Joint environmental organization input into Canada's National Biodiversity Strategy and Action Plan

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Submitted by:

ALUS, Birds Canada, Canadian Parks and Wilderness Society (CPAWS), David Suzuki Foundation, East Coast Environmental Law, Ecology Action Centre, Ecojustice, Environmental Defence, Natural Resources Defense Council, Nature Canada, Nature Trust of New Brunswick, The ChariTree Foundation, The Wilderness Committee, WCS Canada, West Coast Environmental Law, WWF-Canada, Yellowstone to Yukon Conservation Initiative

Introductory remarks

Canada played an important leadership role in securing an ambitious new Global Biodiversity Framework (GBF). Now we need to take the lead by developing an ambitious and effective biodiversity strategy that transforms words into actions.

Building on our collaboration to support an ambitious new GBF in the lead-up to and at COP-15, national and regional environmental civil society organizations are continuing to work together to inform the development of Canada's National Biodiversity Strategy and Action Plan (NBSAP). Based on our combined experience and expertise, this submission highlights a suite of priority recommendations and approaches that will be necessary to achieve the goals and targets of the GBF.

Halting and reversing biodiversity loss by 2030 and achieving full recovery by 2050 requires transformational change across governments and the economy, including to federal, provincial, and territorial government decision-making structures and processes. The GBF is an ambitious and comprehensive framework; all elements are relevant and important for Canada to implement.

In the first section of our submission, we highlight cross-cutting recommendations focused on delivering transformational change and illustrating the integrated nature of the four goals and 23 targets. In section two, we provide more detailed recommendations on areas where collaborating groups have particular expertise, recognizing not all elements are covered. Please note that many organizations are also submitting comments which will provide more detailed recommendations in their key areas of expertise.

The following organizations have contributed to and endorse these recommendations.

ALUS Birds Canada Canadian Parks and Wilderness Society (CPAWS) David Suzuki Foundation East Coast Environmental Law Ecology Action Centre, Ecojustice **Environmental Defence** Natural Resources Defense Council Nature Canada Nature Trust of New Brunswick The ChariTree Foundation The Wilderness Committee WCS Canada West Coast Environmental Law WWF-Canada Yellowstone to Yukon Conservation Initiative

1. Achieving transformational change

The GBF was designed to be implemented holistically, with all goals and targets working together to halt and reverse biodiversity loss by 2030 and achieve the vision of living in harmony with nature by 2050. Canada's NBSAP must also reflect this approach, addressing all GBF goals and targets and recognizing their interconnections.

Transformational change will require rebuilding and reconciling relationships with Indigenous Peoples and supporting Indigenous leadership in stewarding biodiversity. Federal, provincial and territorial government investments and decision making will also need to align with the goals and targets of the GBF. All governments share responsibility for biodiversity in Canada and must be fully engaged in its protection and recovery.

1.1. Indigenous leadership and shared decision making

The GBF integrates upholding Indigenous rights and knowledge systems throughout, including as components of targets 1, 3, 5, 9, 13, 19, 20 and 22. Canada's NBSAP must similarly respect and support Indigenous jurisdiction and connection to lands. It must ensure that Indigenous traditional ecological knowledge systems and laws are recognized and respected on equal basis with western knowledge. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) must be reflected in the NBSAP, including the principle of free, prior and informed consent and article 9(j) of the Convention on Biological Diversity (CBD) on respecting, preserving and maintaining traditional knowledge, innovations and practices for the conservation and sustainable use of biological diversity.

- Establish a new model of shared decision-making that upholds Indigenous jurisdiction and rights, and respects Indigenous leadership and knowledge in decisions related to biodiversity and land, freshwater and ocean stewardship, including those related to industrial extraction and impacts.
- 2. Provide sufficient, long-term funding that meets the needs of Indigenous Nations and communities to support their work to protect, restore and steward lands, waters and wildlife in their territories.
- 3. Include Indigenous representatives and their diverse knowledge systems in the monitoring and management of GBF metrics and targets.
- 4. Create avenues for independent scientific expertise from Indigenous knowledge holders, such as an independent expertise body.
- 5. Enshrine in law safeguards for the use of Indigenous knowledge in implementation of the GBF. This should include but not be limited to intellectual property protections.
- 6. Enable the creation of Indigenous Protected and Conserved Areas (IPCAs) through legislation.

1.2. Aligning actions across governments with NBSAP goals and targets

A whole-of-government commitment to Canada's NBSAP is required to ensure all Crown government departments and agencies are pulling in the same direction to halt and reverse biodiversity loss by 2030. This will require a major shift from status quo approaches where some departments are mandated to save nature, while others actively advance activities that drive biodiversity loss.

All levels of government must align their activities with the goal of being nature positive by 2030. To achieve this, formal coordination mechanisms will be needed.

Recommendations

- 1. Direct all federal ministers through their mandate letters to help deliver on the NBSAP goals and targets, similar to what has been done for goals related to climate change, reconciliation with Indigenous Peoples, and gender equity.
- 2. Create a formal governance/coordinating mechanism that includes federal, provincial, territorial and Indigenous governments and organizations and civil society, building on the Pathway to Canada Target One model. Indigenous/non-Indigenous expert advisory committees, working in ethical space, could advise on implementation based on western and Indigenous knowledge systems.
- 3. Incent provinces and territories to contribute to Canada's GBF commitments using all available tools (e.g., financial, legal, etc.), including by linking federal funding for broader provincial, territorial and municipal priorities (e.g., infrastructure) to delivering measurable outcomes related to NBSAP goals and targets (see also recommendation 6 in section 1.5).

1.3. Mainstreaming biodiversity considerations across policies and decisions (Target 14)

An integrated approach, led by Environment and Climate Change Canada (ECCC), and supported by central agencies such as the Privy Council Office, Finance Canada and Treasury Board is needed to mainstream biodiversity considerations into policies and decisions across the federal government and ensure they are aligned with the goals and targets.

Recommendations

1. Apply an Integrated Climate and Biodiversity Lens to federal policy, decision making and budgeting to ensure implications to biodiversity goals and targets are considered early in the process. This Integrated Climate and Biodiversity Lens should be part of the Impacts Reports in Federal Budgets.

- 2. Develop an overarching policy that adopts the mitigation hierarchy as a framework to mainstream biodiversity considerations across governments. Embed climate and biodiversity offset policies within this broader framework to ensure they are used as a last resort and only to address impacts that cannot be avoided or mitigated.
- 3. Provide clear guidance on how and when governments should say no to project proposals when the harm the projects pose to biodiversity is too great.

1.4. Spatial planning (Target 1)

Spatial planning led or co-led by Indigenous Peoples offers a pathway to halt the loss of remaining ecosystems with high ecological integrity and to identify and protect other ecologically and culturally important areas in partnership with Indigenous Peoples. Done well, regional land and marine spatial planning processes can bring Crown governments, rightsholders, and stakeholders to the table to design knowledge-based plans that identify areas of the land and seascape that will be conserved, restored and developed based on western science and Indigenous knowledge, providing greater certainty for all.

While good spatial planning requires upfront investments of time and money, it will help avoid future conflicts over conservation and development proposals. It is an effective way to deliver well-designed, well-connected networks of protected areas, other effective area-based conservation measures (OECMs) and IPCAs that will conserve natural and cultural values and deliver on the quantity and quality measures of Target 3.

There are positive cases of Indigenous-led or co-led marine and terrestrial spatial planning processes in Canada that could serve as examples for other areas, for example in Yukon and central coast of BC.

Recommendations

- 1. Provide long-term financial support for Indigenous-led or co-led regional spatial planning initiatives, including capacity support for Indigenous Nations and communities to prepare to engage in planning processes and scientific and technical support, where appropriate.
- 2. Require provincial/territorial participation in high quality spatial planning processes as a condition for accessing federal funding.

1.5. Financial plan for implementation (Target 18, 19)

To meet the ambitions of the GBF, implementation of the NBSAP will require an effective, long-term national biodiversity finance plan that includes scaled-up, long-term public finance as well as a range of other complementary financial tools (Target 19). This national plan should be coordinated with Canada's international biodiversity finance.

While there have been significant federal investments in nature conservation in recent years, the short-term nature of this funding has limited effective progress. Long-term investment in safeguarding healthy ecosystems must be considered a core public government priority as it is foundational to the well-being of all Canadians.

There is also an urgent need to align investments across government and society with the goal of halting and reversing biodiversity loss by 2030. One of the biggest opportunities for catalyzing a nature-positive economy lies in redirecting subsidies that harm nature to support the goals and targets of the GBF (Target 18). Significant resources need to be re-directed away from harmful projects, practices and decisions and toward habitat protection and restoration, identifying and monitoring ecological metrics, pollution prevention, etc.

To better align private sector investments with this goal, requiring and supporting the disclosure of nature-related risk is also important.

- 1. Increase long-term federal financial support to provide certainty to Indigenous Nations and communities and other partners as they consider long-term decisions about land and ocean use and conservation.
- 2. Immediately launch a review of subsidies and incentives to identify those that are harmful to biodiversity by 2024 and develop a plan to phase out or reform them by 2028 (Target 18). This work can help fill the current biodiversity funding gap. The Parliamentary Budget Officer could be tasked with conducting this review.
- 3. Develop a full suite of tools, including blended finance, impact funds, biodiversity bonds, payments for ecosystem services and offset mechanisms, to de-risk and spur investments to help build a nature-positive economy. The Canada Growth Fund, Net Zero Accelerator Initiative and Nature Smart Climate Solutions Fund offer starting points to build on.
- 4. Underpin Canada's biodiversity finance plan with a robust mitigation hierarchy policy¹ (see section 1.3) that aims first to avoid impacts to natural habitat, then minimizes impacts and restores habitat, then, as a last resort implements biodiversity offsets with rigorous safeguards.
- 5. Assist Canadian companies and markets in understanding and managing nature-related risks to their operations (Target 15) by expanding the terms of reference of the Sustainable Finance Action Council to support the Canadian financial sector to integrate nature-related financial disclosure in their operations² and to align financial flows with the objectives of the GBF.

¹ 195 State Parties to the UN Biodiversity Convention have specifically endorsed and recommended the use of the mitigation hierarchy as key to mainstreaming biodiversity in the energy, mining, and infrastructure sectors.

² In Budget 2021, the Government of Canada noted its intention to join the Task Force on Nature-related Financial Disclosure. Further steps must be taken to ensure it is integrated—comprehensively, transparently, and accountably—across Canada's financial system.

- 6. Explore the Canada Health Act as a potential model to incent and finance collective action by provinces and territories to safeguard and restore ecosystem health. This would require umbrella legislation that outlines required principles, standards and approaches, and bi-lateral financial agreements conditional on meeting these requirements to support implementation.
- 7. Coordinate Canada's national biodiversity finance plan with its international biodiversity finance and Overseas Development Assistance efforts and initiatives.

1.6. Strong accountability measures

The success of NBSAP implementation in achieving goals and targets over requisite long timeframes will be heavily dependent on putting in place an effective accountability framework that strengthens the federal government's hand and responsibility and helps ensure implementation is not overcome by countervailing short-term economic and social forces. The *Canadian Net Zero Emissions Accountability Act* and *Emissions Reduction Plan* provide a useful template to build on. A combined approach of accountability legislation, comprehensive and inclusive planning, transparent regular monitoring and reporting, and independent expert oversight would be instrumental in ensuring Canada meets GBF goals and targets.

Recommendations

NBSAP goals and targets should:

- 1. Center Indigenous leadership and knowledge as described in section 1.1.
- 2. Reflect the ambition of the GBF, be inclusive of all GBF goals and targets, and incorporate other guidance outlined in the Framework and CBD decisions.
- 3. Ensure equal importance is given to quantity and quality elements of GBF goals and targets.
- 4. Clearly outline the Indigenous, provincial, territorial, municipal government and other partner contributions, as well as federal actions, that will be relied on to achieve the goals and targets.
- 5. Demonstrate (through modeling, for example) how these measures and strategies will collectively achieve the goals and targets.

Accountability legislation should:

- 1. Enshrine the GBF goals and targets domestically, along with rigorous standards and globally recognized indicators against which to monitor and report on progress.
- 2. Require Cabinet to regularly (e.g., every two years) report to Parliament on progress towards achieving these goals, targets and indicators.
- 3. Require and outline course-correction measures where monitoring and reporting demonstrates we are not on track to meeting our targets.
- 4. Require transparent, accurate reporting on indicators, goals and targets.

- 5. Establish an independent, federally funded body of scientific experts and Indigenous knowledge holders to support implementation of the strategy, including by reviewing and making recommendations on plans, reports and necessary course corrections.
- 6. Require the Commissioner of the Environment and Sustainable development to audit and publicly report on progress towards the GBF targets every three years.

1.7. The climate and biodiversity nexus

The GBF recognizes climate change as a key direct threat to nature as well as the potential harmful impacts to biodiversity of some climate mitigation actions. As well, CBD decisions acknowledge the "critical role of biodiversity and ecosystem functions and services for climate change adaptation, mitigation and disaster risk reduction." The 2022 UNFCCC COP27 Sharm el-Sheikh Implementation Plan⁴ recognizes the importance of ensuring the integrity of all ecosystems to address climate change and included nature-based solutions for the first time in UNFCCC history.

Despite the intertwined nature of climate and biodiversity, the two challenges are still being addressed separately in most international and domestic policy and government structures, including within ECCC and across other departments. While progress has been made in recent years, including the introduction of nature-based climate solutions as part of net-zero targets, and the recognition of nature and biodiversity in climate adaptation, true integration is still lacking.

Multiple GBF targets are relevant to the biodiversity-climate nexus. For example, climate is primarily considered as a direct driver of biodiversity loss (Target 8), but works together with Target 11, which focuses on nature's contributions to people, including climate regulation. In addition, targets that focus on spatial planning (Target 1) and protection (Target 3) will be beneficial for addressing climate change, particularly if high-integrity carbon-rich ecosystems are a key focus, including those with irrecoverable carbon (e.g., peatlands, for which Canada has 25% global responsibility⁵) that we cannot afford to lose if we want to achieve net-zero carbon emissions by 2050.

Restoration of ecosystems (Target 2) and creation of green infrastructure in urban environments (Target 12) can be intentionally carried out to ensure co-benefits for both biodiversity conservation and climate change mitigation. Increasing the integration of biodiversity considerations in production systems, through management practices that reinforce biodiversity, can greatly improve the ability of these ecosystems and people to adapt to climate change (Target 10). The GBF also calls for "optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises" (Target 19).

³ See Decision Adopted by the Conference of the Parties to the Convention of Biological Diversity. 30 Dec 2022. https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-30-en.pdf.

⁴ See Sharm el-Sheikh Implementation Plan. 20 Nov 2022. <u>https://unfccc.int/documents/624444</u>.

⁵ Harris, Lorna I, et al. "The essential carbon service provided by northern peatlands." Frontiers in Ecology and the Environment. Vol. 20, Issue 4. May 2022. https://esajournals.onlinelibrary.wiley.com/doi/10.1002/fee.2437.

- 1. Deliberately consider synergies and trade-offs between biodiversity and climate actions, including by applying an Integrated Climate and Biodiversity Lens (see <u>recommendations in section 1.3</u>).
- 2. Protect high-integrity and carbon-rich ecosystems.
- 3. Ensure that natural climate solutions are planned for long-term effectiveness, and not just rapid carbon sequestration.
- 4. Link carbon offsets to an overarching mitigation hierarchy (see <u>recommendations in section</u> 1.3).
- 5. Coordinate efforts between science and policy to identify and help navigate development pathways toward climate resilience for biodiversity and society.

1.8. Other important cross-cutting considerations

1.8.1. Integrating global and domestic responsibilities

Canada's domestic and international actions on biodiversity are related and need to be closely integrated to ensure domestic actions also contribute to global biodiversity goals and targets, and do not undermine them by inadvertently moving harmful actions offshore. Canada has a significant responsibility as a global north nation with a high level of consumption that has a disproportionate impact on biodiversity and peoples worldwide.

Recommendations

- 1. Progressively and substantially increase Canada's financial investments for global implementation of the GBF through overseas development assistance (Target 19).
- 2. Consider and address impacts on global biodiversity in reviewing harmful subsidies (Target 18).
- 3. Address the fair and equitable sharing of benefits from the use of genetic resources (Target 13), Canada's role in wildlife trade (Target 5), and reducing the footprint of consumption on global biodiversity (Target 16).
- 4. Address Digital Sequence Information simultaneously and in a coordinated way through the CBD as well as in Biodiversity Beyond National Jurisdiction (BBNJ).

1.8.2. One Health

In the wake of the global COVID 19 pandemic, the inextricable links between the health of the natural world and human health outcomes have gained greater recognition. For years, scientists have warned that erosion of wild spaces risks unleashing dangerous viruses, as the distance between wildlife and

human-made environments shrinks. The One Health approach advanced by the World Health Organization and many others provides a framework for coordinating efforts related to the health of people, animals and the environment. It is particularly important to prevent, predict and detect global health threats such as the COVID-19 pandemic.

The GBF recognizes the importance of a One Health approach that also should be embedded in Canada's NBSAP. Applying a One Health approach will require involving public health, veterinary and environmental sectors to ensure actions to conserve and sustainably use biodiversity explicitly consider and support public health and vice versa. It requires consideration of food and water safety, nutrition, understanding and addressing wildlife disease, pollution management as well as the significant human health benefits provided by healthy nature.

Recommendations

- 1. Support establishment of a One Health Council for Canada with Indigenous co-leadership and knowledge framework to develop a One Health Action Plan that includes biodiversity as a core pillar.⁶
- 2. Ensure health metrics are included in monitoring and implementation of the NBSAP, and that the health benefits of biodiversity protection are explicitly recognized and identified.
- 3. Fully fund and implement the pan-Canadian Wildlife Health Framework as a key element of the National Biodiversity Strategy.

2. Specific Recommendations

2.1. Protecting land and ocean ecosystems (Goal A, Target 1, 3, 4 and 12)

Globally and in Canada, habitat loss and degradation are the most significant direct drivers of biodiversity loss on land. In the ocean, overexploitation is the primary driver with habitat loss a close second. Thus, maintaining and restoring habitat must be at the core of Canada's NBSAP. Targets 1 and 3 are key to stopping the loss of habitat and permanently protecting ecosystems with significant ecological and cultural values. Ensuring the quality, quantity and equity elements of these targets are implemented, tracked and reported on is necessary for achieving biodiversity conservation outcomes.

Canada demonstrated leadership by committing to and investing in protecting at least 30% of land and ocean by 2030, and by supporting Indigenous-led conservation before the GBF was finalized. However, much remains to be done to achieve this important target, and lessons can be learned from the work to date. Indigenous-led or co-led conservation initiatives are already underway across the country, offering a pathway to delivering on the targets in much of the country.⁷

⁶ This reflects a recommendation of the Royal Society of Canada One Health Working Group.

⁷ See CPAWS 2022 Roadmap | CPAWS

Building on and learning from work already underway, the NBSAP should:

- 1. Increase long-term financial support for Indigenous-led or co-led conservation initiatives, ensuring funding models reflect the needs of nations and communities. A range of permanent funding mechanisms will likely be required to address different needs.
- 2. Commit to delivering and reporting on the quantity as well as quality and equity elements of Target 3. This means protecting at least 30% of land, freshwater and ocean areas, with a focus on areas that are of particular importance for biodiversity (including Key Biodiversity Areas); ecologically representative; well-connected; effectively conserved and managed; equitably governed; and recognize Indigenous rights and territories.
- 3. Affirm that agreed-to international and national standards must be met for areas to be reported towards Target 3, and that a transparent public decision-making process will be put in place for recognizing newly proposed OECMs.
- 4. Ensure federal funding flowing to provinces and territories through Nature Agreements is conditional on their commitment to ambitious, measurable contributions to meeting Targets 1 and 3, co-developed with Indigenous Peoples, with clear accountability mechanisms.
- 5. Recognize land and ocean protection as a nature-based climate solution that can help deliver on climate mitigation and adaptation goals (Target 8) and ensure climate funding programs support nature protection initiatives.
- 6. Advance Marine Protected Area (MPA) network planning across all of Canada's ocean bioregions, building on work being done in the first four bioregions, and working with Indigenous Peoples.
- 7. Develop a transparent mechanism for mapping alignment between protection and restoration initiatives (Targets 2 and 3), Key Biodiversity Areas (KBAs), and critical and recovery habitat identified in Recovery Strategies under the federal Species at Risk Act (Target 4).

2.2. Ensuring ecological connectivity is maintained and restored (Goal A, Target 1, 2, 3, and 12)

Maintaining and restoring ecological connectivity across land and seascapes is essential to sustain healthy ecosystems and to build resilience to climate change across all biomes and spatial scales. Well-connected ecosystems support wildlife migration, hydrology, nutrient cycling, pollination, seed dispersal, climate adaptation, and disease resistance.

⁸ Hilty, J., et al "Guidelines for conserving connectivity through ecological networks and corridors". Best Practice Protected Area Guidelines Series No. 30. Gland, Switzerland: IUCN. https://doi.org/10.2305/IUCN.CH.2020.PAG.30.en.

Connectivity is embedded throughout the GBF. It is a key element of ecosystem functioning in Goal A; a central aspect of spatial planning in Target 1; essential to achieve restoration of degraded areas in Target 2; important for the conservation and effective management of protected areas and other effective area-based conservation measures in Target 3; and vital for biodiversity and human well-being in urban settings in Target 12. It is also inherent but not specifically mentioned in other targets.

Recommendations

The NBSAP should include:

- A national connectivity program and policies that would help identify priority areas for connectivity, support ecological corridor conservation and restoration, and track progress. This should include permanent funding for the Parks Canada Ecological Corridors program.
- 2. A requirement that wildlife mitigation measures be included in project proposals for federal infrastructure funding for federal, provincial and territorial highways to make busy roads safer for wildlife and people, as well as federal support for supportive scientific analyses.
- 3. A requirement that environmental impact assessments incorporate connectivity considerations.
- 4. Continued funding for marine spatial planning initiatives, with an emphasis on integrating marine conservation targets, regional assessment processes for renewable energy, green shipping corridors and ocean noise reduction.

2.3. Restoring degraded habitats (Target 2)

Target 2 of the GBF requires that by 2030 at least 30% of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration. Achieving this restoration target will require coordination across all levels and sectors of government and society as well as:

- increased long-term financial support beyond the estimated \$2.55 billion already invested in programs with potential to support Target 2⁹,
- a stable and adequate supply of native seed and plant stock,
- an agreed-to baseline for restoration and geographically focused targets for areas of degraded terrestrial, inland water and coastal and marine ecosystems, and
- tracking and reporting on progress and quality assurance.

It will also require centering Indigenous Peoples in decision making, monitoring and assessment of ecosystem health, and ensuring the equitable sharing of the benefits from a restoration economy.

⁹ See Green Budget Coalition draft recommendations at https://greenbudget.ca/recommendations/

The strategy should incorporate biodiversity and climate benefits of restoring terrestrial and coastal ecosystems, for example, by supporting measurement and monitoring of the state of restored carbonrich ecosystems like eelgrass beds, saltmarshes, and peatlands and wetlands.

Recommendations

- Create a dedicated restoration coordinating body to ensure collaboration across governments
 and society; help define baselines and ecosystem-specific targets aligned with international
 standards; support engagement with land and water stewards who hold responsibility for
 restoration efforts across the country; and support development of an adequate workforce to
 deliver on the 30% by 2030 restoration target.
- 2. Ensure existing federal funding programs are designed to support effective ecological restoration efforts and funding gaps are identified and filled.
- 3. Allocate federal restoration science and monitoring capacity to support definitions, target setting, monitoring and reporting, and quality assurance.
- 4. Develop, as an urgent priority, a National Seed Supply Strategy that includes:
 - a. Indigenous-led seed needs assessment and priority setting.
 - b. Capacity building within Indigenous communities to support equitable participation in the restoration economy.
 - c. A federal taskforce to identify regional native seed requirements and develop recommendations for how to overcome barriers to successful restoration.
 - d. Expanded horticultural jobs training related to native plants and restoration best practices.
 - e. Native plant materials development centers for each "priority place."

2.4. Sustainable management (fisheries/forestry/agriculture) (Target 10)

2.4.1. Fisheries

Targets 9 and 10 of the GBF require the sustainable use and management of wild species and sustainable management of fisheries. The federal government is primarily responsible for taking action to deliver on these commitments given its jurisdiction over freshwater and marine fisheries. Fisheries distribution, recruitment and habitat are already changing due to climate change and this needs to be reflected in policies and actions. More action is also needed to manage freshwater fish and fish habitat, particularly for those species that do not have sport-fishing or commercial significance.

The federal government should:

- Partner with Indigenous Peoples and fishery participants to address climate-related impacts on fish populations. Public engagement to inform Canada's Adaptive and Resilient Fisheries Strategy should be launched no later than 2024, with the goal of completing the plan by 2025.
- 2. Integrate Fisheries Act measures, especially under the Sustainable Fisheries Framework and the Fish Stocks Provisions, into biodiversity plans and reporting.
- 3. Commit to ecosystem-based fisheries management and accelerate integration into management plans.
- 4. Accelerate the completion and adoption of rebuilding plans under the Fisheries Act, including measurable actions to reduce mortality, particularly for SARA-listed and COSEWIC-assessed species.
- 5. Increase funding and action to deliver on its responsibilities for freshwater monitoring, habitat protection and restoration, pollution prevention and reduction, and enforcement resources.
- 6. Align Canadian fisheries funding with World Trade Organization Agreement on Fisheries Subsidies and work to align fisheries-related international agreements and rules with GBF goals and targets.

2.4.2. Forestry

Canada has almost 10% of the world's forest, and despite claims to sustainability in its national State of the Forest and CBD reports, Canada ranks third in the world for the rate of loss of its intact forests. Boreal woodland caribou, one of the most iconic and well-researched animals in Canada, have continued to decline in numbers with road building and clearcut logging as key drivers of this decline. Canada is also not adequately accounting for or reporting the climate impact of industrial logging, ¹⁰ and land conversion is likely much higher than reported. ¹¹ Additionally, wildfires are expected to increase and will have a significant impact on forest ecosystems, including a potential loss of mature forest habitats, at least in the short-term.

Recommendations

The NBSAP should include commitments from federal, provincial and territorial governments to:

¹⁰ See the 2023 Commissioner of Environment and Sustainable Development Reports: https://www.oag-bvg.gc.ca/internet/English/parl cesd 202304 01 e 44239.html

¹¹ See Boreal Logging Scars: An extensive and persistent logging footprint in typical clearcuts of northwestern Ontario , Canada. Wildlands League. 2020. https://loggingscars.ca/wp-content/uploads/LOGGING-SCARS-PROJECT-SUPPLEMENT-Candidate-Sites-Catalog-final-2020.pdf.

- 1. Develop a regulatory framework to halt forest degradation by 2030, as committed to in the Glasgow Leaders' Declaration, that includes:
 - a. Thresholds for linear disturbance density consistent with recovering woodland caribou and other species at risk.
 - b. Prioritizing the permanent protection of primary forests, and lands and waters that are culturally important to Indigenous Peoples (contributing to Target 3).
 - c. Aligning Canada's approach with international standards such as the UN's System of Environmental-Economic Accounting Ecosystem Accounting (SEEA EA) to ensure that forest degradation and loss are accurately reported.
- 2. Develop a process to support the development, protection and recognition of IPCAs in the managed forest (links to Targets 1 and 3).
- 3. Transparently report on GHG emissions from industrial logging.
- 4. Reduce harvest levels in regions with significant loss of mature forests due to increased natural disturbance.

2.4.3. Agriculture

The GBF offers an opportunity to shift the agriculture sector towards adopting truly sustainable practices that will support and enhance biodiversity and reduce pollution from nutrients, plastics, industrial chemicals and pesticides. Making this shift will require a mix of regulation and biodiversity-positive incentives.

Primary agriculture covers 6.3% of Canada's land area. Farmers and ranchers have significant tools and knowledge that can help halt and reverse biodiversity loss by restoring, enhancing and creating new nature on their land and by adopting modified farming techniques. To encourage widespread adoption of sustainable practices, farmers and ranchers will need financial support, as well as enhanced access to extension/educational resources designed to meet the dual needs of farming and biodiversity.

The federal government has a key role to play in applying legal tools and financial incentives to reduce the key agricultural stressors, such as pesticide pollution and excessive nutrient run-off.

- 1. Re-direct subsidies that directly or indirectly incentivize pesticide use to support nature-positive approaches (Target 18).
- 2. Redirect incentives that reinforce practices that contribute to biodiversity loss to be nature-positive (Target 18).

- 3. Promote market-based models to provide incentives to farmers and ranchers for restoration and the adoption of sustainable agricultural activities that support biodiversity and ecosystem goods and services.
- 4. Empower farmers and ranchers by enhancing public sector extension services and supporting knowledge transfer and peer-to-peer learning.
- 5. Ensure funding programs support biodiversity outcomes and are flexible enough to respect different community needs, local contexts and culture.
- 6. Work to align the World Trade Organization's Agreement on Agriculture, and other international trade agreements and rules, with GBF goals and targets, to discourage agricultural practices that harm biodiversity and encourage nature-positive practices.

2.5. Invasive species (Target 6)

One of the five primary direct drivers of biodiversity loss, invasive non-native species can have a catastrophic impact on biodiversity that is often irreversible. Invasive species directly impact native species, degrade ecosystems and habitats, and cause economic losses of billions of dollars each year, including in the agriculture, forestry, fisheries, and tourism sectors. For example, Environment Canada estimated the annual impact of invasive plants on Canadian agriculture in 2010 was \$2.2 billion.

Recommendations

- 1. Prevent new introductions by identifying key pathways of introduction.
- 2. Ensure effective and early responses to new and emerging species.
- 3. Enable and support cross-sectoral partnerships, collaboration, and Indigenous leadership and knowledge in planning, control, monitoring, and reporting.
- 4. Encourage and ensure access to strong science, management, and reporting that provides accessible and transparent research and data that also helps to evaluate policies and programs to ensure effectiveness.

2.6. Pollution (Target 7)

Pollution is one of the top five drivers of biodiversity loss. To implement Target 7 in Canada, the NBSAP must commit to urgent and ambitious action on pollution reduction to protect wildlife and people. This action would advance reconciliation with Indigenous Peoples whose traditional territories have been degraded by pollution.

Canada is among the heaviest pesticide users in the world, and many of these uses have significant adverse biodiversity impacts. Pesticide use reduction, including elimination of prophylactic uses and

cosmetic uses beyond federal lands must be a key part of the strategy to reduce overall risks from exposure to pollution.

Recommendations

- 1. Commit to a 50% reduction in pesticide use by 2030 along with programs to support farmers and industry to transition away from pesticide and other input-dependent agriculture (Target 7).
- 2. Provide significant, comprehensive support for farmers to transition away from pesticide dependence and remove incentives to over-use pesticides and fertilizers.
- 3. Strengthen the Pest Control Products Act (PCPA) to incorporate a biodiversity lens and a precautionary approach to the assessment of pest control products for the registration and use in Canada.
- 4. Use amendments to the Canadian Environmental Protection Act (CEPA) to reduce environmental pollution.
- 5. Implement bans of cosmetic, forestry, pre-harvest and prophylactic pesticide use on federal lands.
- 6. Incorporate pesticide use reduction into species-at-risk recovery strategies.
- 7. Strengthen Fisheries and Oceans Canada's capacity to protect freshwater from pollution, including by re-establishing regional staff with local expertise.
- 8. Continue to build systems that reduce our waste and support circular economies, such as reuse and refill, right-to-repair and extended product warranties.

2.7. Climate and biodiversity education for children and youth

A well-informed society that is aware of the importance of biodiversity and what can be done to address its threats is foundational to transformative action. Education and knowledge underpin many of the targets in the GBF and are an empowering way to advance progress towards halting and reversing nature loss, with the potential to influence habits, behaviours, and consumption patterns. A deeper relationship with nature and more time spent outdoors have positive impacts on health and wellbeing. Education has a key role to play in strengthening people's connection with their surrounding environment - and the biodiversity within.

Canada's NBSAP must include the development, implementation, and scaling-up of locally rooted, equitable, and accessible formal and informal learning opportunities about biodiversity, bridging scientific and traditional ecological knowledge with a strong focus on children and youth.

- Canada's governments and educational bodies should continue work to better integrate
 biodiversity into elementary and secondary school curriculums and include locally relevant,
 experiential, and land-based biodiversity education opportunities that are inclusive of
 Indigenous perspectives and traditional ecological knowledge, with a commitment to assessing
 program effectiveness.
- 2. The federal government should work with provinces, territories, municipalities, Indigenous Nations, civil society groups and other partners to mainstream and support informal biodiversity education and awareness.
- 3. Canada should support accessible formal and informal climate and biodiversity education in the Global South through international biodiversity finance, particularly for children and youth, and with greater attention to the regions hardest hit by climate change and biodiversity loss.