Discussion Paper

Toward a 2030 Biodiversity Strategy for Canada

Halting and reversing nature loss

Environment and Climate Change Canada
Environnement et Changement climatique Canada

Canada

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About this document

This paper is intended to help Canadians reflect on the state of nature and to inform the development of the 2030 Biodiversity Strategy. The following pages provide an overview of the task at hand, as well as a brief overview of the issues, challenges, and opportunities we face in responding to it. It draws on internal analyses; input from organizations and individuals in the lead-up to, during, and after the United Nations Convention on Biological Diversity (UN CBD) 15th meeting of the Conference of the Parties (COP15) in Montreal; roundtables on halting and reversing biodiversity loss hosted by Environment and Climate Change Canada; insights from federal engagement efforts on related issues; and lessons learned from efforts to date to conserve biodiversity across Canada.

This paper is not meant to be a comprehensive picture of biodiversity conservation and our path forward, as it is largely written from the federal point of view. It is simply a starting point to bring forward the full diversity of Canadian perspectives so we can build an ambitious and inclusive strategy.

Introduction

Nature matters. Canadians depend on biodiverse ecosystems and the services they provide. These include clean air and water, fertile soil, carbon sequestration, and flood and drought mitigation. Biological diversity — or biodiversity — also contributes to the resilience of species and helps ecosystems adapt to change. It is also clear that green and wild spaces are important for physical and mental health. Canada's economy, environment, social, and cultural identities are closely interconnected with and dependent upon its biodiversity.

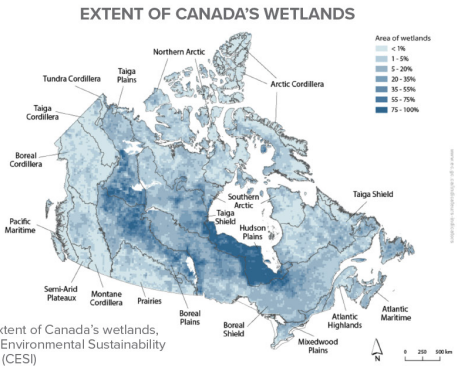
Canada's nature is important for the world and is essential for human survival, security, prosperity, and well-being.

It provides us with a **stable climate**, **breathable air**, **food supply**, **clean water**, and **protection** from disease and disaster.

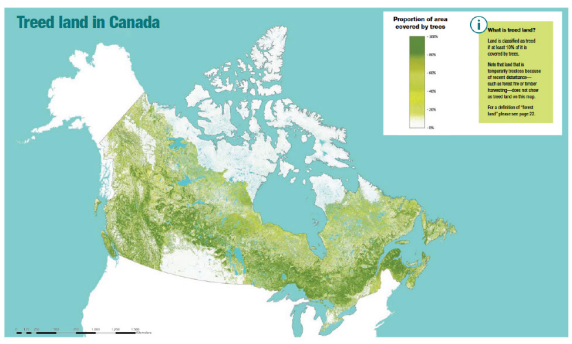
Twenty countries contain **94%** of the world's remaining wilderness. **Canada is #2** on this list.

Canada has:

28% of the world's boreal forest;
20% of the world's total freshwater;
24% of the world's wetlands.



Source: Extent of Canada's wetlands, Canadian Environmental Sustainability Indicators (CESI)



Source: State of Canada's Forest Annual Report 2018

Canada is home to an estimated 80,000 wild species. Canada is also steward of ecosystems that are globally significant and provide essential habitat for a unique variety of plants and animals, including many that are central to the traditions and cultures of Indigenous Peoples. This includes a vast proportion of the world's boreal forests, 20% of its freshwater resources, and the longest coastline on the planet. Canada also has a quarter of global wetlands, 25% of remaining global temperate rainforests, and expansive areas of relatively untouched landscapes.

What is biodiversity?

The CBD defines biological diversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems."

Addressing biodiversity loss is essential and Canadians care about nature and support its protection.

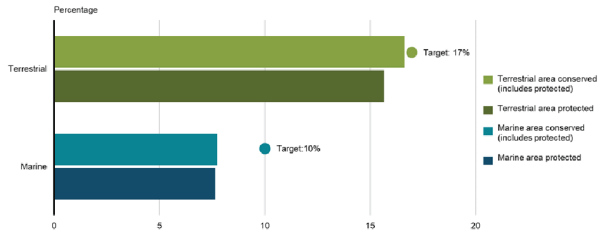
97% of Canadians have either maintained or increased their support for nature conservation since COVID-19.

78% of Canadians prioritize the protection of animal species at risk of extinction over the development of lands where those animals can be found.

Our economies are **embedded in Nature**, not external to it.

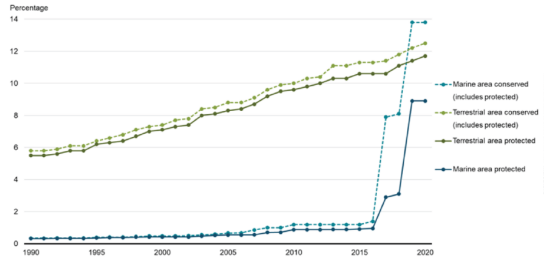
Globally, nature's contributions to people are worth around **$125 trillion a year**.

PERCENTAGE OF GLOBAL AREA CONSERVED IN RELATION TO GLOBAL 2020 TARGETS, MAY 2021



Source: Global trends in conserved areas, CESI

PROPORTION OF AREA CONSERVED, CANADA, 1990 TO 2020



Source: National Conserved Areas, CESI

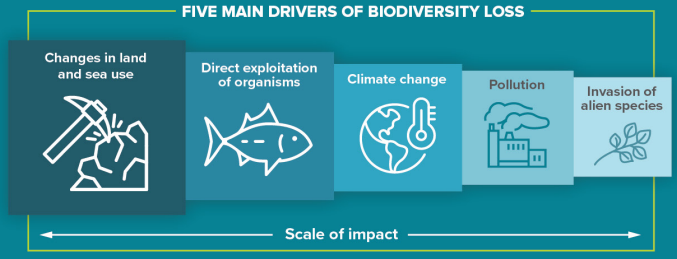
But biodiversity is under threat. Multiple human drivers have significantly altered nature across the globe, resulting in the rapid decline of biodiversity and threatening more species with global extinction now than at any time in human history[1]. The global biodiversity crisis is gaining global recognition on par with climate change as an all-encompassing environmental issue with serious consequences for all humanity. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) released a Global Assessment in 2019, which found that biodiversity is being altered at an unprecedented rate. The IPBES report identified five direct drivers of biodiversity loss, namely land-use and sea-use change, invasive alien species, climate change, overexploitation of resources, and pollution.

[1] IPBES (2019) *The Global Assessment Report On Biodiversity and Ecosystem Services* - Summary for Policy Makers.

Nature globally and in Canada

Globally:

- Up to **1,000,000 species** are threatened with extinction.
- Natural ecosystems have **declined by 47%** on average.
- **Approximately 25%** of species are already threatened with extinction.
- The global biomass of wild mammals **has fallen by 82%**.

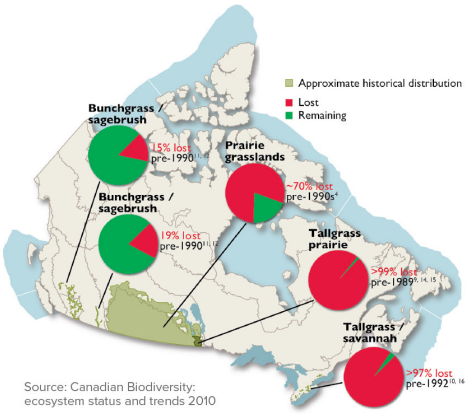


Source: Adapted from IPBES Global Assessment Report on Biodiversity and Ecosystem Services 2019

In Canada:

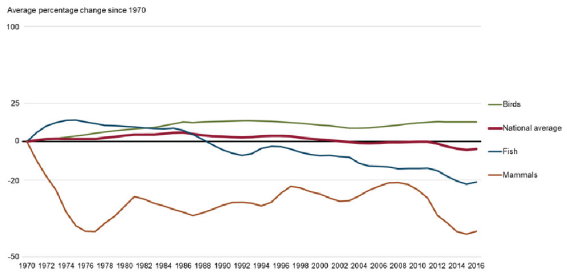
- **70% of prairie wetlands** lost.
- **80% of the Carolinian Forest** lost.
- **Over 80% of wetlands** in and around urban areas lost.
- Between 1970 and 2016, populations of mammal and fish species **decreased by 42%** and **21%** on average.

HISTORICAL LOSS OF GRASSLANDS
Estimated percent loss up to early 1990s



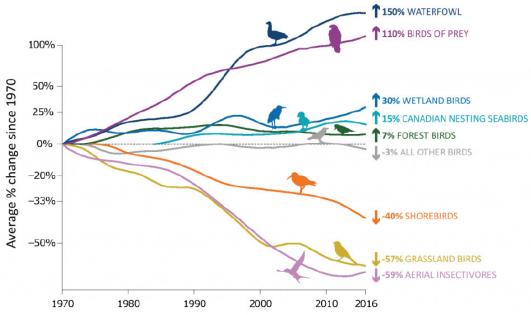
Source: Canadian Biodiversity: ecosystem status and trends 2010

CANADIAN SPECIES INDEX, PERCENTAGE CHANGE, 1970 TO 2016



Source: Canadian species index, CESI

TRENDS IN BIRD POPULATIONS BY SPECIES GROUP, CANADA, 1970 TO 2016

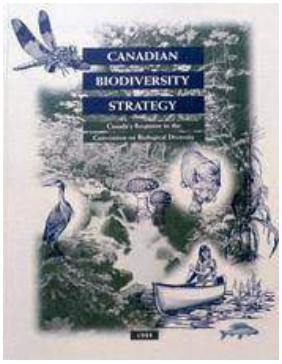


Source: Trends in Canada's bird populations, CESI - North American Bird Conservation Initiative Canada. State of Canada's Birds 2019

The Convention on Biological Diversity (CBD)

The United Nations Convention on Biological Diversity (UN CBD) entered into force in 1993 and has 196 Parties, including Canada. As an international legally-binding treaty, the CBD commits the Parties to conserve biodiversity, use its components sustainably, and share the benefits arising from the use of genetic resources in a fair and equitable manner. Under the CBD, Parties are required to have a National Biodiversity Strategy and Action Plan (NBSAP) that outlines domestic efforts to advance the measures set out in the CBD. Parties must also prepare national reports describing implementation efforts.

Canada was the first industrialized country to ratify the CBD, acknowledging it as an important instrument for promoting and guiding efforts to conserve biodiversity and use biological resources sustainably. As further recognition of the importance of the CBD, Canada has hosted its Secretariat in Montreal since 1996.

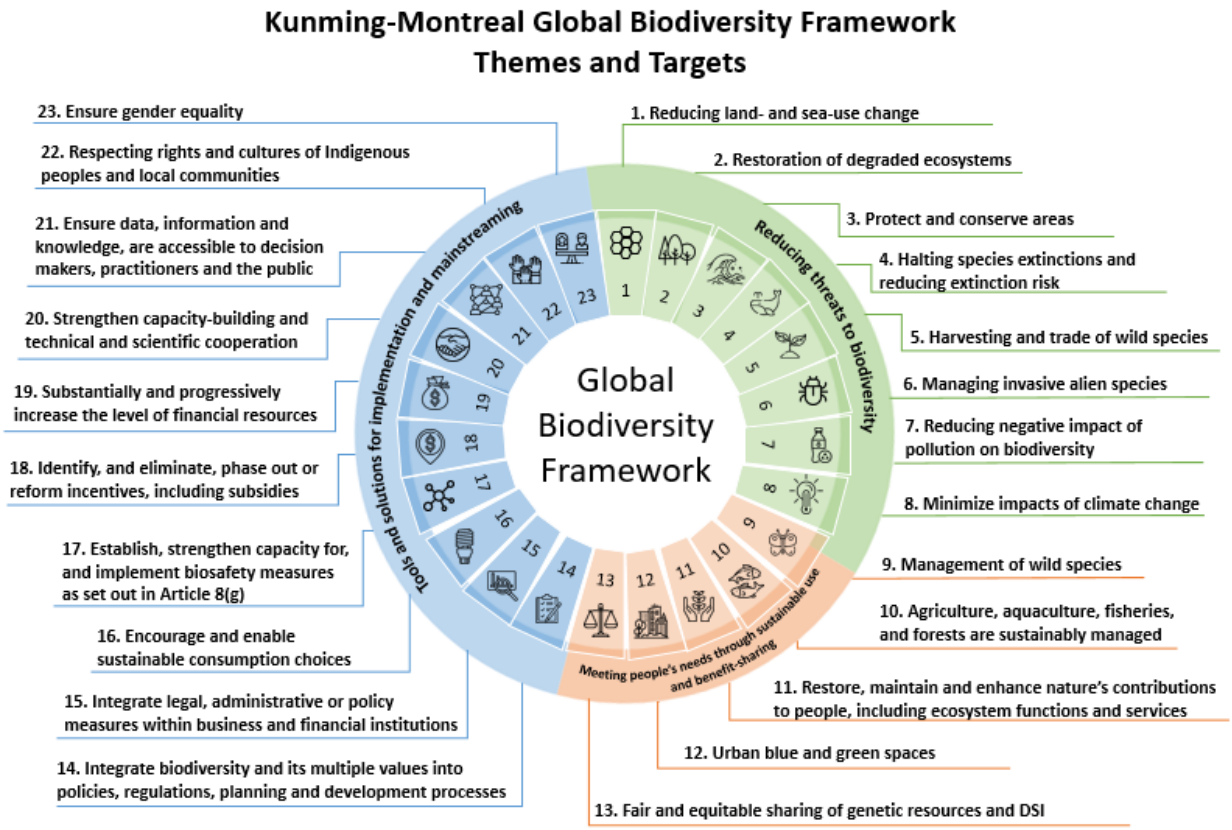


After ratifying the CBD, Canada developed the Canadian Biodiversity Strategy in 1995, the Biodiversity Outcomes Framework in 2008, and the 2020 Biodiversity Goals and Targets for Canada in 2016. Together, these constitute Canada's current NBSAP.

The new Kunming-Montreal Global Biodiversity Framework

The Kunming-Montreal Global Biodiversity Framework (KMGBF) was adopted in December 2022 at the 15th meeting of the Conference of the Parties to the CBD (COP15). This landmark document builds on the Strategic Plan for Biodiversity 2011-2020 and includes a set of goals, targets, and a partial set of indicators for Parties to address (see Annex). A major focus of the KMGBF mission is halting and reversing biodiversity loss by 2030 and restoring biological diversity levels by 2050. The KMGBF represents "an ambitious path forward for our planet" and gives countries "the tools to turn the tide" on biodiversity loss[2].

Parties are required to develop an updated NBSAP by the end of 2024, ahead of COP16, that aligns with the new KMGBF.



[2] Government of Canada – Environment and Climate Change Canada (2022). "Canada helps lead the world to agreement on the monumental Kunming-Montréal Global Biodiversity Framework."

Creating Canada's 2030 Biodiversity Strategy

The Government of Canada, through Environment and Climate Change Canada (ECCC), is responsible for leading the development of the 2030 Biodiversity Strategy and reporting on Canada's progress to meet the KMGBF targets. The Strategy will guide how Canada plans to achieve the new global goals and targets domestically.

Where we're going

The 2030 Biodiversity Strategy will be part of our renewed NBSAP and will reflect domestic priorities for halting and reversing biodiversity loss and Canadian contributions to the goals and targets of the KMGBF to 2030. It will be framed around the KMGBF goals and targets, and cover all related aspects of nature conservation, sustainable use, and access and benefit-sharing of genetic resources. To ensure the Strategy translates into real action and that Canada can track its progress, it will include a robust measurement framework and a plan for how Canada will contribute to each of the KMGBF targets.

The detailed content of the Strategy will be drafted in 2023, informed by a range of engagement efforts (see "How we'll get there" section below). Some guiding principles to consider as we build the Strategy together include:

- **Committing to urgent and ambitious action** – We are at a critical juncture for nature, which demands both urgent and ambitious action, and we cannot afford to wait or to take half-measures. While the targets in the KMGBF are ambitious, they are at best the minimum required to halt and reverse biodiversity loss by 2030.
- **Seeking transformative change** – Achieving our ambitious global goals will require transformational change across all facets of society. Simply put, the status quo will not get us to where we need to be.
- **Taking a comprehensive, whole-of-society approach** – One of the principles of the KMGBF is that a whole-of-society approach is required. No one group has all the knowledge, tools, and resources required to achieve our shared biodiversity goals. This will require all of us working together and leveraging the full suite of tools at our disposal to achieve ambitious outcomes for nature and people.
- **Taking an all-of-government approach** – While ECCC will lead the overall development of the Strategy, other federal departments will play important roles in leading and co-leading different elements of the plan in line with their mandates and expertise. All federal departments and agencies will have a role in supporting its implementation.
- **Walking the path to reconciliation** – Conserving and sustainably using biodiversity must be done hand in hand with Indigenous Peoples. As the original caretakers of the lands, waters, and ice, Indigenous Peoples are leaders, knowledge holders, and knowledge generators; and they hold unique rights and connections to lands and traditional territories.
- **Making space for multiple ways of knowing** – The 2030 Strategy will need to respect and weave together western science and Indigenous knowledge systems, recognizing that both will provide valuable insights and help Canada take informed and effective action towards halting and reversing biodiversity loss.

Where we're coming from

As we develop the 2030 Biodiversity Strategy, it is important to keep in mind that we are not starting from scratch. There is already a solid foundation of knowledge, initiatives, and tools that we can build on, while incorporating new knowledge and lessons learned.

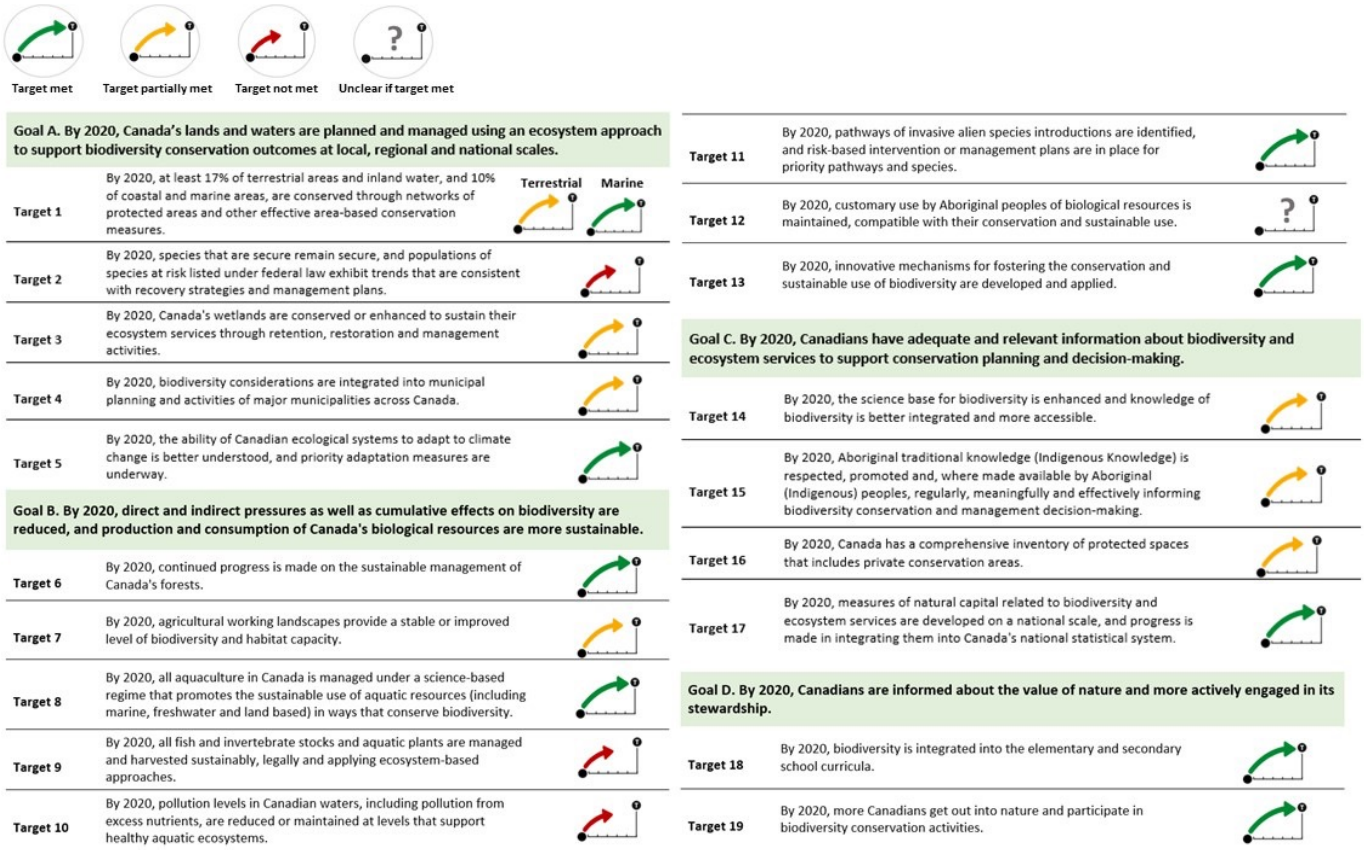
Existing programs, including significant recent federal nature-related investments (see table below) are complemented by actions being undertaken by provinces and territories, Indigenous nations, non-governmental organizations, industry, and other partners and stakeholders across the country. It is important to reflect on what we already have in place to maximize the effectiveness and complementarity of these initiatives. Given the shared jurisdiction for managing biodiversity in Canada, provinces and territories collectively have a major role in helping meet many of the targets across the country's lands and waters. Further, more than 3,500 municipal, regional, Indigenous, and other local governments are responsible for many direct on-the-ground conservation activities, as well as numerous innovative programs. And this all relies on the actions and contributions of individual Canadians at home, at work, and in their communities.

A sample of federal investments in nature

Nature Legacy and Enhanced Nature Legacy ($1.35 billion / 5 years + $2.3 billion / 5 years)	To conserve up to 1 million km^2 of additional land and waters, create jobs in nature conservation, accelerate protection and conservation of provincial and territorial areas, support Indigenous Peoples, take action to prevent priority species from disappearing, and enhance information and knowledge. This includes funding to develop Nature Agreements with provinces, territories, and Indigenous Peoples to advance shared interests for conserving nature, establishing and effectively managing more protected areas, protecting and recovering species at risk and their habitats, and supporting Indigenous leadership in conservation initiatives. It also includes $200 million for infrastructure to use natural or hybrid approaches to protect the environment, support healthy and resilient communities, contribute to economic growth, and improve access to nature for Canadians.
2025 Marine Conservation Target ($976.8 million / 5 years)	To protect the health of our oceans and reach ambitious marine conservation targets. This funding is supporting: effective management of existing marine protected areas (MPAs) and other effective area-based conservation measures (OECMs); the establishment of new MPAs and OECMs to meet the 25% by 2025 target; continuing to build on and foster meaningful partnerships with provincial, territorial, and Indigenous governments, and local communities; and advancing marine conservation via conservation networks.

Natural Climate Solutions Fund (Over $5 billion / 10 years)	To support the implementation of natural climate solutions via three programs: the 2 billion Trees Program ($3.2 billion) to plant two billion trees across Canada, the Nature Smart Climate Solutions Fund ($1.4 billion) to help conserve, enhance, and restore wetlands, peatlands, grasslands and agriculture lands, and the Agricultural Climate Solutions program ($855 million) to support immediate on-farm action. Programming includes dedicated funding to support work with Indigenous partners.
International Finance Commitments (Over $1 billion)	An allocation of at least 20% or more than $1 billion of Canada's $5.3 billion climate finance commitment to projects that leverage nature-based climate solutions and that contribute biodiversity co-benefits in developing countries. $350 million to support developing countries in advancing biodiversity efforts and the implementation of the KMGBF.

The Final Report for the 2020 Biodiversity Goals and Targets for Canada provides insight into previous and ongoing efforts and areas for particular attention going forward (see figure below). In developing and implementing the 2030 Strategy, it will be important to set priorities, actions, and milestones on the path to achieving our biodiversity goals and targets, regularly and transparently assess our progress, correct our course where necessary, and ensure the indicators used to track progress are effective.



Final Assessment of the 2020 Biodiversity Goals and Targets for Canada[3]

Finally, the federal government has previously engaged Canadians on nature-related issues. There is an opportunity to draw on what Canadians have said during the development of these related initiatives and learn from and build upon them to achieve the KMGBF goals and targets in Canada. These initiatives include, for example, the nature-related targets in the Federal Sustainable Development Strategy (Listening to Canadians) and the National Adaptation Strategy Nature and Biodiversity theme.

[3] Government of Canada – Environment and Climate Change Canada (2023). Final Report for the 2020 Biodiversity Goals and Targets for Canada.

Cross-cutting challenges and opportunities

While there are challenges and opportunities that are unique to certain targets, there are some that cut across many or all targets. Taking account of these cross-cutting issues will help support our ability to take specific steps to conserve biodiversity, encourage sustainable use, and ensure our actions result in a balance of environmental, social, and economic benefits that are good for both nature and people.

Coordination and collaboration

Coordination and collaboration are often cited as challenges in biodiversity conservation and sustainable use, given the many actors, disciplines, regions, and ecosystems at play. However, coordination and collaboration is one way to help ensure our collective efforts are complementary, effective, appropriately prioritized, and efficiently resourced. Coordination and collaboration can occur between and across:

- the individuals, institutions, and sectors involved in biodiversity conservation and sustainable use, as well as those not traditionally focused on biodiversity but who may now want to be involved;
- academic disciplines crucial to producing the knowledge base for informed action; and
- areas of action and/or joint impact (e.g., biodiversity and climate change), to ensure best practices and lessons learned are shared and efforts are complementary and not duplicative.

Science and data

Effective and targeted actions to halt and reverse biodiversity loss must be guided by the best available information. Advancing the required knowledge base requires navigating complexity and uncertainty to address multiple, often interacting, questions that span disciplines, organizations, and communities. Another aspect is mobilizing data and knowledge, including sharing information between those developing knowledge and those developing actions and programs. Furthermore, fully valuing Indigenous knowledge and ways of knowing will be necessary. Practices such as "two-eyed seeing" — "to see from one eye with the strengths of Indigenous ways of knowing, and to see from the other eye with the strengths of Western ways of knowing, and to use both of these eyes together"[4] — are a means of drawing on the strengths of both western and Indigenous science and knowledge.

Where available knowledge is insufficient to facilitate decisions within a reasonable range of risk, then research may be required to synthesize existing data or gather and analyze new data and develop models and new insights to better predict possible outcomes. Assessing, challenging, and building on existing studies to improve and expand our knowledge of the natural world will be helpful.

[4] Bartlett C., Marshall M., Marshall A. (2012). "Two-eyed seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledges and ways of knowing." *Journal of Environmental Studies and Sciences*, 2, 331–340.

Engagement and reconciliation with Indigenous Peoples

Indigenous Peoples have deep relationships with nature and have successfully stewarded their environments since time immemorial. Currently, they are on the frontlines of the twin crises of biodiversity loss and climate change, feeling their impacts both early and disproportionately. This uniquely positions Indigenous Peoples to be leaders in addressing the biodiversity crisis.

The 2030 Biodiversity Strategy will seek to reflect First Nations, Inuit, and Métis voices and is an opportunity to advance reconciliation, which in turn is an opportunity to build and implement a stronger Strategy. Listening to Indigenous voices is an opportunity to learn from Indigenous leadership across all the KMGBF targets.

Public awareness and mainstreaming

Growing interest and engagement on biodiversity issues across Canada presents an opportunity to mainstream the conservation and sustainable use of biodiversity and accelerate our collective work to halt and reverse biodiversity loss. COP15 in Montreal was a unique opportunity for Canada and Canadians to focus attention on the importance of nature and the urgency of global action. COP15 saw the highest number of registrations of any other CBD COP before it, with significant participation from a wide variety of governments, Indigenous Peoples, women, youth, and civil society and business stakeholders. This type of momentum can help Canada achieve its nature goals.

Public awareness is important from an engagement and educational standpoint. It can also directly lead to action. For example, local awareness of climate change-induced extreme weather events can promote conservation and the application of nature-based solutions, and growing citizen science movements can fill research and monitoring gaps for data-deficient species.

However, increasing public awareness of biodiversity does not necessarily translate into the mainstreaming of biodiversity across governments, sectors, and society more broadly. Mainstreaming means “ensuring biodiversity, and the services it provides, are appropriately and adequately factored into policies and practices that rely and have an impact on it.” [5]

There are many examples of biodiversity mainstreaming in Canada. For example, the Government of Canada conducts strategic environmental assessments on proposed policies, plans, and programs that could result in positive or negative environmental effects. At a municipal level, examples include the Town of Gibsons, British Columbia, which developed a municipal eco-assets strategy recognizing ecosystem services as integral to the town’s infrastructure and as a core asset of the community. Continuing to mainstream biodiversity will help ensure a whole-of-society approach to implementing the KMGBF.

[5] CBD Secretariat (n.d.). *Mainstreaming Biodiversity: Concept and Work Under the Convention*.

How we'll get to the 2030 Strategy

There will be several key opportunities for Canadians to help shape the 2030 Biodiversity Strategy. These include:

- A **virtual symposium** to kick off the engagement process for developing the Strategy;
- **Focused engagement** with key groups (e.g., provincial and territorial governments, Indigenous nations, municipalities and regional governments, civil society organizations, financial, resource, and industrial sectors, youth), or around thematic issues;
- An **online platform** to allow for broader input; and
- An **opportunity to review a draft** Strategy, and provide input, before it is finalized.

Your input is invaluable

To help inform the 2030 Strategy, please consider the following overarching questions:

- What are the key features of a successful 2030 Biodiversity Strategy?
- What are the most significant challenges and opportunities to achieving the KMGBF 2030 targets in Canada? What successful initiatives could we build upon?
- Are there targets where Canada is already making good progress and others where Canada should focus more attention?
- What measures should be prioritized and implemented as soon as possible to ensure we meet the 2030 targets and are on track to reach the longer-term 2050 goals?
- No target is an island: What overarching tools and solutions hold the most potential for making progress across multiple targets?
- What additional knowledge and enabling mechanisms (e.g., networks, policies) are critical to inform implementation decision-making at all levels?
- In drafting the 2030 Biodiversity Strategy what individuals', communities', or organizations' perspectives, knowledge, and skills should be meaningfully amplified to make progress on reducing threats to biodiversity?
- What are the key human needs and values to be addressed to make biodiversity loss a mainstream concern?
- What does success look like?

Annex

KMGBF Draft Goal / Target	Proposed headline indicators [1] [2]
Goal A The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050; Human induced extinction of known threatened species is halted, and, by 2050, the extinction rate and risk of all species are reduced tenfold and the abundance of native wild species is increased to healthy and resilient levels; The genetic diversity within populations of wild and domesticated species, is maintained, safeguarding their adaptive potential.	**A.1** Red List of Ecosystems **A.2** Extent of natural ecosystems **A.3** Red List Index **A.4** The proportion of populations within species with an effective population size > 500
Goal B Biodiversity is sustainably used and managed and nature's contributions to people, including ecosystem functions and services, are valued, maintained and enhanced, with those currently in decline being restored, supporting the achievement of sustainable development for the benefit of present and future generations by 2050.	**B.1** Services provided by ecosystems*
Goal C The monetary and non-monetary benefits from the utilization of genetic resources and digital sequence information on genetic resources, and of traditional knowledge associated with genetic resources, as applicable, are shared fairly and equitably, including, as appropriate with indigenous peoples and local communities, and substantially increased by 2050, while ensuring traditional knowledge associated with genetic resources is appropriately protected, thereby contributing to the conservation and sustainable use of biodiversity, in accordance with internationally agreed access and benefit-sharing instruments.	**C.1** Indicator on monetary benefits received* **C.2** Indicator on non-monetary benefits*
Goal D Adequate means of implementation, including financial resources, capacity-building, technical and scientific cooperation, and access to and transfer of technology to fully implement the Kunming-Montreal Global Biodiversity Framework are secured and equitably accessible to all Parties, especially developing country Parties, in particular the least developed countries and small island developing States, as well as countries with economies in transition, progressively closing the biodiversity finance gap of $700 billion per year, and aligning financial flows with the Kunming-Montreal Global Biodiversity Framework and the 2050 Vision for biodiversity.	**D.1** International public funding, including official development assistance (ODA) for conservation and sustainable use of biodiversity and ecosystems **D.2** Domestic public funding on conservation and sustainable use of biodiversity and ecosystems **D.3** Private funding (domestic and international) on conservation and sustainable use of biodiversity and ecosystems*

Target 1 Ensure that all areas are under participatory, integrated and biodiversity inclusive spatial planning and/or effective management processes addressing land- and sea-use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities.	**A.1** Red List of Ecosystems **A.2** Extent of natural ecosystems **1.1** Percent of land and seas covered by biodiversity-inclusive spatial plans*
Target 2 Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.	**2.2** Area under restoration*
Target 3 Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.	**3.1** Coverage of protected areas and OECMs
Target 4 Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.	**A.3** Red list Index **A.4** The proportion of populations within species with an effective population size > 500
Target 5 Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spillover, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.	**5.1** Proportion of fish stocks within biologically sustainable levels

Target 6 Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50% by 2030, and eradicating or controlling invasive alien species, especially in priority sites, such as islands.	**6.1** Rate of invasive alien species establishment
Target 7 Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use; (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and (c) by preventing, reducing, and working towards eliminating plastic pollution.	**7.1** Index of coastal eutrophication potential **7.2** Pesticide environment concentration*
Target 8 Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.	**-b**
Target 9 Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.	**9.1** Benefits from the sustainable use of wild species* **9.2** Percentage of the population in traditional occupations* **-b**
Target 10 Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches, contributing to the resilience and long-term efficiency and productivity of these production systems, and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.	**10.1** Proportion of agricultural area under productive and sustainable agriculture **10.2** Progress towards sustainable forest management

Target 11 Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as the regulation of air, water and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.	**B.1** Services provided by ecosystems*
Target 12 Significantly increase the area and quality, and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature, and contributing to inclusive and sustainable urbanization and to the provision of ecosystem functions and services.	**12.1** Average share of the built-up area of cities that is green/blue space for public use for all **-b**
Target 13 Take effective legal, policy, administrative and capacity-building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources and from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources, and facilitating appropriate access to genetic resources, and by 2030, facilitating a significant increase of the benefits shared, in accordance with applicable international access and benefit-sharing instruments.	**C.1** Indicator on monetary benefits received* **C.2** Indicator on non-monetary benefits* **-b**
Target 14 Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, and fiscal and financial flows with the goals and targets of this framework.	**-b**

Target 15 Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions: **a.** Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains, and portfolios; **b.** Provide information needed to consumers to promote sustainable consumption patterns; **c.** Report on compliance with access and benefit-sharing regulations and measures, as applicable. in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.	**15.1** Number of companies reporting on disclosures of risks, dependencies and impacts biodiversity* **-b**
Target 16 Ensure that people are encouraged and enabled to make sustainable consumption choices, including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030, reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation, in order for all people to live well in harmony with Mother Earth.	**-b**
Target 17 Establish, strengthen capacity for, and implement in all countries, biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention.	**-b**
Target 18 Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least $500 billion United-States dollars per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.	**18.1** Positive incentives in place to promote biodiversity conservation and sustainable use **18.2** Value of subsidies and other incentives harmful to biodiversity that have been eliminated, phased out or reformed.

Target 19

Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement biodiversity strategies and action plans, mobilizing at least $200 billion United-States dollars per year by 2030, including by:

- **a.** Increasing total biodiversity related international financial resources from developed countries, including official development assistance, and from countries that voluntarily assume obligations of developed country Parties, to developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, to at least US$ 20 billion per year by 2025, and to at least US$ 30 billion per year by 2030;
- **b.** Significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances
- **c.** Leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments;
- **d.** Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, benefit-sharing mechanisms, with environmental and social safeguards
- **e.** Optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises,
- **f.** Enhancing the role of collective actions, including by indigenous peoples and local communities, Mother Earth centric actions[1] and non-market-based approaches including community based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity;
- **g.** Enhancing the effectiveness, efficiency and transparency of resource provision and use.

Note [1]: *Mother Earth Centric Actions: Ecocentric* and *rights based approach enabling the implementation of actions towards harmonic and complementary relationships between peoples and nature, promoting the continuity of all living beings and their communities and ensuring the non-commodification of environmental functions of Mother Earth*.

D.1 International public funding, including official development assistance (ODA) for conservation and sustainable use of biodiversity and ecosystems

D.2 Domestic public funding on conservation and sustainable use of biodiversity and ecosystems

D.3 Private funding (domestic and international) on conservation and sustainable use of biodiversity and ecosystems*

Target 20 Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation, including through South-South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the Framework.	
Target 21 Ensure that the best available data, information and knowledge, are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent[2], in accordance with national legislation. **Note[2]:** *Free, prior and informed consent refers to the tripartite terminology of "prior and informed consent"* or *"free, prior and informed consent"* or *"approval and involvement".*	**21.1** Indicator on biodiversity information for the monitoring the global biodiversity framework
Target 22 Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.	**-b**
Target 23 Ensure gender equality in the implementation of the Framework through a gender-responsive approach, where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.	**-b**

[1] Indicators marked with a b, a binary indicator was proposed for inclusion for this Goal or Target. See the "Monitoring framework for the Kunming-Montreal global biodiversity framework" for more information. www.cbd.int/doc/c/179e/aecb/592f67904bf07dca7d0971da/cop-15-l-26-en.pdf

[2] Indicators marked with an asterisk (*), an agreed up to date, methodology does not exist for this indicator. The Ad Hoc Technical Expert Group will work with partners to guide the development of this indicator.