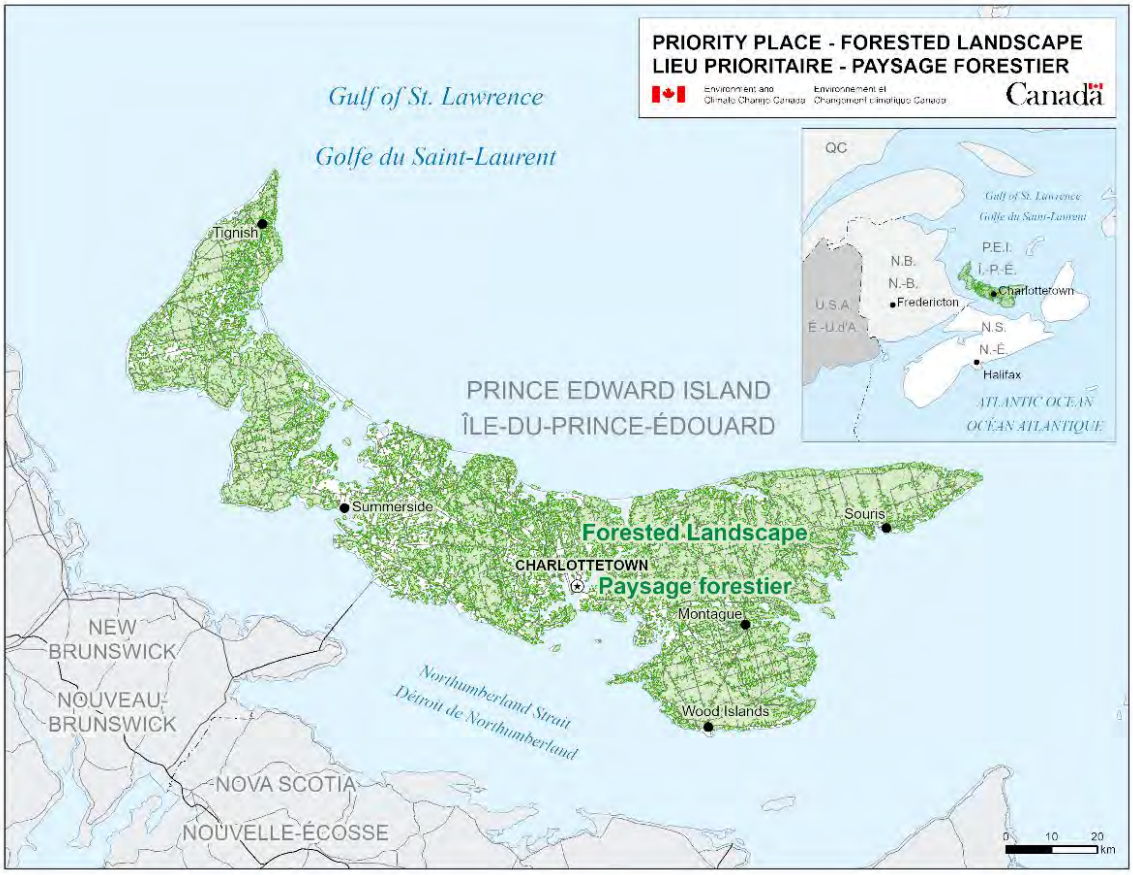

Figure 1. PEI Forested Landscape Priority Place Map (green areas show forested areas distributed throughout the province).

PEI is in the traditional territory of the Mi'kmaq, subject to the historic Peace and Friendship Treaties (1760-61). There are two Mi'kmaq First Nations communities on PEI: Lennox Island First Nation and Abegweit First Nation.

Forested Landscapes on PEI provide habitat for 13 COSEWIC-assessed terrestrial species at risk (see Appendix A) and over 300 high priority provincially significant species, making them one of the most biodiverse habitats on the island. In addition, forests provide numerous ecosystem services such as carbon sequestration, water purification, and erosion control.

Little Brown Myotis, listed as Endangered under SARA. Source: M. Brock Fenton.

There are 52 priority bird species identified in the Bird Conservation Region Strategy for PEI and 21 of these species can be found in forested landscapes. As of December 2023, approximately 4.7% of PEI's land area is protected under legislation or other effective conservation measures. Prince Edward Island National Park and the Black Pond Migratory Bird Sanctuary are also found in this Priority Place.

Vision Statement

In 2020, the core team developed the following vision statement to aspire to a desired state or ultimate condition that the Forested Landscape Priority Place is working to achieve:

Species at risk are thriving in diverse and connected forested landscapes that are conserved and cared for by Islanders.

Conservation Targets

Conservation Targets are the biodiversity features (species, habitats, or ecological systems) that a project team is trying to conserve and restore. They are selected to represent all the biodiversity in the project's scope. Work in this Priority Place focuses on 4 ecosystem conservation targets:

Photo credit: Julie-Lynn Zahavich.

Nested Targets are features or components of the conservation targets that are particularly important to the project. They co-occur on the landscape, require similar ecological processes, and have similar threats as the target. Therefore, they require similar conservation strategies.

The following are nested targets for the PEI Forested Landscape Priority Place:

- Federal Species at Risk Act (SARA) listed species (Appendix A)
- Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed species at risk (Appendix A)
- Species covered under the Migratory Birds Convention Act
- Over 300 high priority provincially significant species
- Important cultural species
- Other rare, unique, or threatened biodiversity features

To understand the important connections between the conservation targets and human wellbeing in the PEI forested landscape, ecosystem services and human well-being benefits were identified (Figure 2).

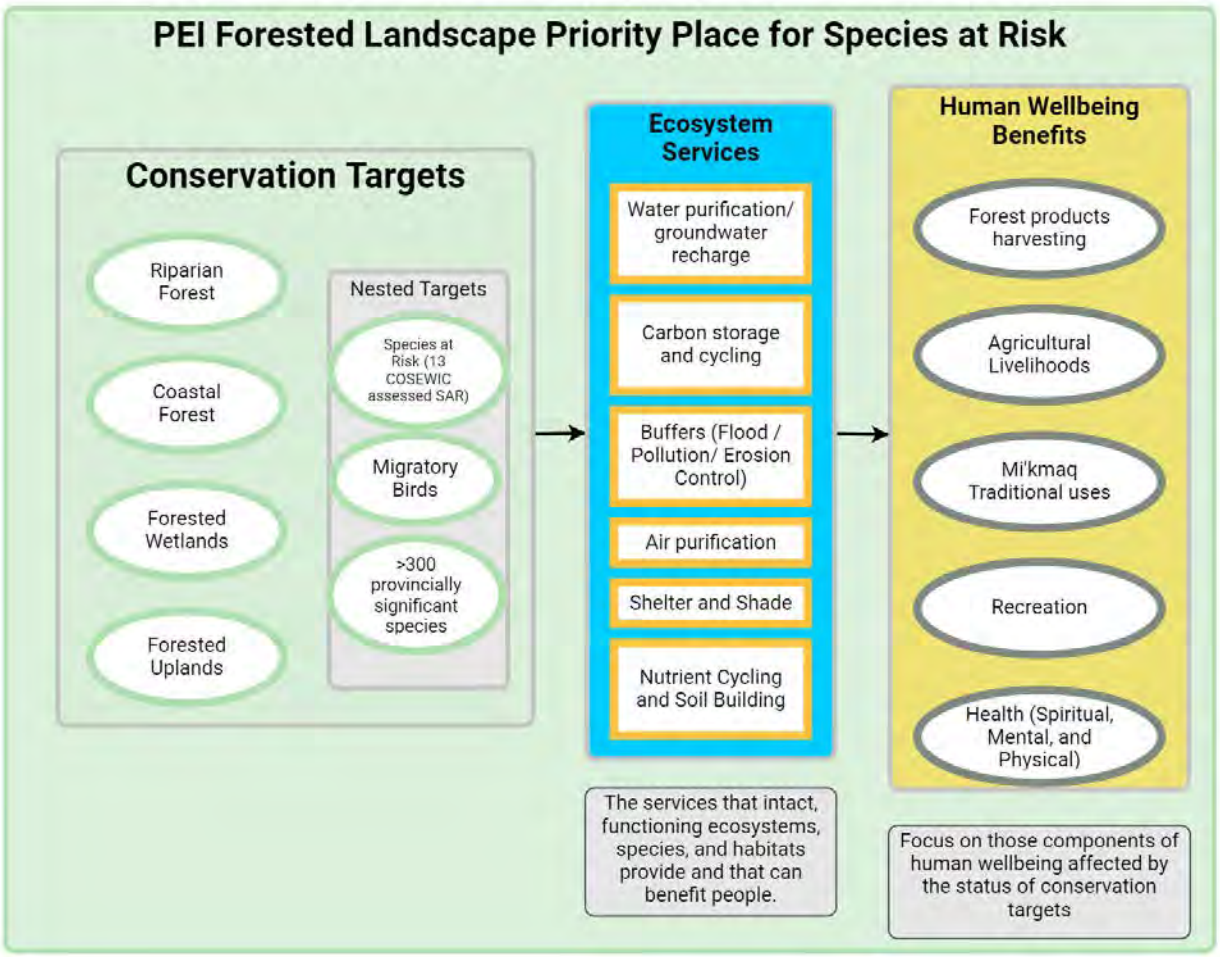

Figure 2. Overview of the PEI Forested Landscape Priority Place Framework of Conservation Targets, Ecosystem Services, and Human Wellbeing Benefits.

Pressures

Conservation must take place in the face of a wide variety of pressures, sometimes referred to as threats. A common challenge for conservation practitioners is deciding which pressures to address. These decisions are often made by applying a set of objective criteria to assess or rank pressures so that actions can be directed where they are most needed. Direct pressures to the Conservation Targets in the PEI Forested Landscape Priority Place were identified and assessed based on their scope (or extent), the severity of their impact, and the degree to which their impacts are reversible (Open Standards for the Practice of Conservation 4.0, 2020). This assessment rated pressures or threats at an ecosystem level within the scope of the Priority Place, and so the outcome may differ from that of species-specific threat assessments found in other documents (e.g., COSEWIC status reports or SARA Recovery Strategies). Twelve pressures were identified, and using the pressure assessment criteria, the following five pressures were

assessed as the highest priority with medium ratings. An internationally recognized standard for pressures is used to the extent possible (International Union for Conservation of Nature – Conservation Measures Partnership; IUCN-CMP), though some pressure names have been adjusted to make them more applicable to the pressures present in the PEI Forested Landscape (Table 1).

Table 1: Pressures ranked as medium in the PEI Forested Landscape Priority Place: logging & wood harvesting; annual & perennial non-timber crops (specifically forest conversion due to agricultural expansion); invasive non-native / alien plants & animals; and residential development, including roads and service corridors.

Pressures	Icon	Rating
Incompatible Wood Harvesting		Medium
Invasive Non-native Species		Medium
Residential Development		Medium
Linear Corridors (Roads & Service)		Medium
Conversion of forests due to agricultural expansion		Medium

Climate-Smart Conservation

Climate change is another significant pressure to biodiversity and species at risk in Priority Places. The current and projected impacts of climate change add several stressors to conservation targets including shifting and changing seasons, severe weather events, shifting species and ecosystems, and potentially exacerbating other pressures and creating new ones. Instead of treating climate change as a direct pressure, the Priority Place is working towards incorporating climate change into all stages of conservation planning and adaptive management. Many conservation organizations are starting to adopt this “climate-smart conservation” approach. This includes using climate scenario planning to consider the potential impacts of climate change on ecosystems and

species, anticipating and managing for change, being adaptable to adjusting strategies and goals, and integrating climate adaptation into conservation actions.

Situation Analysis

A situation analysis helps to create a common understanding of the project's context, describing the relationships between the biological environment and the social, economic, political, and institutional systems. By understanding this context, the team is better informed to select strategies that will achieve their goals and objectives. The following diagram is a tool to help visualize the high-level situation analysis for the Priority Place, identifying some of the contributing factors that drive the pressures and affect the conservation targets (Figure 3). It will be updated and revised by the core team on an ongoing basis.

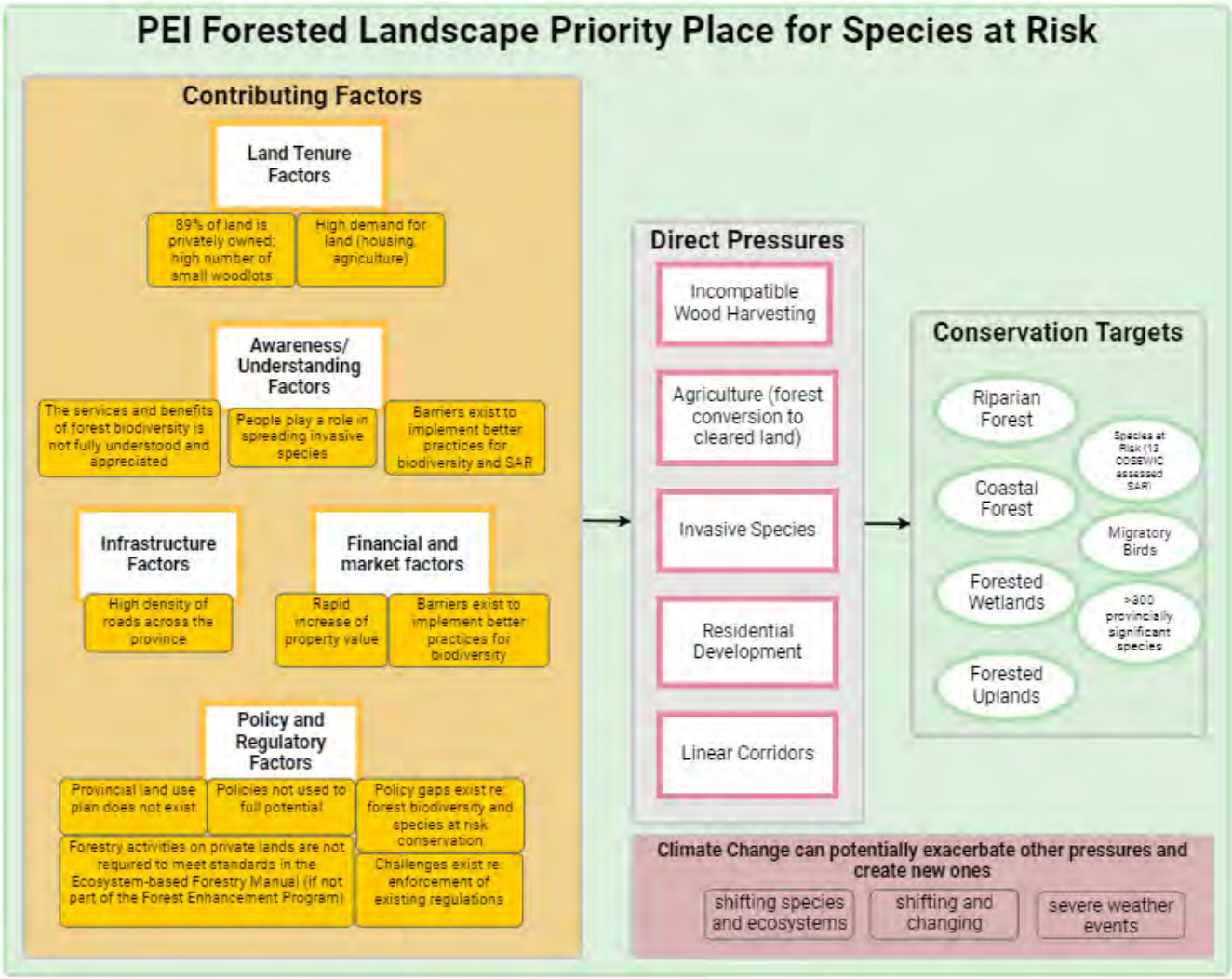

Figure 3. High-level Situation Model for the PEI Forested Landscape Priority Place.

Key Strategies

To make progress towards the conservation of the targets and nested targets, high-level strategies have been identified and prioritized for the Priority Place (Table 2). Each of these strategies may have several activities that address one or more pressures and / or targets. Many of the strategies will advance implementation of Species at Risk recovery approaches. All these activities may not be implemented as projects under the Priority Place and some strategies may be underway or led by other initiatives. The International Union for the Conservation of Nature (IUCN) and the Conservation Measures Partnership (CMP) have produced a set of standard classifications of conservation actions. The ability to meaningfully summarize information and learn across projects is facilitated by using these common terms to describe conservation challenges and solutions.

Table 1. Strategies that have been identified to date in the PEI Forested Landscape Priority Place.

CMP Action Order	CMP Action Category	Strategy
1. Land / Water Management	1.1 Site/Area Stewardship (Habitat Improvement)	Enhance viability and mitigate stresses for forest habitat targets
		Remove and/or manage spread and monitor invasive species within high priority forest ecosystems/ habitats for species at risk
	1.2 Ecosystem & Natural Process (Re)Creation (Habitat Restoration)	Improve the quality and connectedness of PEI forests
		Work with interested private landowners to restore lands to Wabanaki-Acadian forest (e.g. abandoned agricultural land and plantations)
2. Species Management	2.1 Species Stewardship	Implement priority recovery actions and strategies for species at risk, prioritizing actions with multi-species benefits
		Work collaboratively with landowners/ provide services to implement best practices for species at risk on private lands
		Identification and implementation of conservation actions for Black Ash on PEI
3.Awareness Raising	3.1 Outreach & Communications	Promote desired awareness and/or emotions and behavior change by providing information on ecosystem values (e.g., biodiversity, ecosystem services) to target audiences such as farmers
		Deliver outreach and education to promote best practices for forest ecosystems, species at risk and biodiversity on private land

CMP Action Order	CMP Action Category	Strategy
		Implement landowner outreach program for landowners with priority forests (e.g. species at risk critical habitat and/or occurrences; high biodiversity; large forest blocks)
		Support targeted education to address key pressures (e.g., invasive species behaviour change campaigns)
		Increase awareness and understanding of Indigenous values of the PEI forested landscape within the core team and incorporate into conservation planning and implementation. Foster ongoing learning about Mi'kmaq culture, history, and communities
		Recognize and celebrate woodlot owners that implement practices to conserve species at risk and biodiversity and/or restore and conserve forests
4. Law Enforcement & Prosecution	4.1 Illegal acts detection	Prioritize enforcement to address harmful behaviours (e.g., species at risk disturbance)
		Improve awareness / compliance promotion and enforcement of existing legislation
5. Livelihood, Economic & Moral Incentives	5.2 Better Products & Management Practices	Develop and maintain an early detection rapid response (EDRR) system for invasive species
		Develop strategic partnerships to reduce spread of invasives
		Develop, promote, provide, and/or remove barriers to adoption of better products and practices
		Update species at risk / migratory bird / biodiversity information in provincial resources (e.g., PEI Ecosystem-based Forest Management Standards Manual and PEI Forest Wildlife Manual)
	5.3 Market-Based Incentives	Understand how carbon markets can support forest conservation and incorporate biodiversity considerations programs when possible
	5.4 Direct Economic Incentives	Provide and/or increase incentives to landowners to conserve and restore forests, to benefit species at risk and biodiversity

CMP Action Order	CMP Action Category	Strategy
		Promote enrollment in provincial forestry programming (e.g. Forest Enhancement Program, Two Billion Trees)
		Provide additional funding to the PEI Forest Enhancement Program to increase capacity for restoration-focused forest management plans and treatments
		Expand forest conservation /restoration incentives for riparian and coastal forests
6.Conservation Designation & Planning	6.1 Protected Area Designation &/or Acquisition	Prioritize ecologically significant forests for land securement and other conservation options
		Legally, permanently protect forests with species at risk and high biodiversity value
	6.3 Land/Water use zoning and designations	Support land-use planning that incorporates forest habitat, SAR and biodiversity conservation, and climate change considerations
		Support conservation considerations in future provincial land use plan for unincorporated areas
	6.4 Conservation Planning	Develop a PEI Forested Landscape Priority Place conservation implementation plan with input from core team and partners
7. Legal & Policy Frameworks	7.1 Laws, Regulations & Codes	Explore existing laws and regulations, and processes (provincial and municipal) to incorporate forest conservation (e.g. subdivision regulations, land-use change application processes)
		Strengthen protection of forested wetlands
	7.2 Policies & Guidelines	Support and engage with municipalities and watershed groups to share information on ecologically important areas and explore opportunities to strengthen municipal official plans and by-laws to benefit SAR and biodiversity
		Synthesize information and provide advice for permit officers, policy makers and land use planners to support decision-making

CMP Action Order	CMP Action Category	Strategy
		Create, amend, or influence policies and guidelines (provincial and municipal) to improve conservation of forests
		Improve policy, legislation, and enforcement to address invasive species
8. Research & Monitoring	8.1 Basic Research & Status Monitoring	Information gathering and research to fill key knowledge needs, share lessons learned
		Increase understanding of the occurrence, distribution, and habitat associations of species at risk in the forested landscape to inform conservation actions
		Increase understanding of biodiversity and ecosystem service values of forest targets (e.g. coastal / krummholz forests) to inform conservation actions
		Support citizen science and surveys (e.g. early detection of invasives species spread)
		Incorporate future climate scenarios into conservation planning and conservation actions (‘climate-smart’ actions)
		Improve mapping and ground-truthing of forested wetlands
		Consult updated 2020 forest inventory to understand trends in forest cover (e.g. land conversion due to pressures). Define and identify the geographic scope of the forest conservation targets. Identify key ecological attributes for each target and set goals
		Understand impacts of roads and possible mitigations
		Understand woodlot owners’ needs, values, barriers related to forest conservation and restoration. Conduct a survey of PEI woodlot owners
	8.2 Evaluation, Effectiveness Measures & Learning	Assess effectiveness of actions implemented and adapt based on lessons learned, emerging needs, and changing factors in situation analysis
9. Education & Training	9.1 Formal Education	Increase knowledge and appreciation of forest biodiversity among youth and teachers
	9.2 Training & Individual	Increase species at risk and biodiversity knowledge and skills of landowners and forestry professionals

CMP Action Order	CMP Action Category	Strategy
	Capacity Development	Provide training to core team and partners to help implement and evaluate effective conservation actions
10. Institutional Development	10.3 Alliance & Partnership Development	Form a core team to help guide and implement the PEI Forested Landscape Priority Place initiative
		Support Indigenous-led conservation initiatives in the Priority Place
		Establish a Mi'kmaq led PEI Black Ash team to identify and implement conservation actions for Black Ash on PEI
	10.4 Financing Conservation	Secure funding to implement actions identified by the core team

Evaluating Progress Towards Outcomes

Measuring the effectiveness of conservation action is central to good adaptive management. The Conservation Implementation Plan will apply two types of monitoring:

1) Status monitoring of Conservation Targets (status of habitats and species assessed using key ecological attributes, indicators and data sources identified in the Viability Assessment), and
2) Effectiveness monitoring (whether actions are having their intended impacts), guided by theories of change.

Appendix Table 1. Federal Species at Risk Targets of the PEI Forested Landscape Priority Place

The species in the list below include all species at risk found in the Priority Place. Not all species listed will directly benefit from actions being undertaken through the implementation of strategies in this plan, which is subject to appropriations, priorities, and budgetary constraints of the participating jurisdictions and organizations.

Species Common Name	**Species Scientific Name**	**Taxon**	**COSEWIC Assessment Status**	**Species at Risk Act Status**
Black Ash	*Fraxinus nigra*	Vascular Plants	Threatened	No status
Canada Warbler	*Cardellina canadensis*	Birds	Special Concern	Threatened
Common Nighthawk	*Chordeiles minor*	Birds	Special Concern	Special Concern
Eastern Wood-Pewee	*Contopus virens*	Birds	Special Concern	Special Concern
Evening Grosbeak	*Coccothraustes vespertinus*	Birds	Special Concern	Special Concern
Olive-sided Flycatcher	*Contopus cooperi*	Birds	Special Concern	Special Concern
Rusty Blackbird	*Euphagus carolinus*	Birds	Special Concern	Special Concern
Little Brown Myotis	*Myotis lucifugus*	Mammals	Endangered	Endangered
Northern Myotis	*Myotis septentrionalis*	Mammals	Endangered	Endangered
Wrinkled Shingle Lichen	*Pannaria lurida*	Lichens	Threatened	Threatened
Frosted Glass-whiskers	*Sclerophora peronella*	Lichens	Special Concern	Special Concern
Blue Felt Lichen	*Degelia plumbea*	Lichens	Special Concern	Special Concern
White-rimmed Shingle Lichen	*Fuscopannaria leucosticta*	Lichens	Threatened	No status