Canada's 2030 Nature Strategy:

Halting and Reversing Biodiversity Loss in Canada

Environment and Climate Change Canada
Environnement et Changement climatique Canada

Canada

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Minister's foreword

Canadians from all walks of life share a deep and enduring love for nature. The natural world defines the vast and diverse landscapes and seascapes across our country, and is vital to our ways of living. We know that healthy, biodiverse ecosystems sustain us. Yet, it is undeniable that nature is in trouble. The signs are clear, and the science is unequivocal—biodiversity loss is accelerating at an alarming rate, threatening the foundations of human well-being and survival. Our collective actions must meet the urgency of the challenge before us. Together, we can turn the tide, restoring our natural world so that generations to come can be sustained, inspired, and awed, just as we are today.

Twenty countries in the world contain 94% of the world's remaining wilderness. Canada is #2 on this list. We are a major player on the world stage for nature conservation. One in five species in Canada is at some level of risk, from butterflies and sea stars to the iconic boreal caribou.

Our economies are embedded in nature, not external to it. We must start acting as such, and recognize and value nature's contribution to our society, our economy. Globally, nature's contributions to people are worth around $125 trillion a year. As the global community transitions to a nature-positive, net-zero, economy we must act now to ensure Canada remains competitive.

As Minister of Environment and Climate Change, it is my pleasure to introduce Canada's 2030 Nature Strategy on behalf of the Government of Canada. This national strategy establishes a shared vision and roadmap for halting and reversing biodiversity loss in Canada, laying the groundwork for transformative change.

The adoption of the Kunming-Montreal Global Biodiversity Framework in December 2022 was a watershed moment in the global effort to change the course for biodiversity. Countries agreed to an ambitious plan to put nature on a path to recovery. Canadians played a key leadership role to help broker this agreement in Montreal.

Our 2030 Strategy is a testament to that leadership, laying out a path for Canada to achieve the goals and targets of the Kunming-Montreal Global Biodiversity Framework. It reflects the hopes, dreams and determination of the thousands of Canadians that we heard from.

This success of this plan will be built as a national endeavour that calls for the participation and support of all Canadians, new actions from provincial and territorial governments, and full partnership with Indigenous Peoples.

We are not starting from zero. This plan builds on many efforts across our society to protect and sustainably interact with ecosystems and species. Governments, Indigenous Peoples, businesses, organizations, and communities have been achieving conservation successes, creating and stewarding protected areas, ramping up nature-based climate solutions, protecting species at risk, curbing pollution, and much more.

The simple truth is that the only sure path forward for humanity is to protect and restore the ecosystems that sustain us all. I am confident we are up to the challenge of finding new and innovative tools and approaches, adapting effectively, and finding the resolve to rise to the challenge. As we approach COP16, let us move forward together to secure a thriving, biodiverse planet and safeguard our quality of life.

The Honourable Steven Guilbeault,
Minister of Environment and Climate Change

Executive summary

Nature is core to Canada's national identity, is a source of pride, and is the foundation of our daily lives. But the science is clear: nature is in trouble. Biodiversity is declining faster than at any time in human history. When we lose biodiversity, we jeopardize the things we rely on and often take for granted: clean air and water, flood regulation, food security, pollination, and the foundation for much of our economy.

First Nations, Inuit, and the Métis Nation are the first biodiversity protectors, and have stewarded the lands, waters, and ice across Canada since time immemorial. But biodiversity loss threatens their ability to exercise their constitutionally protected rights, such as the right to hunt, fish, and harvest from the land, and sustain a traditional way of life, including traditional practices and ceremonies.

Urgent action is needed to halt and reverse biodiversity loss. The Kunming-Montreal Global Biodiversity Framework (KMGBF) provides an ambitious path forward for doing so at the global level. Canada's 2030 Nature Strategy charts a path for how Canada will implement the KMGBF.

The 2030 Strategy builds on existing initiatives in all regions and sectors across the country, recognizing that these efforts have not been and will not be enough, as biodiversity continues to decline in Canada. Harnessing the transformative change needed to halt and reverse biodiversity loss requires a whole-of-government, whole-of-society approach built on partnership and collaboration. It requires us to address the challenges that have held us back, rethink the paradigms and systems that led us to this crisis, and find new ways of doing things, of working together, and of financing our efforts.

A vision to 2050 will serve as a guide for our actions: "Nature is healthy, thriving, and sustaining and enriching the lives of current and future generations, and all Canadians have re-established their relationship with and are honouring their responsibilities to nature." Six pillars will ensure our path to 2030 is inclusive, adaptable, and evidence-based:

- **Recognizing, upholding, and implementing the rights of Indigenous Peoples and advancing reconciliation**, as Indigenous Peoples are the original caretakers of the lands, waters, and ice.
- **Ensuring a whole-of-government, whole-of-society approach** to create policy coherence and draw on the strengths of every segment of society to build and deliver the solutions we need.
- **Supporting a resilient economy** and improving efficiency and certainty, as our prosperity is inherently linked to a healthy environment.
- **Empowering on-the-ground action** by reflecting regional differences, supporting communities, and adopting flexible community-based approaches.
- **Using the best available science and knowledge**, incorporating new insights, sharing information, and giving equal weight to western science and Indigenous Knowledge.
- **Applying integrated, holistic approaches** to ensure our actions are inclusive and transparent.

The 2030 Strategy addresses all 23 of the KMGBF targets, matching the level of ambition for each. The federal government will lead by example, building on its historic recent investments of more than $12B since 2018 in conservation, ecosystem restoration, species protection, and natural climate solutions. It will also work to ensure transparency and accountability in its actions. However, federal actions alone will not get us to success. For instance, federal lands account for only 6% of Canada's landmass, while 76% are provincial and territorial, 6% are Indigenous owned, and 12% are under private ownership.

Provincial and territorial leadership and ambition will be essential, complemented by actions in all other segments of society.

Halting and reversing biodiversity loss is one of the great challenges of our time, but if we get it right, the transition to a nature-positive Canada will have profoundly positive impacts on our collective well-being, economic prosperity, and quality of life now and into the future.

It's in our nature

Canadians care deeply about and are part of nature. Nature is integral to our identity, is a source of pride, has shaped our values, and sustains our way of living. It is also at the heart of our continued economic resilience and clean growth. Canadians understand the importance of nature, with 96% believing nature is important to their personal well-being.[1] Indigenous Peoples have sustainably stewarded the lands, waters, and ice since time immemorial and are the first biodiversity protectors.

"We" means all of us

The 2030 Strategy uses "we" and "our" to represent the full breadth of Canadian society (e.g., individuals, Indigenous Peoples, governments, other institutions and organizations, academia, the private sector, etc.), given that halting and reversing biodiversity loss demands a whole-of-government, whole-of-society approach.

Healthy, biodiverse ecosystems are vital in every facet of our daily lives and livelihoods. They provide us with clean air and water, healthy soil, food, clothing, shelter, and medicine; help protect us from floods, droughts, and heatwaves; support our health and well-being; sequester and store carbon; provide us with opportunities for recreation, education, and reconnection; form the cornerstone of important economic sectors (e.g., farming and ranching, forestry, fisheries, tourism); and much more. Nature also has inherent value in and of itself. Connection to the lands, waters, ice, plants, and animals is deeply rooted in First Nations, Inuit, and the Métis Nation cultures, spirituality, and knowledge systems that have been passed down for generations.

Our lives and well-being depend on nature physically, economically, culturally, and spiritually, and our interconnection and balance with the land, water, and all they sustain must be restored.

Canada is the second-largest country in the world. We are one of just five countries that together contain more than 70% of the world's remaining intact ecosystems.[2] In addition, Canada is home to 20% of the world's total freshwater, 25% of the world's wetlands, 24% of the world's boreal forests, the world's longest coastline, and one of the world's largest marine territories. Ecosystems in Canada provide essential habitat for approximately 80,000 species.[3]

Biodiversity: The variety of life on Earth

Biodiversity is the variety of all living organisms on Earth. It includes terrestrial and aquatic animals, plants, fungi, and bacteria, and the genetic diversity within them. Humans are also a part of biodiversity. All species interact with each other and the physical world around them to create ecosystems. Each level of biodiversity—genes, species, and ecosystems—creates and sustains intricate webs of life that support life on Earth. Biodiversity is dynamic on the landscape and is not constrained by political, geographical, or administrative borders.

The importance of biodiversity in Canada extends well beyond our borders. For example, the oceans help to regulate the global climate, peatlands and the boreal forest serve as a globally significant carbon sink, and migratory birds and marine mammals rely on important habitat in Canada. Similarly, damage to natural ecosystems in Canada (e.g., the record-setting 2023 wildfire season) can have significant impacts beyond our borders, and Canadians depend on goods and services provided by ecosystems outside of Canada. While urgent action is needed to address

[1] Species at risk, nature conservation and nature-based solutions survey for the Canadian Wildlife Service
[2] Protect the last of the wild: Global conservation policy must stop the disappearance of Earth's few intact ecosystems, warn James E. M. Watson, James R. Allan and colleagues.
[3] Wild species 2020: The general status of species in Canada

biodiversity loss in Canada, our action must also extend beyond our borders given that the vast majority of the world's biodiversity is found in developing countries.

Living in a country endowed with such natural wealth comes with an individual and a collective responsibility to care for nature in a way that safeguards our well-being and prosperity now and into the future. In delivering on our global responsibility, we have much to learn from First Nations, Inuit, and the Métis Nation about how to steward and maintain reciprocal relationships with and responsibilities to nature. The 2030 Strategy is designed to make a difference both here at home and on the global scale.

A critical moment for nature and people

The widespread and increasingly rapid erosion of biodiversity happening around the world means that the course of action we follow now will have long-lasting implications for nature and for us. The risks of inaction are significantly higher than the costs inherent in taking swift and ambitious action. If we do not take this challenge seriously, future generations are at risk of inheriting an environment severely degraded by biodiversity loss, climate change, and pollution, jeopardizing their well-being and economic prosperity. We have a small and quickly closing window of opportunity to undertake the urgent and transformative action needed to ensure a world where people and nature respectfully and peacefully co-exist and thrive.

Up to 1,000,000 species globally are threatened with extinction, and the condition and extent of natural ecosystems have declined by an average of 47% relative to their earliest estimated states.[4] Canada is no exception to these trends. For instance, we have lost 80% of original wetlands in and around urban areas,[5] approximately 80% of native prairie grasslands in Canada has been cultivated,[6] populations of aerial insectivores (i.e., birds that feed by catching insects in flight, such as swallows) have declined by 59% since 1970, [7] and one-fifth of species in Canada assessed as part of the Wild Species 2020 report are at some level of risk of extinction.[8] The loss of biodiversity compromises the health and integrity of ecosystems and decreases species' resilience in the face of growing threats, further jeopardizing their long-term survival.

Multiple human drivers are significantly altering nature across the globe at an unprecedented rate. The 2019 Global Assessment Report on Biodiversity and Ecosystem Services by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) identified the five largest direct drivers of global biodiversity loss, which also impact biodiversity across Canada. In order of greatest to least overall global impact, these are: land-use and sea-use change, overexploitation of organisms, climate change, pollution, and invasive alien species. More specifically, in terrestrial and freshwater ecosystems the driver with the greatest impact is land-use change, while in marine ecosystems it is overexploitation. The same report also shows that nature is declining less rapidly in Indigenous Peoples' lands globally, underscoring the importance of Indigenous-led conservation and stewardship.

[4] Global assessment report on biodiversity and ecosystem services
[5] Canadian biodiversity: Ecosystem status and trends 2010
[6] Management of Canadian prairie rangeland
[7] The state of Canada's birds 2019
[8] Wild species 2020: The general status of species in Canada

The triple crises

Biodiversity loss, climate change, and pollution are intrinsically connected. Pollution can exacerbate the effects of climate change and other drivers of biodiversity loss. Many types of pollution are increasing (e.g., chemicals, plastics) as a consequence of unsustainable production and consumption, as are their negative impacts on nature. For its part, climate change is projected to become an increasingly important driver of biodiversity loss,[9] making climate change mitigation and adaptation efforts crucial. Nature can be a powerful ally in the fight against climate change, both in terms of mitigation (reducing emissions) and adaptation (enhancing resilience to climate change impacts). Using nature-based climate solutions, including natural infrastructure, and protecting high-integrity, carbon-rich ecosystems can benefit both nature and the climate.

There are also several indirect drivers, or underlying causes, of biodiversity loss that influence the direct drivers. These are underpinned by societal values and behaviours that include unsustainable production and consumption, subsidies that are harmful to biodiversity, and economic systems that do not reflect the true values of nature or respect a reciprocal and responsible relationship toward nature. The current structures and systems in place often reflect these indirect drivers of biodiversity loss, making fundamental, structural change—transformative change—essential.

Biodiversity loss threatens the many benefits that nature provides to people. These benefits are often mistakenly viewed as free, but many of them are prohibitively expensive or impossible to replace, such as with engineered solutions (e.g., water treatment facilities, sea walls, flood barriers). For example, a 250-metre naturalized channel in Oakville, Ontario, provides $1.24-$1.44 million in stormwater conveyance and storage annually.[10]

Biodiversity loss can have a negative impact on industries that rely on nature, including through the reduction in biological resources, the spread of pests (native and non-native) and diseases, wildland fires, and the loss of pollinators, which can decrease harvests and negatively affect productive sectors and food security. In addition, taking delayed, inadequate, or worse, no action, would have profound impacts on our economy more broadly, exposing Canadian industries to risk, reducing their productivity and competitiveness, and losing investment opportunities in a nature-positive, net-zero world. By contrast, investing in conservation and sustainable use can result in economic benefits and innovation, such as local employment opportunities from protected and conserved areas, enhanced biological resource management, and the growth of regional sustainable bioeconomies. It can also position Canadian companies as global leaders in clean growth and nature disclosure, among other areas.

There are also important consequences for human and animal health. From a One Health perspective—which recognizes the interconnectedness of human, animal, and environmental health—biodiversity loss will have a significant impact on the health of each component of this system. The current pace of extinctions, the encroachment of human activity in natural spaces, and the release of pollutants can affect antimicrobial resistance, food safety and security, research and development of novel medicines, new emerging diseases associated with wildlife and domesticated species, increased pandemic risk, and overall health resilience. Indigenous health, livelihoods, and well-being are particularly hard hit by the loss of nature, as access to the land, cultural practices, and traditional foods and medicines are all important factors that influence health. Indigenous food systems are already being affected by

[9] Global assessment report on biodiversity and ecosystem services

[10] Getting nature on the balance sheet: Recognizing the financial value of natural assets in a changing climate

biodiversity loss, with declining availability, accessibility, quantity, and quality of traditionally harvested foods, which play an important role in community and individual health and well-being.

The negative impacts associated with biodiversity loss are not distributed evenly across the country. Furthermore, certain groups of people are disproportionately impacted by the effects of biodiversity loss, which can exacerbate existing inequities. For example, rural and remote communities are often highly dependent on healthy ecosystems for their livelihoods (e.g., ecotourism, fishing, forestry), and low-income communities may have limited resources to adapt to a decline in the benefits nature provides. Indigenous Peoples are more likely to experience the adverse effects of biodiversity loss and experience the impacts earlier and more directly than many Canadians.

Halting and reversing biodiversity loss

The biodiversity crisis we are facing is the result of a complex web of factors, including the many choices we make as individuals, as institutions, and as a society, such as how we plan and build our cities and towns, produce our food, transport ourselves and our goods, extract resources, heat and power our homes and buildings, and more. Efforts are underway and there are signs of positive change in all sectors and regions across Canada; however, biodiversity loss continues. Collectively, we must do more, do it faster, and do it in new ways that challenge the status quo and achieve greater results.

The Kunming-Montreal Global Biodiversity Framework (KMGBF – see Figure 1) provides an ambitious path forward for halting and reversing biodiversity loss by 2030. This landmark framework was adopted in December 2022 at the fifteenth meeting of the Conference of the Parties (COP15) to the United Nations Convention on Biological Diversity (CBD). Canada served as the host location for this important event, which was the largest CBD COP to date, and played an integral role in the adoption of the KMGBF.

The United Nations Convention on Biological Diversity (CBD)

The 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.

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.

We have less than a decade to achieve the ambitious task of halting and reversing biodiversity loss. Halting and reversing biodiversity loss means the extent, health, and integrity of ecosystems in Canada will no longer be declining, it means we will no longer be losing species and their genetic diversity, and it means we will be confronting the direct and indirect threats to biodiversity head-on and striving first to do no harm in decisions that affect nature. When we halt and reverse biodiversity loss, the bare minimum is no net loss of biodiversity, moving toward achieving net gain overall.

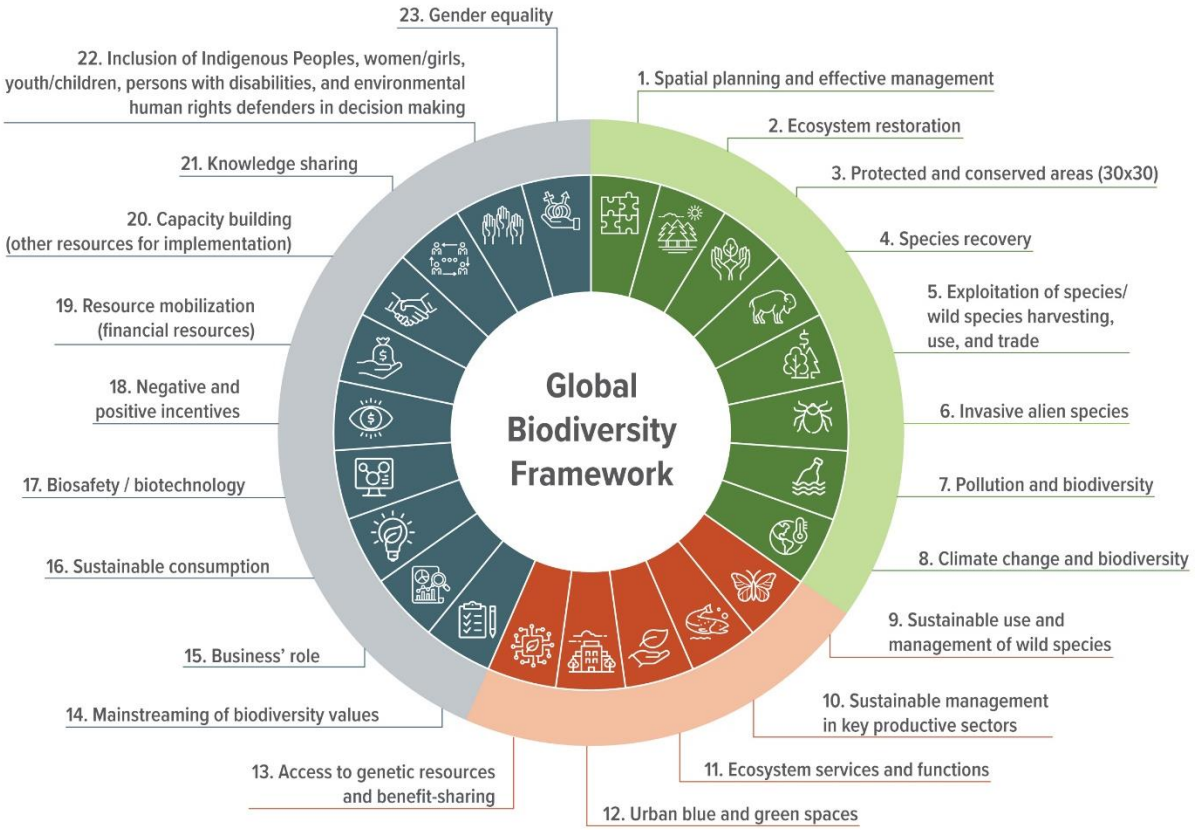

Figure 1 – Overview of the 23 targets of the KMGBF (full target wording can be found in Annex 1)

Getting everyone involved

The 2030 Strategy reflects a diversity of perspectives, so that all Canadians can take ownership of it and work collectively toward meeting our 2030 targets (see Annex 6 for how Canadians were engaged in the 2030 Strategy's development). Generally speaking, each jurisdiction and sector of society has its own unique values, priorities, geography, demographics, and economic realities that shape its conservation actions.

Managing the conservation and sustainable use of biodiversity is a shared responsibility in Canada. For example, the federal government can provide national leadership and coordination, while provinces and territories are responsible for most species and land uses and are crucial to the success of the 2030 Strategy. The list below provides a snapshot of the various actors involved, and where they are well positioned to act independently or in collaboration.

- The **federal government**'s responsibilities, among many, include migratory birds, species listed under the *Species at Risk Act* (SARA), ocean management, and international trade of wild species. It shares responsibility for fisheries management, aquatic species, and pollution prevention, and plays an important role in scientific research, monitoring, and the sustainable development of natural resources.
- **Provincial and territorial governments** have a critical leading role to play in wildlife and habitat management, including responsibility for terrestrial species on provincial Crown land. They also

play a key role in natural resource development and stewardship and land-use planning over most of Canada's land and coastal areas.[11]

- **Municipal governments** have a direct connection to Canadians, are instrumental in connecting them with nature, and are important land managers, local experts, and land-use planners.
- **Indigenous governments and Peoples** are Rights holders and landowners, and honour their responsibilities to the lands, waters, and ice through stewardship and the keeping of Indigenous Knowledge systems. They are essential leaders, experts, and partners in conservation and stewardship. Crown governments share with Indigenous Peoples treaty responsibilities to steward the lands and waters within the context of biodiversity protection and conservation in a way that respects Indigenous Peoples' rights.
- **Non-governmental organizations** (NGOs) deliver on-the-ground initiatives, educate and mobilize Canadians, conduct research and have expertise in many areas, help raise conservation funding, and generate new policy ideas.
- The **private sector**, including financial institutions and large, small, and medium-sized enterprises, has an important responsibility and there is an increasing recognition of its role in sustainably managing natural resources, stewarding private lands, minimizing its own impacts on biodiversity, and helping to advance, finance, and mobilize knowledge and action.
- **Philanthropic organizations** can mobilize resources, catalyze action, and help share best practices and models from across Canada and around the world to support greater action.
- **Academic researchers and educators** contribute to expanding and sharing the knowledge base needed to inform, undertake, and evaluate effective action.
- **Communities and individual Canadians** from all regions and demographics contribute by stewarding private lands, adopting sustainable lifestyles, supporting local actions to create more sustainable and nature-positive communities (i.e., where our actions enhance nature), participating in citizen science initiatives, and creating support and momentum for bold actions on local and larger scales.

Partnerships and collaboration across jurisdictions and among all actors will be crucial to making progress. In addition, action to halt and reverse biodiversity loss must embrace a broad range of perspectives and values. Different communities see and value nature differently, and the 2030 Strategy aims to incorporate these different perspectives. Doing so helps advance efforts that are robust, respectful, and equitable, and that reflect the full diversity of Canadian society and respect the rights of Indigenous Peoples.

[11] The Government of Québec considers itself excluded from the application of the *2030 Nature Strategy*. The Québec government has declared itself bound by the Convention on Biological Diversity and remains committed to implementing it with its own policies and tools. In response to the adoption of the Kunming-Montreal Global Biodiversity Framework by the Parties to the Convention in December 2022, Québec is developing its 2030 Nature Plan that will contribute to the achievement of global targets, including the 30% conservation target within Québec.

Municipal leadership on halting and reversing biodiversity loss

While cities represent a relatively small portion of Canada's total area, they are often located in places rich in biodiversity, such as coasts, river valleys, and lakeshores. Cities can create high development pressure, tending to grow into the surrounding areas, and their environmental impact can extend beyond their borders. As such, their impact on habitat can be significant. Municipal leadership can play an important role in either enabling or compounding challenges associated with habitat connectivity. Action is not only needed in large urban centres: many important habitats are located within or close to small municipalities, and enhanced planning to protect biodiversity in rural areas is crucial. The pan-Canadian report Conservation Close to Home by the Pathway National Steering Committee provides resources to assist local governments and land managers when highlighting local conserved areas in area-based conservation efforts.

Many municipalities across Canada have made commitments to halt and reverse nature loss. For example, at COP15, Montreal invited cities to commit to taking tangible action to protect biodiversity. Over 61 cities from around the globe have signed the Montreal Pledge, including 23 Canadian cities. Additionally, Montreal, Vancouver, and Quebec City have endorsed the Edinburgh Declaration, which recognizes the important role that local and subnational governments play and commits to implementing the KMGBF at the local level.

Municipalities are also demonstrating action through natural assets management (e.g., Grindstone Creek Watershed Natural Assets Management Project), innovative tools and financing (e.g., the Municipality Fund for Biodiversity, which more than 50 Quebec municipalities have joined), and certification schemes, such as Nature Canada's Bird Friendly Cities. In addition, many municipalities have set urban tree cover goals and are supporting action in that area (e.g., Toronto, Montreal, Vancouver, Ottawa). Many municipal conservation actions also contribute to mitigating and adapting to climate change, such as tree cover that reduces the urban heat island effect, protects against flooding caused by extreme precipitation, shades buildings thereby reducing their energy consumption, and sequesters and stores carbon.

Indigenous leadership in conservation

Indigenous Peoples have deep relationships and cultural connections with the lands, waters, ice, and the biodiversity therein. They have successfully stewarded their environments since time immemorial and are leaders and experts in conservation. They have specific rights and capacity to determine how best to conserve biodiversity on their traditional territories. In Canada, lands and waters that are stewarded or co-managed by First Nations, Inuit, and the Métis Nation have higher levels of biodiversity than protected lands without Indigenous co-management.[12] Indigenous Peoples have an abundance of knowledge and expertise related to biodiversity, conservation, and stewardship, which are deeply rooted in Indigenous cultures and languages, and have been accumulated and adapted over time and expressed through their customary laws and practices.

Indigenous Knowledge systems—including creation stories, lived experience, and practices on the land—must be honoured, must be woven with western science where appropriate and guided by Knowledge Holders, and ultimately must be respected in decision making, building on progress to date (e.g., under the *Impact Assessment Act* and *Fisheries Act*). There is also a need to transform how research is done on Indigenous lands, moving past colonial approaches and advancing Indigenous self-determination in research to inform biodiversity decision making (e.g., the National Inuit Strategy on Research).

[12] Vertebrate biodiversity on indigenous-managed lands in Australia, Brazil, and Canada equals that in protected areas

Indigenous worldviews typically do not consider humans as separate from nature, and Indigenous customary laws often include respect for the natural world and a sacred duty to maintain balance. Indigenous Peoples' close connection to and interactions with the land, water, and ice create landscapes and seascapes that are shaped by the interdependence between humans and the environment, including the biological, cultural, linguistic, and spiritual diversity of life. Healthy environments, clean air and water, and biodiversity are necessary for Indigenous Peoples to continue practicing their social, cultural, land-use, self-government, and self-determination rights. The impacts of biodiversity loss—combined with those of climate change and pollution—negatively affect culture, language, and knowledge sharing, and disrupt traditional livelihoods, food security, and physical and mental health.

Conservation efforts in Canada in the recent past removed Indigenous Peoples from their lands and/or restricted their ability to carry out cultural practices, which caused harm to both Indigenous Peoples and the land. Other harmful systems and actions, including colonization, the residential school system, resource extraction, and land appropriation, have also undermined Indigenous Peoples' connections to the land and the intergenerational transfer of knowledge. Colonialism is also responsible for socio-economic marginalization, increased health inequities, systemic racism and discrimination, and intergenerational trauma. As such, meeting basic needs in Indigenous communities (e.g., housing, food security, clean drinking water, access to adequate healthcare) and addressing the ongoing effects of colonization must happen in parallel with addressing biodiversity loss. The 2030 Strategy supports continuing efforts to address these harms so that Indigenous Peoples can heal with the land and at the same time heal the land itself.

There is no path to achieving our 2030 targets without the expertise and leadership of First Nations, Inuit, and the Métis Nation, and transformative change must centre bold, Indigenous-led measures. Increased and strengthened partnerships with Indigenous Peoples are an opportunity to halt and reverse biodiversity loss in Canada, advance reconciliation, increase economic participation, improve quality of life, and support the intergenerational transfer of knowledge. There is an opportunity for all levels of government to build on existing commitments and co-develop policies, programs, and land and marine management and decision-making processes with Indigenous Peoples.

Indigenous-led efforts have made significant contributions to Canada's progress on conservation in recent years. This includes the creation of Indigenous Protected and Conserved Areas,[13] which are lands and waters where Indigenous governments have the primary role in protecting and conserving ecosystems through Indigenous laws, governance, and Knowledge. Examples include the Ts'udé Niljné Tuyeta Indigenous and territorial protected area, Thaidene Nëné Indigenous Protected Area, and ongoing efforts to establish a potential Indigenous Protected and Conserved Area in the Seal River Watershed.

In Canada, Indigenous leadership is at the heart of the Project Finance for Permanence (PFP) model, which brings together Indigenous organizations, governments, and the philanthropic community to identify and work toward shared goals for the long-term protection of nature. PFPs represent a unique opportunity to address the biodiversity crisis while also enhancing community and economic resilience and advancing reconciliation.

[13] Variations of this term are also used to refer to distinctions-based definitions, such as First Nations, Inuit, or Métis Nation Protected and Conserved Areas.

Across the country, Indigenous Guardians initiatives and networks are protecting the land, water, and ice, serving as the eyes and ears on the ground in Indigenous territories. Guardians monitor ecological health, maintain cultural sites, and protect sensitive areas and species. They promote social and community well-being through connections to the land and water, culture, language, intergenerational knowledge sharing, as well as through the development and maintenance of sustainable economies. The federal Indigenous Guardians program is using individualized approaches that are co-designed, co-developed, and co-delivered with First Nations, Inuit, and the Métis Nation to establish Indigenous-led governance. In 2022, the First Nations National Guardians Network (NGN) was launched as a national non-profit First Nations-led central platform to support First Nations Guardians initiatives. The NGN is the first Indigenous-led national stewardship network in the world and is centred on First Nations knowledge, values, and perspectives.

Beyond these examples, there is a large and growing number of Indigenous-led conservation initiatives. These include on-the-land programs, land-use planning, species recovery, restoration, land stewardship, nature-based climate solutions, conservation strategies, and others (e.g., the Métis Nation of Alberta's Conservation Land Access Dashboard, the Ungava Peninsula Caribou Aboriginal Roundtable, Yunesit'in and Xeni Gwet'in First Nations' fire stewardship program, the Sahtu Land Use Plan, the Cree Regional Conservation Strategy).

The United Nations Declaration on the Rights of Indigenous Peoples (the UN Declaration) provides a roadmap to advance reconciliation with Indigenous Peoples by taking further steps to respect, recognize, and protect the human rights of Indigenous Peoples and address the wrongs of the past. Article 29.1 of the UN Declaration states that "Indigenous Peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for Indigenous Peoples for such conservation and protection, without discrimination." The UN Declaration also has references to "free, prior, and informed consent" throughout, emphasizing the importance of recognizing and upholding the rights of Indigenous Peoples and ensuring their effective and meaningful participation in decisions that affect them, their communities, and their traditional territories.

In Canada, the *United Nations Declaration on the Rights of Indigenous Peoples Act* (UN Declaration Act) creates a framework to advance federal implementation of the UN Declaration in collaboration with Indigenous Peoples. The *UN Declaration Act* Action Plan (2023-2028), which will be periodically reviewed and updated, includes 181 measures that will play an important role in combatting systemic racism and discrimination, closing socio-economic gaps, and promoting greater equality for Indigenous Peoples. Several of the measures will be important to achieving our 2030 targets (see Table 3 in Annex 5).

The following sections have been authored by National Indigenous Organizations: the Assembly of First Nations (AFN), Inuit Tapiriit Kanatami (ITK) and the Métis National Council (MNC), which are governed by rights-holding communities, land claims organizations, and governments, and advocate for the rights and interests of First Nations, Inuit, and the Métis Nation at a national level. These sections provide AFN, ITK, and MNC's unique and valuable perspectives on biodiversity conservation in Canada. It is important to acknowledge that the diversity of experiences and perspectives held by Indigenous Peoples throughout Canada may not be fully reflected here. Canada recognizes the significant level of on-the-ground nature stewardship that continues to be taken by Indigenous Peoples at the community and regional levels, which is critically important to halting and reversing biodiversity loss in Canada.

Assembly of First Nations

Advancing First Nations Leadership in Canada's National Biodiversity Strategy and Action Plan

The Assembly of First Nations (AFN) is a national advocacy organization that works to advance the collective aspirations of First Nations individuals and communities across Canada on matters of national or international nature and concern.

Our Mother Earth is in a state of crisis, facing cascading climate impacts and staggering declines in global biodiversity. Our relationship as a global society is out of balance with Mother Earth. Correcting this imbalance requires the wisdom, knowledge systems, resilience, and reciprocity inherent in the lifeways and leadership of First Nations and Indigenous Peoples.

Since time immemorial, First Nations and Indigenous Peoples have been the diligent stewards and caretakers of the Lands and Waters. Comprising just 6% of the global population, the traditional lands and territories of Indigenous Peoples are home to 80% of the remaining global biodiversity. First Nations carry a deep reverence, responsibility, and obligation to care for and steward Mother Earth. It is this very approach that must critically inform all aspects of the National Biodiversity Strategy and Action Plan (NBSAP) implementation, moving towards transformative, systematic change in Canada. The full inclusion of First Nations as climate and conservation leaders will catalyze innovative strategies by upholding the richness of our knowledge systems and honouring our relationship and responsibilities to the Land and Water. Uplifting First Nations solutions and traditional practices will lead to a more sustainable future and help leave a thriving environment for future generations.

To achieve its ambitious conservation goals, Canada must uplift and centralize First Nations-led conservation, enabling and empowering First Nations to lead the way in overcoming substantial environmental challenges by advancing sustainable, transformative policy change around terrestrial and marine biodiversity conservation.

The NBSAP aims to course-correct human impact on the land by restoring degraded ecosystems, protecting natural areas, and halting and reversing the continued decline of biodiversity in Canada. First Nations are at the forefront of stewardship of our Lands and Waters. We are best positioned to guide this endeavor and must be supported to do so.

The AFN Annex (see Annex 4) presents our understanding of a rights-based approach to addressing the biodiversity crisis through promoting and investing in First Nations-led conservation. This means fundamental changes to uplift First Nations governance, laws, and knowledge systems, and advance our self-determination. In doing so, Canada must recognize, respect, and promote the rights of First Nations under Section 35 (S.35) of the *Constitution Act of 1982*, the *United Nations Declaration on the Rights of Indigenous Peoples Act* (UNDA), the Truth and Reconciliation Commission (TRC) Calls to Action, and First Nations' inherent rights and title.

In the context of the NBSAP and the KMGBF, First Nations, the AFN, and Canada share many of the same goals, objectives, and overarching vision—to live in balance and harmony with Mother Earth. First Nations have the leadership, knowledge, and wisdom to guide this important transition to a future that embraces a mutually respectful and reciprocal relationship with Mother Earth.

Inuit Tapiriit Kanatami

There are four Inuit regions in Canada, collectively known as Inuit Nunangat. The boundaries of Inuit Nunangat are the same as the Inuit-Crown treaties and self-government agreements in Canada,

encompassing 51 communities spanning four Inuit regions: the Inuvialuit Settlement Region, Nunavut, Nunavik, and Nunatsiavut. All but two communities in Inuit Nunangat are accessible only by plane year-round, or twice-yearly sealifts. Together they comprise 40% of Canada's land area and 72% of its coastline.[14] The term "Inuit Nunangat" is a Canadian Inuit term that includes land, water, ice, and all forms of life within. Inuit consider Inuit Nunangat to be integral to our culture and our way of life.

Inuit have been sustainably using, conserving, and protecting Inuit Nunangat for centuries. We depend on a healthy ecosystem for food security, cultural connection, safety, and health, including physical, mental, and spiritual well-being. The relationship with the natural environment is central to Inuit culture, laws, identity, values, knowledge systems, and our harvesting economy.[15] Inuit-led conservation is linked to Inuit health and well-being and is inseparable from other issues, such as the critical need for infrastructure, supporting and building local economies, employment, housing, protecting harvesting rights, and food security.[16]

Canadian Inuit have always advocated for the sustainable use, protection, and conservation of biodiversity in the Arctic to the Government of Canada and this has been among the main reasons why Inuit in Canada united in 1976, to form Inuit Tapirisat of Canada. As early as 1979, Inuit determined that federal legislation is needed to help recognize and support Inuit self-determination and to be included as equal partners in managing and protecting the environment.

Inuit recognize the importance of the Global Biodiversity Framework and its associated National Implementation Strategy as a tool to motivate action for the Government of Canada. Target 3 of this strategy commits the Government of Canada to protecting and conserving 30% of terrestrial and marine areas by 2030. Canada cannot meet this commitment without Inuit and Inuit Nunangat. There is also evidence that Indigenous management leads to better outcomes for biodiversity.[17] It is essential for Canada to support Inuit self-determination governance as a means of achieving its biodiversity targets.

There is currently no legislative framework that would enable the creation and implementation of Saputijausimajunik Nunanik Tariumilu Inuit Nunanganni (Protected Terrestrial and Marine Areas in Inuit Nunangat), wherein Inuit and the federal government would share ultimate authority and responsibility. Saputijausimajunik Nunanik Tariumilu Inuit Nunanganni must respect and support Inuit self-determination and support Inuit autonomy in governance as envisioned in Inuit-Crown treaties, the United Nations Declaration on the Rights of Indigenous Peoples, and the federally endorsed Inuit Nunangat Policy that affirms Inuit self-determination and self-governance.

In order to support these commitments, Inuit request that Inuit and the federal government co-develop legislation and regulations to allow the Minister and Inuit to share authority and responsibility for Inuit Protected and Conserved Areas. Stewardship of Inuit lands and waters is vital for Inuit well-being and the future of Inuit Nunangat, and the goal to self-determine conservation and establish Saputijausimajunik Nunanik Tariumilu Inuit Nunanganni must be recognized in legislation.

Collaboration between Inuit and the Government of Canada to advance Inuit-led conservation initiatives throughout Inuit Nunangat will not only benefit Inuit but Canada as a whole. Inuit-led conservation will

[14] Inuit Nunangat coastline length and land area calculations
[15] Conservation hunting: People and wildlife in Canada's North
[16] People of the ice bridge: The future of the Pikialasorsuaq. Report of the Pikialasorsuaq Commission.
[17] Summary for policy makers: Global assessment report on biodiversity and ecosystem services

promote socio-economic and cultural equity for Inuit and will support Canada's national and international commitments to biodiversity protection and enhancement, now and for future generations.

Métis National Council

The Métis National Council (MNC) and its Governing Members are committed to actively engaging in the development of Canada's National Biodiversity Strategy and Action Plan (NBSAP). Since 1983, the MNC has represented the Métis Nation nationally and internationally. We receive our mandate and direction from the democratically elected leadership of the Métis Governments in Alberta, Saskatchewan, Ontario, and British Columbia. These Governments are the MNC's Governing Members.

In our role as the national and international voice for the Métis Nation, MNC has been deeply engaged in negotiations under the CBD, including in the development of the Kunming-Montreal Global Biodiversity Framework, in addition to our participation in other multilateral environmental agreements. We believe that biodiversity conservation is not only crucial for ecological sustainability but also essential for the preservation of Métis heritage, cultural continuity, and on-the-land practices. The MNC participates in the CBD's processes to ensure that Indigenous voices, including those of the Métis, are heard and respected in global discussions on biodiversity policy and action.

In Canada, Métis governments are leading the way in biodiversity conservation by creating Métis-led Indigenous Protected and Conserved Areas (IPCAs), running Métis Guardians programs with citizen scientists, and protecting carbon- and biodiversity-rich landscapes through public awareness campaigns and private land ownership. The preservation of Métis culture is directly tied to protecting the land, water, and air of the Métis Nation Homeland.

For example, Métis governments have recently returned Buffalo (Bison) to the land. The prairie ecosystem and Buffalo have evolved together in a symbiotic way. When this relationship is restored, a healthy and balanced system rich in biodiversity returns to the land, water, and air. Buffalo are deeply connected to the Métis Nation's culture and history, as they historically provided Métis families with everything from food, clothing, and pemmican for trade. The large-scale Bison hunts shaped the Métis way of life and early governance structures. The restoration and return of Bison to the prairies is symbolic of the leadership the Métis Nation is demonstrating in conservation and biodiversity activities.

> "**It's almost like a miracle the way the Buffalo can restore the land and bring it back... it's important for us to have these areas where our animals are safe, and we can grow the numbers again.**" - Métis Nation Elder

Over the last several years, programs that connect Elders and Youth for intergenerational knowledge transfer have supported the cultural continuity of activities like harvesting culturally important foods and medicines. Métis governments are also supporting their citizens with at-home conservation actions like planting pollinator gardens and providing bee houses for their properties. Métis-led conservation action benefits everyone living in Canada, because this work supports the recovery of species at risk, the restoration of important landscapes, and the preservation of carbon- and biodiversity-rich ecosystems.

The NBSAP is an important mechanism to recognize these contributions of Indigenous Peoples to meeting international targets for conservation. In addition to contributing to the NBSAP, the MNC and its Governing Members will be authoring a Métis Nation Conservation Strategy to relay to partners, such

as Canada, the priority areas of action on nature for the Métis Nation. Future actions to protect biodiversity in Canada must be responsive to and reflect the conservation priorities of all Indigenous Peoples, including the Métis Nation.

It is critical that Canada uphold its obligations under the *United Nations Declaration Act* and involve the Métis Nation in developing target implementation plans and actions. We look forward to opportunities to shape this most consequential component of the NBSAP together, through fulsome engagement and bilateral processes like the Métis Nation – Canada Strawberry Moon Table on Nature.

Building on our successes and addressing outstanding challenges

We are not starting from scratch with the 2030 Strategy. It builds on previous initiatives developed to guide our domestic biodiversity efforts, including the 1995 Canadian Biodiversity Strategy, the 2006 Biodiversity Outcomes Framework, and the 2020 Biodiversity Goals and Targets for Canada. Our success in achieving the 2020 targets was mixed (see Table 2 in Annex 5). The 2030 targets raise the bar across the board, so even the 2020 targets we met will still require continued and even additional effort, while other areas will require an even greater effort and new approaches.

Recent federal investments in nature amounting to approximately $12B will serve as the foundation for the federal response, providing important contributions to progress toward our goal of conserving 30% of our lands and oceans by 2030, species at risk identification, protection, and recovery, Indigenous leadership in stewardship and conservation, and efforts at the intersection of climate change mitigation and nature, among others. But federal actions are only one part of the whole-of-government, whole-of-society solution, and there are opportunities to go further.

We have a wide range of existing initiatives, strategies, technologies, tools, and knowledge available, but these have been insufficient in halting and reversing biodiversity loss to date. Moving forward, we have an opportunity to re-examine and reprioritize our existing efforts, be open about what has worked and what has not, and fill gaps where new tools, approaches, and information are needed. While we must use our existing successful tools to their full extent, build on them, amplify and scale them up, refine them, and/or apply them in new ways, we must also be willing to let go of tools that are no longer serving us. And it is crucial that we develop new and innovative tools and approaches, recognizing that we are in uncharted territory and cannot fully know what approaches we will need, and must therefore be willing to learn, adapt, and innovate as we go. Generating and sharing knowledge and monitoring our efforts will help us understand how effective our actions are and what areas may need greater attention.

There are numerous examples of successful or promising tools being used across the country, in all sectors and at all levels of government, that we can build on and that can inspire new, innovative efforts, including:

- **Market-based and innovative financing mechanisms**, such as the First Nations-led Great Bear Forest Carbon Project, the Deshkan Ziibi Conservation Impact Bond, British Columbia's Conservation Financing Mechanism, Ontario's Conservation Land Tax Incentive Program, the Project Finance for Permanence funding model, and the federal Green Bonds.
- **Actions to address the triple crises** of biodiversity loss, climate change, and pollution. For instance, Quebec's 2030 Plan for a Green Economy addresses climate change and supports nature-based solutions as a way to adapt to climate change while benefiting species. Programs

such as the federal On-Farm Climate Action Fund are taking action to address climate change, with co-benefits that address biodiversity loss and pollution.

- **Efforts to advance biodiversity outcomes on working landscapes**, including Alberta's Rangeland Grazing Framework and its Land Trust Grant Program, Prince Edward Island's Alternative Land Use Services Program, and British Columbia's New Future for Old Forests report and recommendations.
- **Initiatives designed to educate, raise awareness, and facilitate broader involvement**, such as eBird citizen science efforts, the Diverse Nature Collective's work to make space for diverse voices in conservation, the ability of doctors to prescribe time in nature (PaRx), the "Greening the Spark" environmental engagement campaign in New Brunswick's francophone schools, and the international Nature Positive Universities, which includes several Canadian universities and promotes nature on campus.

Despite all the good work underway, we have yet to turn the tide on biodiversity loss. To do that we will need to address several key challenges that have, to date, hampered our best efforts. These include:

Government coordination and policy coherence – There is an increased need to coordinate across the many government departments and agencies that must be involved in biodiversity conservation, as well as a need to coordinate across all levels of government (e.g., federal, provincial, territorial, municipal, Indigenous). Strengthening policy coherence—and actively eliminating incoherence—will help ensure governments are not working at cross-purposes when it comes to nature. Coordination efforts must also extend to knowledge sharing and monitoring, which are frequently siloed within and across governments.

Valuing nature – The diverse values of nature (monetary and non-monetary) tend to be treated as externalities in decision making,[18] with nature often being placed behind economic development in terms of importance. Our economy is embedded in nature, and with the right tools we can protect nature, ensure economic prosperity, and enhance our well-being. Amplifying and integrating biodiversity values and considerations into decision making in an inclusive, transparent way will be key, such as through the creation of markets and advances in natural capital accounting.

Adequate, long-term investments – The scope of the biodiversity crisis requires adequate, stable, and sustained investments and innovative funding solutions. While ongoing government resources will be essential, on their own they are insufficient in meeting this challenge. Governments, private sector, philanthropy, and others must mobilize to increase and facilitate access to funding, including through the use of economic and social signals, such as promoting innovative blended financing approaches.

Climate change – The impacts of climate change are projected to significantly increase in frequency and intensity. They pose an ongoing challenge by threatening progress (e.g., the impacts of floods and wildfires on natural areas), amplifying other drivers of biodiversity loss, and adding complexity and uncertainty to biodiversity-related planning. In addition, the urgent need to move forward with climate change mitigation measures must be done in a way that minimizes the impact on biodiversity. Ensuring our biodiversity and climate change efforts are integrated, have the same level of urgency, and are based in best-available science and knowledge will help climate-proof our conservation investments.

[18] The economics of biodiversity: The Dasgupta review

Awareness and capacity – Given the need for all sectors, groups, institutions, and individuals to be part of the solution, there is a need to raise awareness and build capacity to ensure diverse voices are included and no one is left behind. Doing so will also help generate support for initiatives aimed at tackling the biodiversity crisis.

Connections to other efforts

The 2030 Strategy is not a standalone effort. It both complements and is complemented by numerous other federal strategies and initiatives, such as those focused on climate change, waste and pollution, sustainable development, and reconciliation and Indigenous rights, among others.

The 2030 Emissions Reduction Plan highlights nature-based solutions as one area of action that will help draw down emissions. The National Adaptation Strategy also includes nature and biodiversity as a key system for focusing whole-of-society efforts and embeds the notion of halting and reversing biodiversity loss in the overarching goal for that system. Furthermore, efforts to reduce pollution, including Canada's comprehensive efforts to reduce plastic pollution and move toward a circular plastics economy, contribute to our nature goals.

Canada's 2030 Agenda National Strategy seeks to create a shared vision of how Canada will implement the United Nations 2030 Agenda for Sustainable Development and identify actions to accelerate the achievement of the 17 Sustainable Development Goals (SDGs) at home and abroad. Each target in the KMGBF (and Canada's 2030 Nature Strategy) connects directly to at least one SDG (see Table 1 in Annex 5). Similarly, the Federal Sustainable Development Strategy (FSDS) sets targets and performance measurements to further federal actions toward achieving the SDGs. The targets, implementation strategies, and short-term milestones from the 2022-2026 FSDS and subsequent iterations will strengthen the implementation of Canada's 2030 Nature Strategy.

The Quality of Life (QoL) Framework for Canada outlines a rationale and approach for adopting a quality-of-life approach to government decision making in Canada, and highlights that the natural environment is the foundation of human existence and impacts to nature pose a risk to livelihoods and well-being.

The *United Nations Declaration on the Rights of Indigenous Peoples Act* Action Plan outlines a roadmap of actions Canada needs to take in partnership with Indigenous Peoples to implement the principles and rights set out in the UN Declaration, and to further advance reconciliation in a tangible way. The Action Plan includes measures specific to lands, territories, and resources, as well as to the environment, with the recognition that these measures are intertwined with others, such as self-determination, participation in decision making, and economic and social rights (see Table 3 in Annex 5).

The Sustainable Agriculture Strategy, currently in development, will complement Canada's 2030 Nature Strategy through its long-term vision and approach to addressing agri-environmental issues and advancing the sector's sustainability, competitiveness, and long-term vitality. The Sustainable Agriculture Strategy will focus on five priority areas: climate change mitigation, climate change adaptation and resilience, biodiversity, water, and soil health.

From vision to action: Achieving the 2030 targets

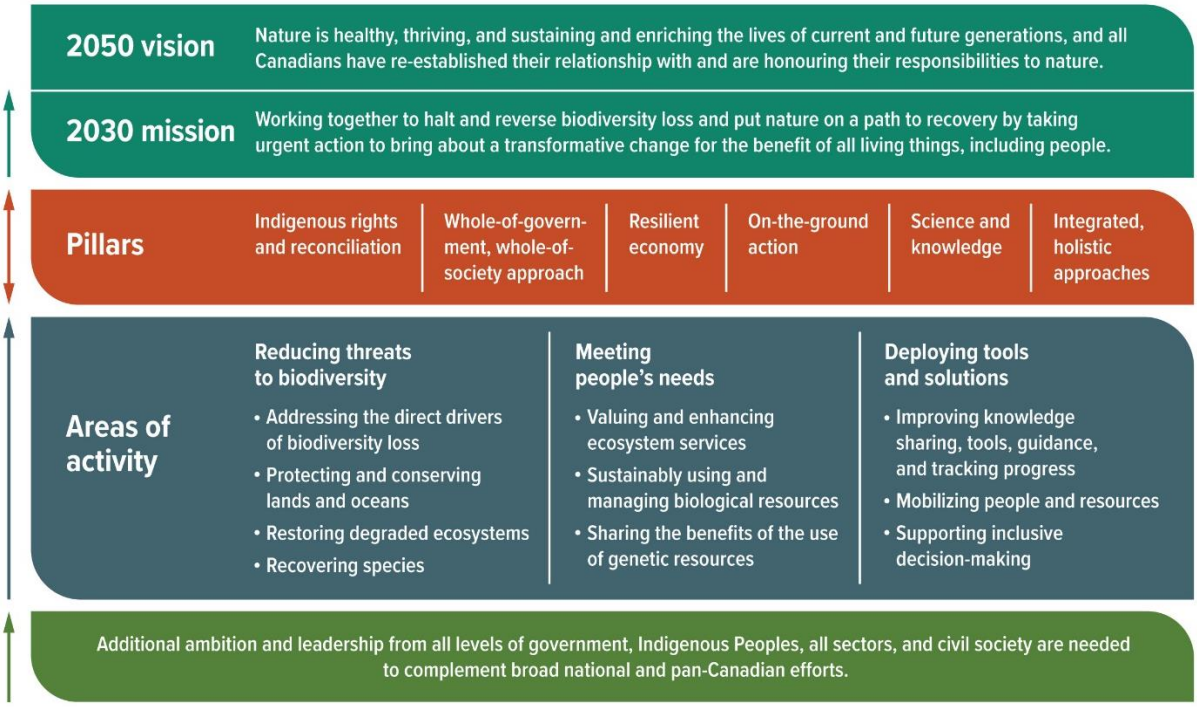

Figure 2 – Elements of Canada's 2030 Nature Strategy

The 2030 Strategy is both a promise and a map: a promise to current and future Canadians, Indigenous Peoples, and the world, that we will ensure a just, nature-positive Canada, and a map for how we will collectively get there. However, we know the work does not stop in 2030. Achieving our 2030 targets is just a first step in reaching Canada's long-term vision for 2050, which will serve as a guide for our actions:

> ***VISION**: Nature is healthy, thriving, and sustaining and enriching the lives of current and future generations, and all Canadians have re-established their relationship with and are honouring their responsibilities to nature.*

This long-term vision is paired with a Canadian mission to achieve the 2030 targets:

> ***MISSION**: Working together to halt and reverse biodiversity loss and put nature on a path to recovery by taking urgent action to bring about transformative change for the benefit of all living things, including people.*

While *what* we achieve is critically important, *how* we achieve it is just as fundamental. The pillars below will help ensure we do so in a way that is inclusive, adaptable, and evidence based.

- **Recognizing, upholding, and implementing the rights of Indigenous Peoples and advancing reconciliation** – Conserving and sustainably using biodiversity must be done in partnership with First Nations, Inuit, and the Métis Nation. As the original and ongoing stewards of the lands,

waters, and ice, Indigenous Peoples are leaders, Knowledge Holders, landowners, and hold inherent rights, title, and connections to lands and traditional territories. Acting to reach our 2030 targets is an opportunity to advance reconciliation in a tangible way that respects the rights of Indigenous Peoples and seeks to address the ongoing effects of colonialism and harms to Indigenous Peoples on the land.

- **Ensuring a whole-of-government, whole-of-society approach** – No one jurisdiction or group has all the knowledge, tools, and resources required to address the biodiversity crisis. Every government body at all levels must be actively involved to ensure coherence across environmental, economic, and social mandates. In addition, every sector of society must be involved in building the solutions that will achieve ambitious outcomes for nature and people.
- **Supporting a resilient economy** – Our prosperity is inherently linked to a healthy environment. Building a nature-positive Canada will help us grow a clean, competitive, and resilient economy, attract investment, and position our companies and industries as global leaders. The 2030 Strategy will support efforts to improve the efficiency of impact assessments, the regulatory system, and permitting processes.
- **Empowering on-the-ground action** – To be effective, biodiversity efforts must reflect regional differences by emphasizing community empowerment and agency, and supporting flexible local, community-based approaches that leave room for creativity, rather than relying on top-down, one-size-fits-all programs, and that focus on outcomes rather than prescriptive processes.
- **Using the best available science and knowledge** – Successful implementation must draw on the best available knowledge, incorporating new insights as they become available. The lack of scientific certainty must not be used to justify delayed action. The evolving knowledge base must respect and give equal weight and consideration to western science and Indigenous Knowledge while ensuring Indigenous Peoples' rights and prior and informed consent for the use of their knowledge; must advance interdisciplinary research to better understand the complexities of the challenge ahead and foster innovation; and must be shared with and made accessible to those who need it.
- **Applying integrated, holistic approaches** – Integrated, inclusive, and transparent approaches (e.g., ecosystem approach, One Health) can guide our actions in a way that recognizes the interconnectedness of all living things, explicitly links the ecosystem health with the benefits people and communities enjoy, and does so at a scale that makes sense.

The 2030 Strategy addresses the KMGBF's four goals to 2050 and 23 targets to 2030, matching the level of ambition of the KMGBF for each one. The targets represent an integrated package where each is critical to the success of the whole. Addressing targets in isolation will be inefficient and ineffective; rather, the 2030 Strategy strives to take a holistic approach that advances multiple priorities in parallel, maximizes co-benefits, and seeks to navigate any trade-offs. Of note, Targets 21, 22, and 23 (knowledge sharing; inclusion of Indigenous Peoples, women, and youth in decision making; and gender equality, respectively) play a key role in laying the foundation that cuts across all targets to achieve an approach that reduces inequalities in biodiversity policy and decision making.

An inclusive 2030 Strategy

Diversity is one of the foundations of Canadian culture and identity, and individuals, communities, and cultures have many perspectives on and relationships with nature. Diversity, equity, and inclusion are cross-cutting across the KMGBF, as meeting our 2030 targets will be impossible without the broad representation, participation, and leadership of diverse communities and Indigenous Rights holders. It is crucial that people living in Canada see themselves reflected in the 2030 Strategy and have the opportunity to meaningfully contribute their own unique skills, knowledge, and perspectives to its implementation. It will be important to ensure the full, effective, and equitable participation of those who have been underrepresented or traditionally not involved in biodiversity-related activities, including by working to remove systemic barriers to their participation. This includes Indigenous Peoples, women, 2SLGBTQI+ people, youth, racialized people, persons with disabilities, rural communities, and new Canadians, among others. It is essential that the benefits from implementing the 2030 Strategy are distributed equitably and do not further exacerbate existing inequities or create new ones (e.g., urban greening initiatives should not ignore lower-income communities). Likewise, any trade-offs must not consistently and disproportionately impact one community.

Laying the groundwork for transformative change

Reaching our 2030 targets and working toward our 2050 vision will require transformative change. While the work underway provides a promising starting point, transformative change will require a deep examination of our values, norms, and systems, including how nature is valued, how it is used and for what purposes, and how these decisions are made. It must also respect and centre the leadership of First Nations, Inuit, and the Métis Nation across Canada. Transformative change will inevitably have implications for the ways we live and work; however, the 2030 Strategy will be implemented in a way that ensures that nobody gets left behind.

What is transformative change?

IPBES defines transformative change as "a fundamental, system-wide reorganization across technological, economic, and social factors, including paradigms, goals, and values, needed for the conservation and sustainable use of biodiversity, good quality of life, and sustainable development."

The federal government will continue to model leadership on taking a whole-of-government approach that reconciles environmental, economic, and social mandates, and has already started to move the needle through the whole-of-government development of the 2030 Strategy. With respect to a whole-of-government approach across jurisdictions, as a start, the federal-provincial-territorial governance for departments responsible for conservation, wildlife, and biodiversity will be revised so that it aligns with the implementation of the 2030 Strategy and the KMGBF. Broadly, renewed governance will take into account the importance of ongoing, effective engagement with Indigenous partners and external stakeholders.

Integrating biodiversity across government mandates, decisions, and actions will help ensure protecting and enhancing nature is not a nice-to-have but a must-have. To this end, the new federal Climate, Nature, and Economy Lens, implemented through the Cabinet Directive on Strategic Environmental and Economic Assessment, will ensure that biodiversity effects (positive or negative) are considered in proposals submitted to Cabinet, the Prime Minister, and the Minister of Finance for decision. Lens considerations include mitigation measures and links to the 2030 Strategy, where relevant.

Transparency and accountability measures will be important tenets to support transformative change. The federal nature accountability bill, if passed into law, would establish an accountability and

transparency framework to advance federal implementation of the KMGBF commitments. Clear and accessible reporting would allow for an assessment of progress toward contributing to the global targets and, where necessary, provide information on course corrections to stay on track.

However, transformative change is not the unique responsibility of the federal government. There are others already driving toward transformative change, such as the Government of British Columbia, through its draft Biodiversity and Ecosystem Health Framework.

Leveraging current federal, provincial, and territorial actions

Federal, provincial, and territorial (FPT) efforts and investments in nature conservation in recent years have provided a solid foundation for advancing efforts to halt and reverse biodiversity loss, though these existing efforts, which include time-limited investments, will not be enough. Provincial and territorial leadership is essential in meeting our 2030 targets given their jurisdictional responsibilities (see Annex 3 for more details on PT actions and commitments). In fact, most targets will be impossible to achieve without PT leadership.

These existing efforts include multi-jurisdictional collaborations and leverage the respective mandates, responsibilities, and priorities of each jurisdiction. Collaboration often extends beyond FPT governments, involving Indigenous governments and organizations, industry, NGOs, and others.

Protecting 30% of Canada's land and waters by 2030: Several PTs, such as British Columbia, Quebec, and Manitoba, have committed to conserving 30% of land by 2030. Other commitments include Nova Scotia's legislated target of conserving 20% of land by 2030, being implemented through its Collaborative Protected Areas Strategy. The Nunavut Land Use Plan (currently under development) has the potential to contribute to Canada's terrestrial and marine conserved areas. Through Nature Agreements, the federal government is encouraging increased PT ambition by identifying, advancing, and supporting shared priorities on biodiversity.

Working to recover species at risk (SAR): The Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada, which shifts efforts from single species to multi-species conservation and ecosystem-based planning, was agreed to by FPT governments and is being implemented in collaboration with Indigenous Peoples and a variety of partners and stakeholders. The Framework for Aquatic Species Conservation will similarly transition aquatic SAR conservation to a multi-species approach.

Restoring degraded lands and ecosystems: Ongoing restoration efforts include Saskatchewan's restoration directives for oil and gas sites that consider SAR and critical habitat, Alberta's Wetland Replacement Program, which provides funding to municipalities and NGOs to construct or restore wetlands, and the Government of Quebec-funded Invasive Alien Plants Control program, which includes an objective related to restoring environments affected by invasive alien plants. The federal Bonn Challenge pledge will bring at least 19 million hectares of degraded and deforested landscapes under restoration by 2030. The Natural Climate Solutions Fund is working to restore forests, wetlands, peatlands, and grasslands via the 2 Billion Trees program and the Nature Smart Climate Solutions Fund. The national Framework to Identify Fish Habitat Restoration Priorities will also help advance marine and freshwater restoration efforts.

Engaging, partnering, and working with Indigenous governments and organizations: Efforts to support Indigenous-led conservation include British Columbia's development of its Biodiversity and Ecosystem Health Framework, which is built on the foundation of upholding and implementing the UN Declaration and includes a commitment to co-development with First Nations, as well as FPT collaboration in PFP initiatives to enable long-term financing for Indigenous-led conservation and stewardship. Federally, several initiatives support Indigenous-led conservation, including the Indigenous-Led Area-Based Conservation program, Indigenous Guardians, and Parks Canada's Indigenous Stewardship Framework, as well as the commitment to work with Indigenous communities on co-management agreements for new national parks and national marine conservation areas.

Integrating nature and climate action: Work to address biodiversity loss and climate change in parallel includes Yukon's Our Clean Future, which includes, for example, dedicated action to address climate change impacts on species and habitats, and Prince Edward Island's Climate Adaptation Plan, with actions related to nature-based solutions, climate-vulnerable species and habitats, and others. Ontario has undertaken research to map carbon stores and connectivity to maximize climate and biodiversity benefits. At the federal level, both the 2030 Emissions Reduction Plan and the National Adaptation Strategy include nature and biodiversity as a key area of action. The Natural Climate Solutions Fund supports efforts to address climate change and benefit biodiversity and human well-being, and the participation of a wide range of partners and stakeholders, including PTs, is crucial to its success.

Ensuring sustainable management and use of biological resources: Collaborative FPT efforts include successive FPT agricultural policy frameworks, which have advanced the socio-economic and environmental sustainability of the sector, and FPT efforts related to sustainable forest management.

Improving our knowledge base: Foundational efforts here include FPT scientific research programs, many of which involve collaborations with non-government researchers; federal investments in satellite earth observation, which will provide data to better understand and monitor biodiversity changes; as well as key reports, including collaborative reporting efforts such as the Wild Species reports (FPT) and the State of Canada's Birds (FPT, private sector, NGOs).

Measuring our progress

Measuring specific aspects of the state of biodiversity supports evidence-based decision making, and allows for more transparent accounting and reporting of the time, funds, and effort invested against the benefits achieved. It lets us know whether our actions are helping halt and reverse biodiversity loss and where we need to adjust. Monitoring enables measurement and reporting, and therefore accountability.

What is an indicator?
Indicators are an important tool in evaluating whether actions taken to conserve biodiversity are achieving their desired results and whether sufficient progress is being made. Biodiversity indicators can be used to measure and monitor a particular aspect of the state of biodiversity. They provide us with a signal when what we are looking at is too large or complex to fully measure. For example, trends in bird population size that rely on grassland habitats can tell us about the changing condition of the grasslands themselves.

There are three basic ways to monitor change and progress, which are reflected in our Domestic Biodiversity Monitoring Framework:

1. Measuring our performance in implementing actions (i.e., did we do what we said we would do?).

2. Measuring how effective our actions are (i.e., are they having a positive, neutral, or unintended negative effect on biodiversity?). We often use a surrogate measure, such as the presence of forest nesting birds as a substitute measure of overall forest health, when direct effects are difficult or expensive to measure.
3. Measuring the state of biodiversity (directly or indirectly) at a national scale (i.e., has biodiversity loss been halted or reversed?).

Regardless of what is being measured, it is important to follow up on the results. To be effective, monitoring results must be looked at in an adaptive management loop, where actions are developed, implemented, monitored for their effectiveness, refined according to results, and the cycle is repeated.

All parties to the CBD must report on their progress toward the four goals and 23 targets of the KMGBF in 2026 and 2029, using the KMGBF monitoring framework's indicators. The KMGBF monitoring framework includes 26 headline indicators that must be reported on by each country, as well as over a dozen global 'binary' indicators (yet to be released). This is the first time the CBD has established and required standardized indicators.

The headline indicators outlined in the KMGBF monitoring framework sometimes provide limited information and are not intended to give us the full story about a target. Indicators help direct our attention to where action is needed, in lieu of attempting to provide a complete picture. To help focus on key aspects of biodiversity that would otherwise be neglected, Canada has identified additional indicators in our Domestic Biodiversity Monitoring Framework (DBMF), some of which will be relevant to several targets given the integrated nature of the 2030 Strategy.

The DBMF is composed mainly of national-scale indicators. However, monitoring frameworks and programs from all levels of government, as well as civil society, complement and reinforce monitoring actions across Canada to allow a fuller understanding of the state of biodiversity and the effectiveness of our actions across the wide range and scales of biodiversity in Canada.

The indicators are primarily based on western science and knowledge; however, Indigenous Knowledge provides an equally valid and important way to understand and report on nature.

Domestic Biodiversity Monitoring Framework (DBMF)

The DBMF will be used to help determine whether Canada is on track to meet the goals and targets of the KMGBF. It lists indicators per target, drawn from the Monitoring Framework for the KMGBF and complemented by domestic indicators. See Annex 2 for an overview version of the DBMF.

The full list of indicators is included in the DBMF (see Annex 2), including current details on reporting methodology, and types and sources of required information and data. Over time, work by the international community and the CBD Secretariat will help fill gaps in methodology, data, and definitions. Measuring biodiversity across Canada is often challenging for various reasons. The country is vast and usually thinly populated more than a few hundred kilometres from our southern border; composed of diverse geographic regions and drivers of change, making it difficult to obtain comparable conservation results; and subject to global changes—such as a warming arctic—that can mask or exacerbate regional or national trends. Our domestic framework is designed to be feasible to implement, to stand up to examination against the best-available science and knowledge, and to hold Canada accountable at the domestic and international levels.

Looking forward

Halting and reversing biodiversity loss is one of the great challenges of our time. If we get it right, the transition to a nature-positive Canada will have profoundly positive impacts on our collective well-being, economic prosperity, and quality of life now and into the future.

What Canadians value in this nature-positive future will be as diverse as Canadians themselves. For some it will be exploring Canada's natural beauty, or looking forward to the return of their favourite birds in spring. For others it will be working the land and seeing it thrive, supported by the surrounding ecosystems. And for yet others it will be watching their business grow as customers seek out sustainable, nature-friendly options.

While we may differ in how we value nature, what motivates us to protect it, and even in how we go about doing that, the 2030 Strategy provides a call to action and a framework to focus our efforts. Federal actions and investments must be complemented by actions from provinces and territories. Actions by Indigenous Peoples, the private sector, NGOs, and others will also be important. As implementation unfolds, the 2030 Strategy and its federal implementation plans will be adjusted as needed, modifying actions, filling new gaps, and seizing emerging opportunities based on lessons learned, assessments of our progress, and our evolving knowledge base. Regular and transparent monitoring and reporting will help us ensure we are on track.

We will only reach our objectives if we all work together, each contributing according to our particular strengths, expertise, and mandate. As we move forward, we need to learn from each other, find new and innovative partnerships, and capture the imaginations of Canadians to create a groundswell of support and momentum to build a future where nature and current and future generations can thrive.

Annex 1: Federal target-specific implementation plans

The target-specific implementation plans in this annex include an analysis of where Canada currently sits in relation to achieving each target, some of the primary challenges and opportunities we will face, an overview of key federal actions already underway, as well as areas the government will explore moving forward to help close the gap on each target. While the implementation plans are federally focused, no target can be met without additional actions from all segments of society, particularly provinces and territories (see Annex 3). The implementation plans are colour-coded according to the KMGBF theme they belong to (see Figure 1): Reducing threats to biodiversity (Targets 1-8, green); Meeting people's needs through sustainable use and benefit-sharing (Targets 9-13, orange); Tools and solutions for implementation and mainstreaming (Targets 14-23, blue).

Canada is largely adopting each target as-is from the KMGBF, recognizing that the suite of targets represents a holistic package, with each one being critical to the overall goal of halting and reversing biodiversity loss. In some cases (e.g., the collective resource mobilization goals of Target 19), targets do not have a direct Canadian equivalent, only a global number, which Canada will contribute to. But in all cases, we are adopting the targets with the full ambition of the KMGBF.

There is an important consideration to note regarding the target language in the KMGBF for the purposes of the 2030 Strategy. While "indigenous peoples and local communities" is used throughout the CBD and the KMGBF to account for regional differences, in the Canadian context, "Indigenous Peoples" have specific and distinct rights as recognized and affirmed in Section 35 of the *Constitution Act, 1982*. The Government of Canada further recognizes that Indigenous Peoples have distinct rights as set out in the UN Declaration, which states that "respect for Indigenous Knowledge, cultures and traditional practices contributes to sustainable and equitable development and proper management of the environment." The *UN Declaration Act* affirms the UN Declaration as a universal human rights instrument with application in Canadian law and provides a framework for its implementation by the Government of Canada. In Canada, "local communities" does not exist as a formal or legal term, and local communities do not have rights comparable to those of Indigenous Peoples. As such, the 2030 Strategy highlights Indigenous Peoples. In addition, while the KMGBF uses "indigenous peoples" it is capitalized in the 2030 Strategy, as is standard in the Canadian context.

Federal department and agency acronyms used throughout Annex 1

AAFC	Agriculture and Agri-Food Canada
CanNor	Canadian Northern Economic Development Agency
CBSA	Canada Border Services Agency
CFIA	Canadian Food Inspection Agency
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
CSA	Canadian Space Agency
DFO	Fisheries and Oceans Canada
DND	Department of National Defence
ECCC	Environment and Climate Change Canada
FIN	Finance Canada
GAC	Global Affairs Canada
HC	Health Canada
IAAC	Impact Assessment Agency of Canada
INFC	Infrastructure Canada
ISC	Indigenous Services Canada

ISED	Innovation, Science, and Economic Development Canada
NRC	National Research Council Canada
NRCan	Natural Resources Canada
NSERC	Natural Sciences and Engineering Research Council of Canada
PC	Parks Canada
PCO	Privy Council Office
PHAC	Public Health Agency of Canada
PS	Public Safety Canada
PSPC	Public Services and Procurement Canada
SSHRC	Social Sciences and Humanities Research Council
SSC	Shared Services Canada
StatCan	Statistics Canada
TBS	Treasury Board of Canada Secretariat
TC	Transport Canada
WAGE	Women and Gender Equality Canada

TARGET 1: SPATIAL PLANNING AND EFFECTIVE MANAGEMENT

Target 1: "Ensure that all areas are under participatory integrated 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."

Note: In the Canadian context, "Indigenous Peoples" have specific and distinct rights, whereas "local communities" does not exist as a formal or legal term. As such, the 2030 Strategy highlights Indigenous Peoples. For a more in-depth explanation, please refer to the Annex 1 introductory text.

Target 1 aims to bring the loss of areas of importance for biodiversity, including areas of high ecological integrity, close to zero by 2030. As described by the CBD,[19] participatory, integrated biodiversity-inclusive spatial planning offers a way to consider land- and sea-use change at appropriate geographic scales, involving all jurisdictions and Indigenous Rights holders. It supports management decisions that can benefit ecosystems, wildlife, and people as it considers the full range of human activities, as well as potential conflicts among uses, to ensure that all species and ecosystems can persist and thrive, including under changing climatic conditions. Target 1 addresses "all" areas, recognizing that biodiversity outcomes cannot be achieved through protected and conserved areas alone. Canada has an important role at the global scale to preserve ecosystems of high ecological integrity,[20] including arctic ecosystems and vast intact forests.

The terms "spatial plans" and "spatial planning" are used broadly here and include land-use planning, Marine Spatial Planning (MSP), and other effective management processes.[21] Spatial planning incorporates both western science and Indigenous Knowledge systems.

Current status

There are strong regional differences in the extent of spatial planning, and land-use planning is undertaken by a range of actors, including municipal and regional bodies. For example, the Nunavut Land-Use Plan is following a participatory and biodiversity inclusive process, covering the entirety of the Nunavut Settlement Area, including marine areas. Regional land-use plans are legally binding in Nunavut and the Northwest Territories, and both the Sahtu and Gwich'in plans in the Northwest Territories are finalized and being implemented by parties. MSP, building from international and national guidance,[22] is

[19] CBD Guidance for Target 1

[20] The *Canada National Parks Act* defines ecological integrity as "with respect to a park, a condition that is determined to be characteristic of its natural region and likely to persist, including abiotic components and the composition and abundance of native species and biological communities, rates of change and supporting processes." Additionally, the CBD Guidance for Target 1 notes that "ecosystems can be generally considered to have integrity when their dominant ecological characteristics (e.g., elements of composition, structure, function and ecological processes) occur within their natural ranges of variation and can withstand and recover from most disturbances."

[21] "Effective management process may be utilised instead of or as a complement to spatial planning to address land use and sea use change. This may include such things environmental assessment, environmental impact assessment and strategic environmental impact assessment" (Convention on Biological Diversity, Guidance Notes for Target 1).

[22] "MSP Process Blueprint", a framework based on international guidance from the United Nations, and "Fisheries and Oceans Canada's National Guidance for Marine Spatial Planning."

advancing an evidence-based and inclusive approach for the marine area that will result in four first-generation MSP frameworks.

Preliminary internal federal estimates suggest that at least 60% of Canada's land and freshwater area and 30% of its marine area are covered by some kind of spatial planning, though not all existing plans or planning processes would be considered as meeting the standard set in Target 1 (i.e., participatory, integrated, biodiversity-inclusive). Achieving Target 1 will require completing planning processes that are underway, filling geographic gaps, and improving existing plans to ensure they encompass biodiversity and are informed by engagement. The identification of areas of importance to biodiversity is key to this work, and foundational work has started to track the persistence of areas of high biodiversity importance.

The federal government will advance Target 1 in the marine environment, where it has jurisdictional authority. However, in the terrestrial environment, provincial and territorial governments have responsibility for resources (except on federally administered lands) and their leadership is crucial to achieving this target, with the federal government and Indigenous Peoples playing a supporting role.

Challenges and opportunities

Biodiversity-inclusive spatial planning is inherently complex, addressing the full breadth of biodiversity and requiring involvement from a range of players across jurisdictions, each with different values, traditions, and relationships with the land, coast, sea, and ice. Addressing competing priorities for an area is a significant challenge, and policy gaps may also slow progress. For example, a lack of well-defined responsibilities for planning may occur in the absence of modern treaty agreements between the Crown and Indigenous Peoples. Regional spatial planning provides a mechanism to bring together a broad range of parties to develop evidence-based plans that support conservation and development and provide greater certainty to those involved. Advancing Target 1 offers opportunities to reprioritize and coordinate existing efforts, resolve conflicts, and secure important biodiversity areas before they are under threat. It can also simultaneously support several other targets (e.g., Targets 2, 3, 4, 8, 10), which includes minimizing climate change impacts by identifying and preventing the loss of areas that provide important ecosystem services like carbon sequestration.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Advancing marine spatial planning (MSP)	DFO, in collaboration with ECCC, NRCan, PC and TC, has advanced MSP in the Pacific North Coast, Southern British Columbia, Scotian Shelf-Bay of Fundy, Newfoundland and Labrador Shelves, and the Estuary and Gulf of St. Lawrence, with four first-generation marine spatial plans or frameworks to be developed by the end of 2024.
Undertaking integrated planning for priority areas, sectors, and threats	Under the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada (led by ECCC), the draft Strategic Conservation Framework for Species at Risk – Agriculture Sector sets objectives for the reduction of land conversion associated with each of the important habitats within agricultural landscapes. This framework is key to Target 1, which aims to bring the loss of areas of high biodiversity importance and ecological integrity to near zero by 2030. ECCC will complete Conservation Action Frameworks for the forestry and urban development sectors within

AREA OF ACTION	HIGHLIGHTS
	the Pan-Canadian Approach. On the aquatic side, DFO is bringing partners, stakeholders, and Indigenous communities together in set areas to address specific threats to conserve, protect, and restore fish and fish habitat and identify appropriate options and tools to manage aquatic resources.
Collecting, reporting, and developing environmental data and information	DFO, NRCan, ECCC, AAFC, and CSA collect and/or report on **environmental data** to measure land- and sea-use change and support biodiversity-inclusive decision making and reporting. Examples include the State of Canada's Oceans and State of Canada's Forests report, the Canada Marine Planning Atlas, the Canadian Extreme Water Level Adaptation Tool, land use and land-use change mapping, satellite-based land cover monitoring, Canadian Terrestrial Ecological Framework, national inventories for grasslands and forests, the National Deforestation Monitoring System, and the RADARSAT Constellation Mission. Programs are in place to **identify and delineate areas of high biodiversity importance**, including Key Biodiversity Areas (KBAs), priority areas for the creation of ecological corridors, wetlands, and other areas of high biodiversity importance, as well as updating Ecologically and Biologically Significant Areas where applicable. ECCC, DFO, and PC are involved in supporting or leading this work, in collaboration with provinces and territories, NGOs, academia, and Knowledge Holders. ECCC is working with KBA Canada to support and finalize the identification of terrestrial, freshwater, and marine KBAs across the country and continued updates and maintenance of the KBA Canada Registry.

Going further

To further advance action on Target 1, the federal government will:

- Define areas of high biodiversity importance (e.g., KBAs), including ecosystems of high ecological integrity, and make publicly accessible maps of these areas.
- Reinforce the value of spatial planning in areas of land and freshwater under federal jurisdiction.

The federal government may also explore additional opportunities, including:

- Establishing a national inventory of spatial plans for land and sea to identify additional planning actions required to meet the target and track progress.
- Completing spatial planning in all areas of federal jurisdiction, including marine spatial planning in all bioregions.
- Pursuing strategic opportunities to advance and support spatial planning.
- Developing pan-Canadian guidance, including definitions tailored to the Canadian context where needed, to support biodiversity integration in spatial planning.
- Building on work to support the initial identification and delineation or recognition of KBAs, ecological corridors, and other areas of high biodiversity importance, as well as updating Ecologically and Biologically Significant Areas as needed.

TARGET 2: ECOSYSTEM RESTORATION

Target 2: "Ensure that by 2030 at least 30% 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."

Canada is home to vast and diverse natural ecosystems; however, they often bear the brunt of economic activities (e.g., resource development, urbanization, pollution, land conversion), natural disturbances (e.g., wildfires, drought, floods), climate change, invasive alien species, and their cumulative impacts. These are driving ecosystem degradation, leading to landscape fragmentation, habitat loss, and the disruption of ecosystem services and functions. Canadians are increasingly aware of, and affected by, ecosystem degradation: microplastics in food chains; loss of wetlands disrupting water quality, biodiversity, and flood control; decreasing quality of hunting and fishing harvesting success; coastal and riverbank erosion; and decreasing crop yields due to general decline in wild pollinator species are just a few examples.

Ecosystem restoration can improve degraded areas, restore and enhance ecosystem functions and services, support species at risk recovery, contribute to climate change mitigation and adaptation, and improve ecosystem resilience. It can also improve livelihoods, bring back healthy ecosystems, support a restoration economy throughout Canada, and enable Indigenous conservation leadership. By improving degraded ecosystems across Canada, we are putting nature on the path to recovery.

Current status

There is growing recognition of the important role of ecosystem restoration in reversing biodiversity loss and helping nature recover. At the global level, Canada is part of the Bonn Challenge, along with over 60 countries. As part of this challenge, Canada has committed to bring at least 19 million hectares of degraded and deforested landscapes into restoration by 2030 within Canada.

The federal government, along with its provincial and territorial counterparts, has made significant investments in ecosystem restoration over the past few years. These investments support a range of activities, including on-the-ground restoration work, capacity building, and investments in science and research.

Indigenous communities, municipal governments, NGOs, the private sector, community-based groups, and other local partners have also made important contributions to the restoration of degraded areas, particularly by carrying out on-the-ground restoration and awareness-raising activities. Continuing and strengthening collaborative partnerships with Rights holders and stakeholders can help amplify the impact and effectiveness of restoration projects.

Despite these efforts, ecosystem degradation continues to occur rapidly across Canada. Strengthened and increased whole-of-society and whole-of-government efforts are needed to scale up restoration action.

Challenges and opportunities

Despite past and ongoing restoration successes, there are several areas requiring attention to support the domestic implementation of Target 2.

First, Canada currently does not have a national definition for key terminology in Target 2, notably, "degraded areas" and "effective restoration." However, there is a solid knowledge foundation on which we can build, including definitions of ecosystem degradation from international bodies, technical and scientific working groups, or the scientific community that converge on common elements. Formally defining these terms in the Canadian context is the first step toward establishing a baseline understanding of the area of degraded ecosystems and the area under restoration in Canada. This will also allow Canada to identify priority areas for restoration and report on progress.

Second, information on restoration efforts is currently fragmented and dispersed among numerous organizations. Establishing a common platform to pull together information from various sources would facilitate information exchange, foster collaboration, promote strategic planning and implementation, and streamline the reporting process.

Finally, there is an opportunity to enhance the collective response to ecosystem restoration across Canada. Organizations have called for additional guidance from the federal government on how to prioritize restoration activities and degraded areas. They have also emphasized the need for more adaptable funding processes, long-term funding, and additional support with monitoring and reporting on their success.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Committing to restore degraded areas	Through its Bonn Challenge pledge, Canada has committed to bring at least 19 million hectares of degraded and deforested landscapes under restoration by 2030. ECCC, NRCan, and PC will track and measure progress made as part of the Bonn Challenge pledge, based on the indicators developed by the International Union for Conservation of Nature's Restoration Barometer, including the location and area under restoration actions.
Investing in ecosystem restoration action	Canada is working to conserve, restore, and enhance ecosystems through the **Natural Climate Solutions Fund** (ECCC, NRCan, AAFC), with the goal of restoring 1.32 million hectares by 2031. In particular, the 2 Billion Trees program (NRCan) supports environmental co-benefits through tree planting, and the Nature Smart Climate Solutions Fund (ECCC) supports restoration and enhancement of wetlands, peatlands, and grasslands. Through the **Enhanced Nature Legacy** (ECCC, DFO, PC), Canada is financially supporting actions by PTs and other partners to recover species at risk (SAR), support the conservation of culturally important species, and protect and conserve priority ecosystems. Through PC's **Conservation and Restoration (CoRe)** projects, Canada is also taking action in federal protected areas to restore ecological communities impacted by invasive species and restore relationships with iconic Canadian species, such as salmon and bison, in partnership with Indigenous Peoples. ECCC financially contributes to the **North American Waterfowl Management Plan** (NAWMP), an international partnership that

AREA OF ACTION	HIGHLIGHTS
	conserves, protects, and restores wetland and upland habitats across North America. Since its inception in 1986, NAWMP has secured 9.5 million hectares and enhanced 1.7 million hectares of land in Canada.[23] Canada is also a Contracting Party to the Ramsar Convention on Wetlands and is contributing to the conservation, wise use, and restoration of wetlands. DFO's initiatives to **restore and rehabilitate aquatic ecosystems and SAR** include the Aquatic Ecosystems Restoration Fund and Pacific Salmon Strategy Initiative. DFO's national Framework to Identify Fish Habitat Restoration Priorities will inform the development of regional fish habitat restoration priorities, with the aim of improving coordination of marine and freshwater restoration and informing resource management decisions. ECCC also supports the restoration of aquatic ecosystems through the strengthened Freshwater Action Plan, which focuses on restoring waterbodies of national significance, including completing the clean-up of 12 of 14 remaining Canadian Great Lakes Areas of Concern by 2030 and all 14 by 2038. Through the **Federal Contaminated Sites Action Plan** Phase IV (2020 to 2024), federal departments owning contaminated properties are continuing to remediate the highest priority contaminated sites. Similarly, ECCC's **Environmental Damages Fund** directs funds received from fines, court orders, and voluntary payments to priority projects that will benefit the natural environment in Canada, including restoration. FPT governments implementing the **Resilient Agriculture Landscapes Program** help agricultural producers adopt practices such as maintaining and restoring grasslands and wetlands. PC has identified national criteria and national priority areas for ecological corridors through its **National Program for Ecological Corridors**. In the first years of the program, PC has supported seven pilot projects, and is now supporting three additional corridor projects, with more proposals currently being sought and reviewed. This will support the identification and recognition of 4-6 ecological corridors that will maintain and restore ecological connectivity, thereby helping reduce biodiversity loss and species adapt to climate change.
Undertaking science and research on effective restoration	ECCC, DFO, PC, AAFC, and NRCan support ongoing research and development of best practices and innovative remediation and restoration techniques, the assessment of effectiveness of restoration actions, and collaboration and information exchange. These departments will continue to carry out research to understand what constitutes a degraded area in all biomes (terrestrial, freshwater, marine) and the desired endpoint and indicators to identify when a degraded area has been restored. For example, NRCan's Cumulative Effects Science Program facilitates pragmatic research on forest ecosystem-based strategies and

[23] Habitat Matters 2023

AREA OF ACTION	HIGHLIGHTS
	tools for mitigating cumulative effects and restoring ecological integrity of forests, including caribou habitat. Also, AAFC's Living Labs program brings together farmers, scientists, and other sector partners to co-develop and test innovative technologies and on-farm practices to foster resilient agroecosystems.
Preventing and mitigating degradation through existing regulatory and policy frameworks	ECCC, IAAC, PC, and DFO are working to prevent ecosystem degradation and promote ecosystem restoration on federally regulated lands and waters, support efforts to protect and conserve areas, and implement the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada. They will continue to require that proponents of development projects avoid, minimize, eliminate, control, or offset adverse effects of development and natural resource management activities on ecosystems and wildlife under the *Impact Assessment Act*, *Fisheries Act*, *Canada Wildlife Act*, *Migratory Birds Convention Act, 1994*, *Species at Risk Act*, *Canada National Marine Conservation Areas Act*, and *Canada National Parks Act*, as well as relevant policies and regulations such as the Federal Policy on Wetland Conservation. Relevant legislation and policies in PTs and between federal and Indigenous governments continue to regulate prevention and mitigation of degradation within their jurisdiction.

Going further

To further advance action on Target 2, the federal government may explore additional opportunities, including:

- Working to define "degraded areas" and "effective restoration", identify degraded areas to establish a terrestrial and aquatic baseline for the target, assess priority areas for restoration, and facilitate reporting on progress.
- Improving and strengthening supply chains (e.g., securing seed sources), supporting training, capacity building, and Indigenous leadership in seed conservation and restoration, addressing policy gaps, and ensuring the required infrastructure is in place (e.g., for housing native seed sources).
- Supporting collaborations and facilitating the exchange of knowledge and information necessary to advance restoration-related science, practice, and policy.

TARGET 3: PROTECTED AND CONSERVED AREAS (30X30)

Target 3: "Ensure and enable that by 2030 at least 30 percent of terrestrial and inland water, and of coastal and marine 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."

Note: In the Canadian context, "Indigenous Peoples" have specific and distinct rights, whereas "local communities" does not exist as a formal or legal term. As such, the 2030 Strategy highlights Indigenous Peoples. For a more in-depth explanation, please refer to the Annex 1 introductory text.

As the steward of large extents of ecologically important areas, Canada has an opportunity to show global leadership in protecting and conserving nature. Effectively managed and well-connected networks of protected and conserved areas help safeguard ecosystems, species, and their genetic diversity, making them more resilient to human, environmental, and climatic changes. Ocean protection efforts support the climate resilience of sensitive marine habitats and provide a safe haven for biodiversity. Protected and conserved areas also provide a host of economic, health, and socio-cultural benefits (e.g., tourism opportunities, local employment, preservation of cultural sites and values, protection of resources for food, medicines, and social and ceremonial harvesting).

Current status

Canada has made progress in protecting and conserving its terrestrial and marine areas. Working in partnership with provinces and territories, Indigenous Peoples, local governments, industry, NGOs, academia, and private landowners and trusts, as of December 2023, Canada has moved from less than 1% of conserved ocean area in 2015 to 14.7% today (842,828 km^2—equivalent to an area approximately the size of Yukon and Newfoundland and Labrador combined). On land, Canada has conserved over 350,000 km^2 since 2015—an area larger than the country of Finland—for a total of 13.7% (1,368,065 km^2). Progress is tracked through the publicly available Canadian Protected and Conserved Areas Database (CPCAD), with data provided to the World Database of Protected Areas annually, and also reported through the Canada's conserved areas indicator of the Canadian Environmental Sustainability Indicators program.

While this progress is significant, Canada must more than double its entire cumulative area of conservation to date in just six years. The federal government cannot achieve Target 3 on its own, as it manages just 6% of Canada's land and freshwater. Land in Canada is primarily managed by provincial, territorial, and municipal governments, as well as Indigenous governments and private landowners. Marine and coastal areas are largely under federal jurisdiction, but decisions about advancing conservation areas are made in consultation with partners and stakeholders. Collaboration, as well as provincial and territorial leadership, are essential to achieving Target 3. For areas to be entered into CPCAD and count toward Target 3, they must meet pan-Canadian definitions that are based on established international standards.

Demonstrating the importance of partnerships, some of Canada's largest conservation gains to date have come from Indigenous-led conservation, including Edehzhie Dehcho Protected Area and National Wildlife Area (14,218 km^2), Thaidene Nëné Indigenous Protected Area, which includes a national park reserve and territorial protected areas (14,070 km^2), and Kitaskino Nuwenëné Wildland Provincial Park in Alberta (3,145 km^2).

Canada currently directly manages a diverse portfolio of 37 national parks, 10 national park reserves, one national urban park, 57 National Wildlife Areas (NWAs), and 92 Migratory Bird Sanctuaries. In the marine environment, Canada has established 14 *Oceans Act* Marine Protected Areas (MPA), three National Marine Conservation Areas, two marine parks, one marine NWA, and 60 marine other effective area-based conservation measures (e.g., marine refuges).

In addition to area-based progress, Canada has made progress on qualitative aspects of this target including ecological representation, well-connected and equitably governed areas with effective conservation outcomes, and meaningful engagement with Indigenous Peoples, as well as being one of the first countries piloting a program to identify terrestrial Key Biodiversity Areas (KBAs) and promote their consideration in land-use planning.

Challenges and opportunities

Working toward success on Target 3 is an opportunity to use inclusive, innovative mechanisms that go beyond traditional approaches, as well as an opportunity to remove barriers to expanding networks of protected and conserved areas and reporting on progress. Several challenges will need to be addressed, including: the jurisdictional complexity of this target; the time needed to build trusted, long-term relationships with partners who establish and manage conserved areas; a lack of partner and stakeholder capacity to engage in initiatives; the need to manage established protected and conserved areas over the long term to ensure they are achieving their conservation objectives; the need for innovative approaches to conservation to manage ecosystem shifts resulting from climate change; and competing demands for land and resources.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Expanding and effectively managing the network of federal protected and conserved areas	In the terrestrial environment, work is ongoing to **acquire additional lands and expand existing federal protected areas**. PC is working to establish 10 new National Parks, 10 National Marine Conservation Areas, and four freshwater National Marine Conservation Areas, and designate up to six National Urban Parks by 2026 (and 15 by 2030) in collaboration with Indigenous partners, stakeholders, and other levels of government. Budget 2024 proposed funding for the establishment of one new National Park, one new National Marine Conservation Area, and one new National Urban Park, work is underway to complete the process to establish these sites. ECCC is also continuing to expand its existing network of NWAs and marine NWAs to include more nationally significant habitat. In the marine environment, DFO is currently actively advancing conservation networks in the Scotian Shelf & Bay of Fundy and BC's Northern Shelf Bioregion. The federal government has published its **plan to reach the 2025 goal in the marine environment**: an 'all in' effort building

AREA OF ACTION	HIGHLIGHTS
	on and sustaining meaningful partnerships with governments at all levels, Indigenous Peoples, industry, NGOs, community-based groups, and academia. The federal government continues to engage with partners and stakeholders to identify new candidate protected and conserved areas for consideration in the effort to achieve the 30% by 2030 marine conservation target. Efforts to **effectively manage terrestrial and marine federal protected and conserved areas** are ongoing, and are essential to ensuring they are successful in achieving their conservation objectives. These efforts are supported by scientific research, ecological monitoring, best-available information and data, and compliance verification and enforcement. Effective management efforts also include ecological restoration, climate-informed adaptive management, and collaboration with Indigenous partners (including exploring co-governance opportunities). In the marine environment, Canada plans to implement the federal MPA Protection Standard in most new federal MPAs to help safeguard ecologically sensitive areas from the potentially harmful effects of some industrial activities, including proposals to enhance restrictions on certain vessel discharges. In addition, PC is leading work to develop regulations to help manage national marine conservation areas.
Recognizing Other Effective Area-Based Conservation Measures (OECMs)	In the terrestrial environment, as of 2023, 241 terrestrial OECMs—lands and waters managed in ways that achieve the conservation of biodiversity, but that are not protected areas or parks—have been recognized in the Canadian Protected and Conserved Areas Database, conserving 91,461 km^2, which represents approximately a quarter of Canada's progress toward the terrestrial target since 2015. ECCC is supporting the recognition of additional OECMs by ongoing site screening, public communications, and reducing barriers. Areas of focus moving forward include the recognition of conservation measures in the managed forest, identifying and including lands protected under municipal bylaws, and lands managed by federal departments and agencies (in all cases, only where these lands are achieving the conservation of biodiversity and meet pan-Canadian definitions of OECMs). In alignment with the federal Greening Government Strategy, departments and agencies will identify federal OECMs that contribute to the target. In particular, DND will assess many portions of its military training areas and recognize those that are OECMs. In the marine environment, 60 OECMs (fisheries area closures that meet the science-based criteria set out in the Government of Canada's Guidance for Recognizing Marine OECMs and are known as marine refuges) have been recognized, accounting for 318,517 km^2 of conserved ocean area. The federal 2022 Marine OECM Guidance implements the federal marine OECM Protection Standard in these areas and guides their ongoing management. DFO will continue exploring opportunities to recognize new

AREA OF ACTION	HIGHLIGHTS
	area-based measures that provide biodiversity conservation benefits as marine OECMs.
Increasing ambition via Nature Agreements	The federal government is encouraging increased ambition on nature conservation from provinces and territories and is supporting them with funding through Nature Agreements (NAs). To date, Canada has signed three NAs that will support PTs in expanding area-based conservation and other shared nature priorities. This includes the Canada-Yukon and Canada-Nova Scotia NAs, as well as the Tripartite Framework Agreement on Nature Conservation between Canada, British Columbia, and the First Nations Leadership Council. Canada continues to explore opportunities for additional agreements with PTs expressing interest in making ambitious commitments related to area-based conservation.
Supporting Indigenous-led conservation	Indigenous-led conservation is at the forefront of Canada's conservation efforts. ECCC supports the establishment of Indigenous-led protected areas and the recognition of Indigenous-led OECM projects through the **Indigenous-led Area-Based Conservation (ILABC) program**. Since 2019-2020, ILABC and its precursor, Target 1 Challenge, have provided $202M to 94 recipients to either establish new protected areas or OECMs or undertake early planning and engagement work that could result in new conservation areas. Additionally, the **Indigenous Guardians** program supports on-the-ground, community-based stewardship initiatives of Indigenous Peoples on their traditional territories. In addition, four **Project Finance for Permanence** (PFP) initiatives ($800M of federal funding) are expected to support additional marine and terrestrial protected and conserved areas and enable long-term durable financing for Indigenous-led management and stewardship of protected and conserved areas. PFPs are broad, large-scale conservation initiatives that will also support progress on other targets (e.g., Targets 1, 2, 22). The PFP model brings together Indigenous communities and organizations, PTs, the philanthropic community, and the federal government to identify shared goals for protecting nature while advancing reconciliation. Key progress includes the signings of the Qikiqtani Inuit Association Agreement in Principle and the Northwest Territories PFP Framework Agreement. Work is ongoing to conclude final PFP agreements in 2024-25 and will identify joint pathways to contribute to Target 3, with the possible establishment of some areas by 2025. DFO's **Oceans Management Contribution Program** helps build capacity for Indigenous governments and communities to participate in establishment, management, and stewardship activities for *Oceans Act* MPAs and DFO's marine OECMs.
Identifying and creating ecological corridors	PC is contributing to terrestrial connectivity through the identification of ecological corridors, mapping national priority areas for ecological corridors and providing support to partners to identify and create corridors. By 2025, priority areas for ecological corridors will be identified

AREA OF ACTION	HIGHLIGHTS
	at the national scale, and 4-6 ecological corridors will be recognized that maintain or improve ecological connectivity between protected and/or conserved areas and unprotected habitat. Additionally, safe passageways for wildlife, such as over and underpass structures, are being explored on PC roads within national priority areas for corridors.
Conserving privately protected areas	ECCC supports the conservation of privately owned ecologically sensitive lands, primarily in southern Canada, by working with partners through the Natural Heritage Conservation Program (NHCP), the Ecological Gifts Program, and the North American Waterfowl Management Plan, as well as supporting stewardship of privately protected areas. NHCP has proven to be an excellent model for collaborative conservation, with partners conserving over 2,400 km^2 of land from investments by ECCC, matched by private contributions, in the first four years of the program.

Going further

To further advance action on Target 3, the federal government will:

- Work to achieve multiple objectives and targets through its efforts on Target 3. Where possible, protected area selection and planning will occur in the context of regional spatial planning and—in the terrestrial environment—be informed by the finalization of KBAs. It will also help protect critical habitat for species at risk, areas under restoration, and high-carbon ecosystems, while maximizing synergies with other federal programming.
- Provide additional public information on the process for recognizing OECMs.

The federal government may also explore additional opportunities, including:

- Focusing on large-scale conservation areas to meet the quantitative element of the target, and areas of high biodiversity and carbon value to meet the qualitative aspects of the target.
- Empowering the Minister of Environment and Climate Change and the Minister of Fisheries and Oceans to, in partnership with Indigenous Peoples, take into account both ecological and cultural conservation considerations for the establishment of protected areas across land and sea.
- Continuing to pursue ways to provide long-term support for Indigenous-led conservation, including stewardship of these areas (e.g., Indigenous Guardians).
- Reviewing innovative funding opportunities to support further progress on protected areas.
- Basing future programming on lessons learned, such as flexible funding mechanisms to reduce burden on partners, maintaining and enhancing strategic partnerships, and stronger communications.

TARGET 4: SPECIES RECOVERY

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."

Species recovery and biodiversity are important to help ecosystems stay healthy, adapt to changes, and be resilient in the long term. Biodiversity is also crucial to ensure that we have enough food and can grow crops sustainably. Having different types of plants and animals means we have options if one crop fails or if a disease attacks our livestock. Plus, Indigenous Peoples and Canadians have strong connections to many species through their traditions and beliefs.

Current status

Canada is home to about 80,000 known wildlife species. The Wild Species 2020 report[24] assessed 50,534 species using available data on their distribution and status. Of those, 20% have some level of risk of extirpation or extinction and for many other species, there is not enough information available to properly assess. As of December 2023, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) has assessed 875 wildlife species, of which 662 are considered species at risk (SAR) under the *Species at Risk Act* (SARA).

The federal government aims to make timely, evidence-based decisions to help the survival and recovery of species and safeguard their habitats. These efforts are done in collaboration with Indigenous Peoples, provinces, territories, municipalities, stakeholders, and communities. They focus on monitoring wildlife health issues and ensuring that wildlife populations are monitored and protected. While SARA is key for conserving and protecting biodiversity in Canada, there are other laws that contribute to federal efforts, including the *Migratory Birds Convention Act, 1994*, the *Canada Wildlife Act*, the *Fisheries Act*, the *Oceans Act*, the *Canada National Marine Conservation Areas Act*, and the *Canada National Parks Act*.

There has been much progress since the 2013 audit by the Commissioner of the Environment and Sustainable Development, most notably in completing overdue recovery strategies and management plans. However, the 2023 audits found the federal government's actions were lacking regarding tracking, planning, and reporting on the recovery of wildlife species listed under SARA and the protection of their critical habitats. Ongoing efforts are being directed at continually improving results for SAR in Canada. No single jurisdiction can effectively protect SAR alone. Establishing and implementing agreements with provinces, territories, and Indigenous Peoples is vitally important. Success will include Indigenous leadership on species conservation and taking into account Indigenous Knowledge systems and perspectives. Ongoing efforts are needed to continue to support in situ and ex situ conservation and share data on species and genetic diversity, as well as for research, monitoring, and enforcing conservation laws. Focusing collective efforts through the 2030 Strategy from all

[24] Wild species 2020: The general status of species in Canada

jurisdictions and sectors will have strong results on SAR and critical habitats, to help integrate biodiversity considerations into our decisions every day.

Challenges and opportunities

Species recovery is complex and influenced by many factors, including habitat degradation, pollution, invasive alien species, overharvesting, and climate change. Unfortunately, a growing number of species are becoming at-risk, many SAR populations continue to decline, and positive results of recovery and conservation work often take a long time to become apparent. Species recovery needs innovative thinking, ongoing efforts, teamwork, more focused monitoring, and careful planning. With the 2030 Strategy, there is an opportunity for all jurisdictions to take more action, including taking a broader approach that considers whole ecosystems, being good stewards of the lands, monitoring wildlife health, and making sure that biodiversity laws—such as those mentioned above—are followed. Working together with Indigenous Peoples, industry, academia, NGOs, private landowners, and other governments is important for the success of SAR recovery. While the federal government has some tools, there is still a lot to do to help SAR, including involving more people in planning, decision making, implementation, and reporting under SARA.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Supporting meaningful Indigenous participation and leadership in the implementation of the *Species at Risk Act* (SARA) and biodiversity conservation	ECCC, DFO, PC, and CIRNAC will continue to work together to make sure Indigenous Peoples are involved and lead in **SARA processes** by taking a holistic approach to conservation efforts, which includes respectfully taking into consideration Indigenous Knowledge systems and western science, and supporting Indigenous capacity building. Additionally, ECCC, DFO, and PC are developing policies and guidance to meet the goals of the *United Nations Declaration on the Rights of Indigenous Peoples Act*. Further, the three departments, with support from NRCan, are working to ensure Indigenous Peoples are properly engaged in evaluating various agreements with First Nations, Inuit, and the Métis Nation under SARA Sections 10 or 11. Federal programs will continue to prioritize **Indigenous leadership in stewardship**, such as the Indigenous Partnerships Initiative and the Enhanced Nature Legacy initiative.
Protecting and recovering species at risk (SAR) through federal programming and initiatives	ECCC, DFO, PC, and NRCan will continue to improve planning and implementation of **SAR recovery and restoration actions**, enforcing laws, and reporting back under SARA. The federal government will also continue to move toward **a multiple-species, ecosystem-based approach** through the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada (terrestrial) and the Framework for Aquatic Species at Risk Conservation (aquatic). Several **funding programs**, including the Canada Nature Fund for Aquatic Species at Risk, Habitat Stewardship Program, Aboriginal Fund for Species at Risk, and the Species at Risk Partnership on Agricultural Lands, empower partners to carry out actions to help SAR. These actions are

AREA OF ACTION	HIGHLIGHTS
	further boosted by actions to meet Target 3, which aim to expand protected and conserved areas. There are also broader **collaborative, multi-jurisdictional initiatives** that focus on priority SAR species, including whales, Pacific salmon, wood bison, and boreal and southern mountain Caribou. These projects also benefit other SAR and biodiversity in general.
Managing biological collections	AAFC, NRCan, and DFO maintain large biological collections to protect the genetic diversity of both wild and domesticated species in Canada.
Delivering human-wildlife co-existence programming	To ensure meaningful and safe visits to national parks and to help the environment, PC will keep implementing human-wildlife co-existence strategies. The CSA, with support from industry, academic, and government partners, will keep using satellite data to protect wildlife, through its smartEarth program (e.g., smartWhales initiative). DFO is developing the Whalesafe Gear Strategy for testing and implementing whale-safe fishing gear in Canadian fisheries.
Supporting coordination for species protection and recovery with provinces and territories, Indigenous governments, and other critical partners	ECCC, PC, and DFO will keep strengthening collaboration between all jurisdictions to improve species recovery and biodiversity conservation. ECCC will continue to work with PTs and Indigenous Peoples to establish Nature Agreements to help identify, advance, and support shared priorities on biodiversity, including species recovery.
Implementing the Migratory Birds Program	The federal government has the responsibility for migratory birds under the *Migratory Birds Convention Act, 1994* for which ECCC takes the lead to protect, conserve, and properly manage migratory bird populations. This work also involves generating, tracking, and sharing data and research results, which inform decisions on how to best protect migratory birds.

Going further

To further advance action on Target 4, the federal government will:

- Explore ways to improve the transparency and implementation efficiency of the SARA program.
- Improve implementation of SARA by continuing to advance listing decisions for aquatic species, assessed as endangered or threatened by COSEWIC, applying a streamlined and efficient listing process.
- Increase knowledge sharing of data, information, and results such as SAR data through Canada's Open Data Portal and via web-based Species at Risk mapping.

The federal government may also explore additional opportunities, including:

- Developing interoperable data platforms for tracking SAR recovery measures, migratory bird populations, and activities that support recovery reporting, decision making, and collaboration.
- Enhancing delivery of SARA obligations through multi-species stewardship approaches.

- Within a One Health initiative, taking steps to advance wildlife health initiatives through national and international coordination and policy development, and implementing the Pan-Canadian Approach to Wildlife Health to respond to wildlife health issues, including for SAR and migratory birds.
- Exploring policy or guidance to increase wildlife passages and mitigation measures on federally funded roads.

TARGET 5: EXPLOITATION OF SPECIES / WILD SPECIES HARVESTING, USE, AND TRADE

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."

Note: In the Canadian context, "Indigenous Peoples" have specific and distinct rights, whereas "local communities" does not exist as a formal or legal term. As such, the 2030 Strategy highlights Indigenous Peoples. For a more in-depth explanation, please refer to the Annex 1 introductory text.

The overexploitation of wild species is a direct driver of biodiversity loss: globally, it is the largest driver in marine ecosystems, and the second largest in terrestrial and freshwater ecosystems. Continued actions are needed to ensure the legality, sustainability, and safety of the use, harvest, and trade of wild species, especially as the global bioeconomy continues to grow. These actions must be undertaken while upholding the rights and ways of living of Indigenous Peoples, who have been harvesting wild species for millennia without contributing to overexploitation.

Current status

Canada plays a leadership role both internationally and domestically to address overexploitation. Internationally, as a Party to the Convention on International Trade in Endangered Species (CITES), the Government of Canada works with 184 other member countries to safeguard certain wild species from overexploitation due to international trade, including through federal implementation of the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act* with cooperation from provinces and territories. Furthermore, addressing exploitation through federal, provincial, territorial, and Indigenous government wild species management practices, in consultation with Indigenous Peoples and through community engagement, has proven effective in achieving sustainable levels of legal use and harvest for certain species. PT governments largely have jurisdictional responsibility for wild species management, including implementing legislation and practices to conserve and protect terrestrial wildlife, forests, and freshwater fisheries. In addition, the federal government is working to strengthen Indigenous and northern food systems and food security, and to enhance access to customary use of wild species and traditional harvesting and food sharing.

The sustainable use and harvest of terrestrial wildlife in Canada has been guided by established principles for hunting and trapping regulations for decades (e.g., *Migratory Birds Convention Act, 1994*), and sustainable use principles have been incorporated into management practices by governments for all natural resource sectors. Thanks to these efforts, terrestrial species in Canada are not as impacted by overexploitation compared to other direct drivers of global biodiversity loss. For example, as of 2016 most waterfowl species in Canada have been managed to meet acceptable population thresholds,[25] and populations have increased by 150% overall since 1970.[26] Significant progress has been made in some

[25] Population status of Canada's wild birds
[26] Trends in Canada's bird populations

harvested migratory bird species, but continued effort is needed to ensure that harvest levels remain sustainable.

Efforts toward sustainable fisheries have consistently achieved a high proportion of key fish stocks harvested at or below approved levels, an evidence-based measure of pressure on wild fish stocks.[27] However, more progress is needed as only 48% of key stocks were assigned a stock status zone designation as Healthy or Cautious in 2021,[28] which is below the 2026 target of 55%. For example, despite extensive conservation efforts and fishery restrictions, Pacific salmon stocks continue to decline. After being deemed necessary, additional evidence-based measures, including longer-term conservation closures for commercial fisheries, have been implemented after engagement with BC First Nations and stakeholders.

Challenges and opportunities

Gaps limiting progress on Target 5 exist, particularly with respect to trade, and there is an opportunity to better monitor commercially traded wild species entering Canada, detect illegal trade, and promote and enforce sustainable international trade of wild species. Additionally, the increased demand by people for wild species and derived products can result in species exploitation as well as risks of pathogen emergence and spillover. Advancing federal-provincial-territorial Minister-approved frameworks, such as the Pan-Canadian Approach to Wildlife Health, would help ensure that trade, but also use and harvesting, are safe from risks of pathogen spillover that poses risks to One Health sectors. Work to address challenges should consider the adoption of an ecosystem-based approach to wild species management, and especially one that would include Indigenous Knowledge systems.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Ensuring sustainable, safe, and legal trade in wild species	ECCC implements the **Convention on International Trade in Endangered Species** (CITES) and decisions to assess the sustainability of Canadian trade in CITES-listed wildlife. ECCC continues to undertake administrative updates and amendments to the **Wild Animal and Plant Trade Regulations** to strengthen the ability to enforce regulations and contribute to international efforts to reduce declines of specific populations.

[27] Harvest levels of key fish stocks
[28] Status of key fish stocks

AREA OF ACTION	HIGHLIGHTS
Ensuring sustainable, safe, and legal use and harvest of fisheries	DFO supports marine conservation and sustainable fisheries objectives by implementing activities under the **Oceans Protection Plan** and continues to implement the **Pacific Salmon Strategy Initiative** to protect Pacific salmon, an important culturally significant species. Other DFO efforts include conducting the Annual **Sustainability Survey for Fisheries** (SSF), expanding the implementation of the **Sustainable Fisheries Framework**, including developing reference points and other components of the precautionary approach framework for all key stocks per the annual SFF Work Plan, applying the *Fisheries Act* Fish Stocks Provisions, and conducting sustained, coordinated, and intensive aerial pollution surveillance over all waters under Canadian jurisdiction through the Aerial Surveillance Program. PC is **developing regulations** to support the management of the Policy and Directive for the Establishment and Management of National Marine Conservation Areas (NMCAs) and NMCA reserves.
Advancing sustainable use of forests and trade of forest products	NRCan is collaborating with provinces and territories to consider a **definition of forest degradation** and appropriate indicators within a framework through the Canadian Council of Forest Ministers. This is expected to strengthen Canada's sustainable forest management reputation for trade markets that value reducing deforestation and forest degradation. NRCan is collaborating with ECCC to **address illegal harvest and international trade in forest products**, including through the development of science, data, and tools that support wildlife enforcement officers and customs and border officials.
Ensuring sustainable, safe, and legal use and harvest of migratory birds	ECCC delivers monitoring and research programs for some migratory bird species and supports domestic collaborations, fosters international partnerships, and is working to build meaningful relationships with Indigenous Peoples to protect, conserve, and manage migratory birds.
Ensuring sustainable and legal use, harvest, and trade of terrestrial wildlife	ECCC is continuing to implement the Agreement on International Humane Trapping Standards, which encourages the sustainable use of wildlife by hunters and trappers, improves animal welfare in the trapping of wildlife, meets the European Union regulations on humane trapping of wild species, and thereby maintains access to the European wild fur market.
Supporting meaningful participation and leadership of Indigenous Peoples and building capacity to manage wild species	Through Enhanced Nature Legacy programming, DFO, ECCC, and PC are **advancing Indigenous leadership in wild species conservation** and helping build capacity for Indigenous Peoples to lead the design and implementation of action for wild species management and use, including with regards to commercial fishery operations and co-management processes. ECCC and PC are supporting and **building capacity for Indigenous-led conservation** and monitoring initiatives, such as the Indigenous Guardians programs.

AREA OF ACTION	HIGHLIGHTS
Minimizing impacts to non-target species	DFO is developing a Whalesafe Gear Strategy, a long-term strategy for testing and implementing whalesafe fishing gear in Canadian fisheries to help alleviate whale entanglements in fishing gear, including the use of rope-on-demand fishing gear in high-risk areas of entanglements for North Atlantic right whales. (Link to Target 4)

Going further

To further advance action on Target 5, the federal government will:

- Develop options to enforce the legality of imports of forest products that are not listed under CITES and imports of forest risk commodities.

The federal government may also explore additional opportunities, including:

- Reducing risk of pathogen spillover and impacts to non-target species through a collaborative multi-sectoral approach to identifying and reducing wildlife health threats in support of One Health initiatives and the Pan-Canadian Approach to Wildlife Health.
- Expanding work with PTs and Indigenous partners on One Health initiatives to improve coordination and implementation of actions to address cross-cutting priorities.
- Using of modern digital technology to increase efficiencies at Canada's borders and detect and curb the illegal import/export of wild species.
- Expanding and accelerating the development of a systematic implementation of an ecosystem approach to fisheries management for federally managed fish stocks and fisheries to further promote healthy ecosystems, sustainable fisheries, and opportunities to support the economic prosperity of the fishing industry.
- Expanding the Blue Economy Strategy to help maintain healthy ecosystems that are essential to ocean-based industries and creating equitable and sustainable livelihoods in existing and emerging maritime sectors.
- Examining opportunities to work with PTs and Indigenous partners to address unregulated harvest of unlisted wild plants outside of protected areas.

TARGET 6: INVASIVE ALIEN SPECIES

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 per cent by 2030, and eradicating or controlling invasive alien species, especially in priority sites, such as islands."

Invasive alien species (IAS), one of the five direct drivers of global biodiversity loss, are species of plants, animals, and micro-organisms introduced to environments outside of their habitat of origin that, once established, threaten local biodiversity, ecosystems, and species, and the economy or society. The damage they cause aggravates and is aggravated by other direct drivers of biodiversity loss, including land- and sea-use change and climate change. In Canada, IAS are a significant threat to 42 federally listed species at risk. Their impact on nature's contributions to people and good quality of life include heightened risks from emerging infectious diseases, decreased food security, or increased threats on Indigenous cultural practices, including traditional foods and medicines. The global annual cost of IAS is estimated to exceed US$423B, though this is likely a gross underestimate.[29] In Ontario alone, it costs $75M-$91M annually to manage a single species, the zebra mussel.[30] As a result, preventing the introduction of IAS remains the best and most cost-effective option to address the threats of IAS.

Current status

The federal government, provinces and territories, and non-government actors have taken numerous actions to address the threat of IAS. These actions span all elements of this target and beyond: pathway identification and management; monitoring of key IAS; eradication, control, and management measures; public education, compliance, and enforcement measures; and building the knowledge needed to assess threats and impacts of IAS, including economic ones. Thanks to these efforts, Canada met its 2020 biodiversity target for IAS, which focused on the identification of pathways of introductions, as well as the development of risk-based intervention or management plans on priority pathways and IAS.

Existing measures on IAS (e.g., number of intervention plans in place, number of newly known IAS establishments within federal scope) provide an incomplete portrait of the situation. Remaining knowledge gaps for preventing IAS introduction and establishment, minimizing their impacts, and effectively managing them, should not prevent taking action on IAS. This is especially true as threats of IAS are expected to grow with increased global trade and travel, and can be amplified by climate change and other global drivers of biodiversity loss. For example, invasive alien plants could make ecosystems more vulnerable to wildfires, and wildfires can, in turn, exacerbate the introduction and spread of IAS.

Strengthened collaboration on monitoring, science, and control measures, as recommended in 2018 by the Federal-Provincial-Territorial Invasive Alien Species Task Force to the Conservation, Wildlife, and Biodiversity Ministers,[31] continues to be important for success. The federal government can advance Target 6 by building on existing work within its jurisdictional mandate (e.g., increased biosecurity at

[29] IPBES Invasive alien species assessment: Summary for policymakers
[30] Ontario invasive species strategic plan (2012)
[31] Canada's 2020 biodiversity goals and targets: Target 11

Canada's borders, prevention and management of federally regulated IAS, increased coordination with PTs to help track progress at a national scale). Federal efforts alone will be insufficient to achieve the target, given the jurisdictional mandate of PTs with regards to pathway and IAS management. PTs have a key role to play in managing their regulated IAS—updating their regulated lists of IAS, monitoring and managing pathways and species, and collecting data. Municipalities also have a role to play with respect to monitoring and management.[32] Indigenous Peoples support IAS management as part of holistic approaches to stewardship that can support ecosystem restoration, address IAS management, and support food sovereignty all at once, for example. NGOs are also important players with regards to on-the-ground actions, as well as outreach and education. Finally, key industry sectors and recreation groups can play an important role to help prevent IAS introduction and spread resulting from global trade and recreational activities, respectively.

Challenges and opportunities

Some of the key challenges to address IAS include: general lack of public awareness and recognition of the impacts of IAS and the role the public can play in preventing their spread; the need for additional tools to effectively eradicate, control, and manage IAS; gaps in science, monitoring, and data (e.g., horizon scanning, risk assessments, baseline data, socio-economic impacts, predictive models with linkages to climate change), including digital technologies to support prevention, monitoring, and mitigation efforts; and the need to navigate a complex landscape of federal, provincial, and territorial legislation and regulations.

There are opportunities to consolidate an integrated whole-of-government, whole-of-society approach to addressing the threats of IAS by clarifying governance structures and jurisdictional roles, supporting and optimizing legislative tools for pathways integrated management, and optimizing legislative tools to address priority IAS. There also is an opportunity to agree on common definitions for terms (e.g., priority species, pathways, and sites), adopt a biosecurity lens using digital tools (e.g., when seeking to keep track of and prevent IAS incursions at the border), and support more effective emergency response. An increased focus on IAS, along with data collection and aggregation at the national scale, could help raise the profile of IAS, and increase public education and awareness to enable action.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Preventing new invasions	ECCC leads national **policy coordination efforts** at the federal, provincial, and territorial levels, as well as international efforts (e.g., Convention on Biological Diversity, G7, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) to raise ambition and address knowledge and management gaps to help address the threats of IAS. Other international work led by the CFIA, DFO, and TC supports the prevention of introductions of IAS. ECCC, CBSA, CFIA, and TC enforce **legislation and regulations** to prevent new introductions (e.g., *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act,* 2021 Ballast Water Regulations). TC is working to complete a national policy framework to control and manage

[32] Total annual expenditures on IAS across Canadian municipalities were extrapolated from survey results. Estimated average total municipal expenditures ranged from $95.8M to $400M, with a median of $247.9M. Estimated Annual Expenditures on Invasive Species by Canadian Municipalities: 2021 National Survey Results

AREA OF ACTION	HIGHLIGHTS
	vessel hull biofouling by 2027 and continues to participate in international efforts to limit the introduction and spread of aquatic invasive species (AIS). DFO administers the **Aquatic Invasive Species Regulations**, which provide a suite of regulatory tools that can be used by FPT authorities to prevent the introduction of AIS into Canadian waters, and to control and manage their establishment and spread, if introduced. DFO is leading the development of a revitalized Canadian Action Plan to Address the Threat of AIS in collaboration with PT and other federal National AIS Committee partners. The Action Plan will be released in 2024-25. Several initiatives are being implemented by different federal departments, including AAFC, CFIA, TC, and PC, to **prevent the introduction and spread of new IAS**, for example: the Ballast Water Innovation Program to help reduce the spread of AIS in the Great Lakes and St. Lawrence River region; plant protection regulatory programs to prevent and control plant pests, identify, characterize, and assess potential impacts of biocontrol agents, and manage the import and release of new agents; and reducing the risk of IAS entry in PC-administered places through public education, surveillance and monitoring, equipment/material inspections, activity restrictions, and permits for high-risk activities. **Science activities** include NRCan's Forest Pest Risk Management program, which generates knowledge about the risks posed by both native and non-native forest pests and tools to address them, and AAFC's Strategic Plan for Science, which includes research to monitor, understand, and mitigate the impacts of IAS on biodiversity in agro-economic systems. PHAC is promoting the development, uptake, and distribution of **education and awareness tools and resources** on emerging vector-borne diseases for target audiences, including children and caregivers, outdoor workers, people living in at-risk areas, and Indigenous communities to support early identification and prevention.
Enabling early detection of and response to new and spreading invaders	DFO's **Aquatic Invasive Species Programs** support the early detection, response, and management of AIS, prevent Asian carp establishment, control sea lamprey populations in the Great Lakes, and facilitate on-the-ground action through partnerships. PHAC carries out **integrated risk assessments**, and develops tools to support early detection and warning of newly introduced emerging infectious diseases. Several ongoing **science, monitoring, and surveillance** efforts support early detection and response, such as efforts in some PC-administered sites; support for modernization of biological collections (NRCan); research on mitigation strategies for pests that are efficient and do not create new problems (AAFC); and efforts to develop, improve, and maintain surveillance systems on newly introduced climate-sensitive infectious diseases to inform people in Canada of the risks (PHAC). **Upcoming science efforts** include DFO's provision of spatial data for AIS introductions and spread (to be launched by 2027) and implementation of its eDNA laboratory (launched in early 2024) to detect AIS in commercial products,

AREA OF ACTION	HIGHLIGHTS
	and to detect new occurrences and monitor their spread, and the CFIA's Canadian Plant Health Information System for information sharing, collaboration, and risk intelligence (to be launched by 2024), as well as plant pest surveillance in support of regulatory programs and decisions.
Managing established and spreading invaders	There are efforts underway to **manage specific invaders in specific areas**. For example, PC and ECCC manage IAS in the protected areas under their administration. CFIA has programs to prevent the spread of plant pests in Canada, and AAFC develops strategies for managing pests in agricultural systems. DFO, in collaboration with US partners, implements the Sea Lamprey Control Program under the Great Lakes Fishery Commission. HC responds to **emergency registration of pesticide applications** to control seriously detrimental infestations such as IAS while protecting human health and the environment. Finally, there are **collaborative FPT efforts** to share best practices, tools, and knowledge about the management of established and spreading invaders (AAFC, CFIA, DFO, ECCC, HC, NRCan, PC, PHAC).

Going further

To further advance action on Target 6, the federal government will:

- Continue to work with PTs to help ensure roles and responsibilities related to IAS management are clear and to identify legislative, regulatory or policy gaps that may hinder effective and coordinated IAS prevention, management and rapid response.
- Work in collaboration with PTs to examine and potentially update the 2004 IAS Strategy for Canada to reflect emerging areas, such as biosecurity.
- Integrate IAS considerations into existing work, such as climate change modelling as appropriate, restoration efforts, and monitoring programs.
- Increase knowledge on the biodiversity and socio-economic impacts of IAS by continuing to explore or develop economic analysis and valuation methods.
- Further engage Canadians and Indigenous Peoples to take part in actions to help prevent the introduction and spread of IAS, or to help control them.

The federal government may also explore additional opportunities, including:

- Developing and deploying new IAS detection and control options.
- Working to reduce regulatory-related financial barriers to addressing IAS for federal departments, PTs, and possibly other parties.
- Incentivizing the private sector to expand the market availability of alternative (to conventional pesticides) biopesticide control options for IAS, and maintain registrations of products with limited profit potential but high value for managing IAS.
- Using a nationally consistent emergency management system to respond to aquatic invasive species, working closely with PTs.
- Using modern digital technology to increase efficiencies at Canada's borders, intercept IAS in commerce at the border, and make import data available for risk assessment, monitoring, and traceability.

TARGET 7: POLLUTION AND BIODIVERSITY

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: reducing excess nutrients lost to the environment by at least half including through more efficient nutrient cycling and use; 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 also preventing, reducing, and working towards eliminating plastic pollution."

Pollution is one of the five largest direct drivers of global biodiversity loss. It impacts biodiversity by disrupting ecosystem functions and reducing the resilience of the systems and organisms living within them. Pollution also has negative impacts on human health. The triple crises of biodiversity loss, climate change, and pollution are intrinsically connected. Minimizing biodiversity loss by addressing risk associated with pollution is crucial to sustainably maintaining ecosystem functions and services.

Current status

In 2021, an estimated 2.92 million tonnes of pollutants of all kinds were released directly into the environment in Canada. Although this represented a 17% decrease from 2012,[33] some types of pollution are increasing (e.g., plastic waste and some chemicals), as are their cumulative negative impacts on nature.

The federal government develops and administers legislative, regulatory, and non-regulatory measures to prevent risk associated with various types of pollution, including from excess nutrients, pesticides, chemicals, and plastic waste. Canada's robust legal and regulatory framework addresses risks to human health and to the environment (including plants and animals), for example, through the *Canadian Environmental Protection Act* and the *Pest Control Products Act* and its Regulations. Other major initiatives to prevent and reduce pollution include the Freshwater Action Plan, the Sustainable Canadian Agricultural Partnership, the Chemicals Management Plan, the Federal Zero Plastic Waste Agenda, the Ghost Gear Program, the Air Quality Management System, and the recent federal commitment to eliminate the use of pesticides for cosmetic purposes on federal lands, among others.

The federal government works with provincial, territorial, and other levels of government, Indigenous governments and organizations, and stakeholders, each of which implements measures to prevent and reduce pollution. The federal government also works with international partners to address risks and reduce pollution from beyond our borders as Canada, especially in the Arctic and northern regions, receives pollutants produced and released in other regions of the world. Continuing work with this full range of partners is crucial to protect biodiversity from the negative impacts of pollution from all sources. This includes working together to reduce by at least half the overall risks from pesticides and highly hazardous chemicals, including those that may arise as a result of shipping, as well as to reduce risk associated with plastic pollution and excess nutrients lost to the environment. Work will be done to identify baselines and measures to reduce these risks consistent with the KMGBF commitment.

[33] Canada's National Pollutant Release Inventory: 2021 data highlights

Challenges and opportunities

Minimizing pollution's negative impacts on biodiversity is an increasingly important and complex challenge as consumption grows, potentially exacerbating current sources of pollution. Ongoing efforts to address nutrient loading, for example, reflect the inherent challenges that arise from the multiple sources and pathways of nutrient loss (e.g., urban, industry, agriculture). Similarly, mitigating risks to biodiversity from pesticides using a risk-based approach requires the consideration of potential impacts on pollinators and species at risk, the cumulative effects of pesticides on the environment, and the development and implementation of beneficial management practices and innovative technologies (e.g., precision application tools, alternative pest management solutions). Risk management measures also need to balance the need to reduce risks from excess nutrients and pesticides with food security and livelihoods. Preventing and reducing plastic waste requires a comprehensive approach that moves toward a circular economy and plastics alternatives. Reducing pollution risks from chemical substances, marine and air pollutants, and waste requires ongoing monitoring and modelling to determine environmental concentrations and assess the risk of contaminants, including from cumulative exposure, particularly for key ecosystems and watersheds of concern.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Nutrients	Led by ECCC, the 2023-2033 Freshwater Action Plan aims to achieve Canada's Lake Erie phosphorus load reduction targets by 2039 through the adoption of an innovative precision conservation approach whereby areas contributing the highest phosphorus loads will be identified, and suites of partner-led actions that will yield the greatest results will be advanced. The Freshwater Action Plan also aims to complete the clean-up of 12 of 14 remaining Canadian Great Lakes Areas of Concern by 2030 and all 14 by 2038. It also aims to establish Canada-US nutrient reduction targets for all Canadian Great Lakes. Efforts will advance targeted strategies to accelerate reduction of nutrient pollution to other major lakes (e.g., Lake Winnipeg) and freshwater ecosystems.
Pesticides and nutrients	**Beneficial management practices (BMPs) and technologies** optimize agricultural pesticide application to reduce losses and mitigate potential risks. Under successive federal-provincial-territorial Agricultural Policy Frameworks, including the current Sustainable Canadian Agricultural Partnership (2023-2028), provinces and territories (PTs) design and deliver agri-environmental programs. AAFC leads the delivery of other federal programs, such as the Agricultural Climate Solutions program. These programs support increased on-farm adoption of BMPs and minimize impacts and enhance benefits to biodiversity, through support for the development and adoption of practices to improve soil health, avoid excess application of nutrients, and reduce the risk of nutrient runoff, among other things. These programs also facilitate and support knowledge transfer on tools and approaches for nutrient and pest management, to increase awareness and usability of practices and technologies that reduce environmental risks. AAFC also conducts and supports **research and development to enhance BMPs** and technologies in agriculture, including the co-development of

AREA OF ACTION	HIGHLIGHTS
	scientifically proven and economically viable Integrated Pest Management and Nutrient Management practices with stakeholders, and accelerating the research, development, and adoption of alternative pest management solutions.
Pesticides	HC leads the **Rapid Priority Review Stream for Lower Risk Pesticides**, which approves lower-risk pesticides through a streamlined process and tiered data requirements, compared to conventional pesticides. HC is expanding a monitoring pilot project to a **National-Scale Water Monitoring Program for Pesticides**, which will collect real-world data from pesticide monitoring programs in Canada, particularly on pesticide concentrations that could cause acute and/or chronic impacts to invertebrates, fish, and plants in water. This data will directly support decision making related to environmental impacts and risk assessments. HC is also developing a **Pesticide Use Information Framework**, a multi-pronged model for access, delivery, and management of pesticide information. Accurate characterization of risks associated with pesticides will support regulatory decisions and the development of risk management options, leading to increased protections for the environment and biodiversity to help reduce risk. NRCan conducts scientific research activities supporting implementation of the **Forest Pest Risk Management: National Research Agenda (2019-2029)** to contribute to reducing the use of chemical forest pest control through ongoing development and evaluation of science-based alternative forest pest control tools and strategies.
Chemicals	The **Chemicals Management Plan**, led by ECCC and HC, includes assessing and managing risks to the environment and health from a wide range of substances in consumer products, food, cosmetics, drugs, drinking water, pesticides, and industrial releases. This includes ensuring that no new substances are introduced into the Canadian marketplace before undergoing ecological and health risk assessments, and the implementation of management measures when required. CIRNAC will continue to lead the **Northern Contaminants Program**, in partnership with ECCC, DFO, HC, northern Indigenous organizations, and others, to facilitate the monitoring and assessment of persistent organic pollutants and chemicals of emerging Arctic concern, in support of northern public health advice, the work of the Stockholm Convention and of the Arctic Council. ECCC will continue the **Great Lakes Water Quality Monitoring and Surveillance Program** for chemicals of mutual concern (US-Canada), contributing Canadian monitoring, data, and scientific expertise to the State of the Great Lakes report, in support of the Canada-US Great Lakes Water Quality Agreement. Under the **Whales Initiative,** DFO and ECCC are examining the threat of contaminants on key priority whale species and their prey. This work involves

AREA OF ACTION	HIGHLIGHTS
	monitoring of contaminants in air, freshwater, wastewater, sediment, whales, and their prey. The **Integrated Satellite Tracking of Pollution (ISTOP) Program**, operated by ECCC together with TC, uses RADARSAT Constellation Mission data to detect and report on oil pollution in Canadian waters. This is part of an ongoing effort to minimize or eliminate coastal water pollution, which adversely affects marine birds, mammals, and their ecosystems.
Plastics	ECCC, DFO, CIRNAC, NRC, TC, StatCan, NRCan, and HC are working to advance a **circular plastics economy** to prevent and reduce plastic pollution on several fronts (e.g., science, innovation, mobilizing Canadians, international actions). ECCC is working with PTs to implement the Canada-wide Strategy and Action Plan on Zero Plastic Waste, which includes developing guidance to prevent and reduce plastics from entering the environment from industrial discharges and wastewater treatment systems. CIRNAC, ECCC, DFO, and HC are advancing Canada's Plastic Science Agenda to gather information on plastic waste in the environment, track the effectiveness of actions, and inform policy development. Two **Innovation Solution Canada** challenges have been funded in relation to marine shipping, on novel ways to reuse and recycle fiberglass from end-of-life vessels, and on prototype technology that can be fitted on a vessel to capture microplastics in greywater. TC continues to engage on the International Maritime Organization's **Action Plan to address marine plastic litter** from ships.
Air pollutants	ECCC establishes and administers regulatory and non-regulatory measures to reduce air pollution from industry, and consumer and commercial products. ECCC and TC establish and administer measures to reduce air pollutant emissions from transportation. ECCC also implements Canada's Air Quality Management System, which provides a cross-Canada framework to reduce air pollutant emissions and improve air quality in collaboration with PTs.

Going further

To further advance action on Target 7, the federal government will:

- Amend, by 2025, the Pest Control Products Regulations to give the Minister of Health the explicit authority to: (1) require submission of available information on cumulative environmental effects, (2) require the consideration of cumulative effects on the environment of pesticides that have a common method of toxicity during risk assessments where information and methodology are available, and (3) require the submission of available information on species at risk.
- Enhance protections for human health and the environment through HC's Continuous Oversight Approach to Regulating Pesticides. The policy adds new oversight processes such as the systematic scanning of published scientific literature, water monitoring data, and regulatory decisions made by other countries to further enable a modern regulatory program with

improved capacity to help ensure that risks associated with pesticides continue to be acceptable.

- Provide guidance, through the Sustainable Agriculture Strategy, on pathways to improve environmental outcomes that further enhance the optimization of nutrient and pesticide application through beneficial management practices (BMPs) and precision agriculture technologies.
- Enhance measurement of integrated pest management (IPM) by exploring opportunities to reduce data gaps related to on-farm use of pesticides, and BMP adoption.
- Play a leadership role in negotiating an ambitious, legally binding international agreement to end plastic pollution.
- Finalize and implement a federal Ocean Noise Strategy.
- Implement prohibitions on disposal at sea of waste and other matter, dumping of fill, deposit of deleterious drugs and pesticides in most new federal marine protected areas, consistent with the Marine Protected Areas Protection Standard.

The federal government may also explore additional opportunities, including:

- Undertaking new research and monitoring to support science-based decisions and actions on pesticides and chemicals, collecting real-world data on concentrations at sites across Canada, and conducting wildlife effects and impacts assessments.
- Complementing research efforts to advance IPM practices and technologies with enhanced knowledge transfer.
- Exploring fundamental geoscience work to advance understanding of hazardous contaminants (e.g., hydrogen sulfide, methane, or salts from bedrock, or de-icing) in aquifers.
- Exploring actions to reduce cosmetic pesticide use across Canada.

TARGET 8: CLIMATE CHANGE AND BIODIVERSITY

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 solutions and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity."

Climate change and biodiversity loss are inextricably linked. Climate change is a leading cause of biodiversity loss, and at the same time, biodiversity loss reduces nature's ability to mitigate and adapt to climate change. The 'twin crises' must be tackled together. Nature-based solutions (NBS) and ecosystem-based approaches (EbA) are important tools that embrace the power of nature to reduce the effects of climate change while also supporting biodiversity. Climate action can also have unintended impacts on biodiversity, such as habitat loss and degradation from mining for critical minerals to support the replacement of gas-powered vehicles with electric vehicles. This target calls for minimizing the negative and fostering the positive impacts of climate action on nature.

Current status

Canada has made significant commitments and investments toward addressing climate change, including in NBS and EbA, over the past decade. When considering the accounting contribution of the Land Use, Land-Use Change, and Forestry sector, Canada has reduced its greenhouse gas (GHG) emissions by 13% from 2005 levels as of 2021.[34] In addition, under the Paris Agreement, nature and biodiversity are reflected in Canada's Nationally Determined Contribution submission, which recognizes the importance of nature in climate mitigation and adaptation efforts and reflects the government's investments in NBS and commitments to nature conservation. However, more work is needed to achieve our climate objectives.

The effects of climate change are already being felt across Canada and are projected to intensify in the future, including more extreme heat, shorter snow and ice cover seasons, thinning glaciers, rising sea levels with warmer and more acidic oceans surrounding Canada,[35] changes in species distribution, and increasing frequency and intensity of forest fires and extreme weather events.[36] These changes threaten the health of ecosystems and species in Canada. Certain ecosystems, such as mountain ecosystems and ice-related habitats, are already facing particularly large impacts from climate change.[37] It is critical to consider how best to climate-proof natural areas and their biodiversity.

Indigenous Peoples are at the forefront of experiencing the impacts of both climate change and biodiversity loss. The federal government is partnering with First Nations, Inuit and the Métis Nation governments and organizations to support Indigenous Climate Leadership through a partnership that empowers self-determined climate action and supports the implementation of national, regional, and local Indigenous climate strategies, including the Assembly of First Nations National Climate Strategy (2023), the National Inuit Climate Change Strategy (2019), and the Métis Nation Climate Change Strategy (2024).

[34] 2023 Emissions Projections Report
[35] Canada's changing climate report
[36] Land-based greenhouse gas emissions and removals
[37] State of the mountains report 2018

The scope of the challenge to meet this target is significant, given the increasing impacts of climate change and the continuing scope, scale, and rate of biodiversity loss. Meeting this target will require national-scale transformation, balancing complex trade-offs, and a holistic approach to decision making that recognizes the interconnectedness of the environment, economy, and society. There is significant learning required to optimize GHG emission reductions and achieve outcomes that are reportable and accountable at scale for NBS and EbA. Additional work is required to ensure that actions to address climate change do not have unintended consequences for nature and biodiversity.

Challenges and opportunities

Target 8 provides an opportunity to maximize synergies between climate and nature programming, more clearly delineate trade-offs, and include these considerations in decision making. Understanding which ecosystems have high carbon sequestration potential, particularly those with irrecoverable carbon, like peatlands, can support the identification and prioritization of protected and conserved areas that mitigate climate change while also supporting biodiversity. In particular, the carbon sequestration potential of oceans and coastal ecosystems (blue carbon) requires further research.

Additional research is needed to better understand the impacts of climate change on biodiversity and how to increase nature's resilience to climate change. Our knowledge of ecosystem resilience is limited, and more work is required to develop more advanced natural asset inventories and evidence-based monitoring of adaptation and resilience to climate change across ecosystems.

Federal efforts alone will be insufficient to close the remaining gap, with significant contributions required from provinces and territories, as well as industry sectors (e.g., forest sector wildfire mitigation efforts) and civil society at large. Canada can build on work already underway to collaborate with provincial, territorial, and municipal governments, such as through the bilateral action plans under the National Adaptation Strategy and the Green Municipal Fund.

What we're doing

Mitigation to minimize the impact of climate change and ocean acidification on biodiversity

AREA OF ACTION	HIGHLIGHTS
Reducing greenhouse gas (GHG) emissions economy wide	The ***Canadian Net-Zero Emissions Accountability Act*** legislates Canada's 2030 emissions reduction target of 40-45% below 2005 levels, with the goal of net-zero emissions by 2050 and creates a framework for transparency and accountability to deliver on Canada's climate commitments. The **2030 Emissions Reduction Plan** provides a roadmap to reduce emissions across all sectors of the economy, including using nature-based solutions (NBS), to meet Canada's 2030 target and lay the foundation for net-zero emissions by 2050. Through the Plan, Canada invested an additional $29.6M to advance an Indigenous Climate Leadership Agenda that is supporting self-determined action in addressing Indigenous People's climate priorities. Canada will set its national GHG emissions reduction target for the year 2035 by December 1, 2024.
Implementing nature-based solutions	The **Natural Climate Solutions Fund** includes NRCan's 2 Billion Trees program, ECCC's Nature Smart Climate Solutions Fund, and AAFC's Agricultural Climate Solutions Program. It supports projects that conserve, restore, and enhance

AREA OF ACTION	HIGHLIGHTS
	wetlands, peatlands, grasslands, and forests, and support increased adoption of beneficial management practices on farmland to increase carbon sequestration and help combat climate change and its impacts, with numerous co-benefits for biodiversity and human well-being. These programs aim to achieve a reduction in the annual GHG emissions from land use by 7-10 megatonnes of carbon dioxide equivalent (Mt CO_2e) annually by 2030 and 16-20 Mt CO_2e by 2050. The programs also support Indigenous organizations and communities in undertaking Indigenous-led, on-the-ground projects for ecological restoration, improved management and conservation of wetlands, grasslands, and forests, and capacity building to deliver on natural climate solutions. AAFC is further **supporting the adoption of NBS in the agriculture sector** through the Resilient Agricultural Landscape Program, working with PTs through successive agricultural policy frameworks, including the current Sustainable Canadian Agricultural Partnership. Led by GAC, Canada has also committed to allocating a minimum of 20% of its $5.3B climate finance commitment (2021-2026), over $1B, to projects that leverage **NBS and contribute biodiversity co-benefits**. ECCC is also leading the development of protocols under Canada's **GHG Offsets System**, which will include NBS.
Supporting ecosystem-based approaches	**Enhanced Nature Legacy** is Canada's largest investment in nature to date, with a $2.3B investment over 5 years to conserve up to 1 million km^2 of additional land and inland waters (DFO, ECCC, PC, INFC). INFC's **Natural Infrastructure Fund** supports communities in adopting natural and hybrid infrastructure projects to deliver services, such as climate change resilience, improved access to nature, or enhanced biodiversity and habitats. DFO, ECCC, and PC are advancing a suite of **areas for conservation** that will contribute to conserving 25% of oceans in Canada by 2025 and 30% by 2030 (Marine Conservation Targets). PC is supporting the creation of **ecological corridors** that improve connectivity between protected areas.
Advancing science and knowledge	Existing initiatives to advance science at the intersection of climate change and biodiversity include the Carbon Atlas Series for national parks and national marine conservation areas (PC), Hudson Bay–James Bay Lowlands Biodiversity Conservation and Carbon Sequestration Initiative (PC), Sustainable Agriculture Research Initiative (AAFC, NSERC, SSHRC), Forest Climate Change Program (NRCan), Genomics Research and Development Initiative (NRC, AAFC, CFIA, ECCC, DFO, HC, NRCan, PHAC), and the 2 Billion Trees program (NRCan). DFO and NSERC are also undertaking projects to estimate the extent of blue carbon in salt marshes, seagrasses, kelp forests, and soft sediments across Canada's three oceans.

Adaptation (including Disaster Risk Reduction) and resilience

AREA OF ACTION	HIGHLIGHTS
Implementing natural climate solutions	Under Canada's **National Adaptation Strategy** (NAS), ECCC is developing Action Plans with PTs to support implementation, including through actions to advance the NAS' nature and biodiversity system. The NAS includes a Wildfire Resilient Futures Initiative (NRCan) that aims to enhance community prevention and mitigation, support innovation in wildland fire knowledge and research, and establish a Centre of Excellence focused on wildland fire innovation and resilience. PC has been working to improve the **resilience of national parks** to wildfire, prepare to respond to wildfire, make communities safer, and adapt to climate change. INFC's **Disaster Mitigation and Adaptation Fund** supports built and natural infrastructure projects designed to mitigate current and future climate-related risks and disasters triggered by natural hazards.
Advancing science and knowledge	Several initiatives are undertaking **research to understand the impacts of adaptation on biodiversity**, such as Canada's Adaptation Platform (NRCan) and its working groups (coastal management, biodiversity, forestry, science assessment), Canada's Map of Adaptation Actions (ECCC), the Aquatic Climate Change Adaptation Services Program (DFO), reports available as part of Canada in a Changing Climate: Advancing our Knowledge for Action, and the Continental Assessment of Biodiversity (ECCC, with the US and Mexico). The CSA, ECCC, and NRCan are working together to launch the **WildFireSat mission** in 2029, which will monitor all active wildfires in Canada from space in real-time. This new information will increase Canada's ability to manage wildfires nationwide, thus helping to reduce habitat destruction and minimize harm to biodiversity.
Developing tools and capacity	INFC will support infrastructure practitioners, owners, and investors at the community level in implementing natural infrastructure (NI)/NBS through its climate toolkit initiative. This initiative will facilitate access to information, tools, standards, and resources, including on NI/NBS, to support climate-informed decision-making for infrastructure projects. It will operate a Climate Help Desk offering direct support to help infrastructure developers use toolkit resources and connect users with other available supports and resources. It will also establish a mechanism to mobilize climate and infrastructure expertise, including on NI/NBS, to help communities include climate considerations in project options and design. Initial support services are expected to be available in fall 2024, followed by a phased approach for new tools and supports until 2028.

Minimization of the negative and fostering the positive impacts of climate change measures on biodiversity

AREA OF ACTION	HIGHLIGHTS
Considering climate change and biodiversity effects in decision making	Beginning in 2024, the new Climate, Nature, and Economy Lens, led by ECCC and implemented through the Cabinet Directive on Strategic Environmental and Economic Assessment, will ensure that biodiversity effects (positive or negative) are considered in proposals submitted to Cabinet, the Prime Minister, and the Minister of Finance for decision. Lens considerations include mitigation measures and links to the 2030 Strategy, where relevant. This new directive replaces the Cabinet Directive on the Environmental Assessment of Policy, Plan, and Program Proposals.
Fostering positive impacts of climate action	Key initiatives outlined above, such as the Natural Climate Solutions Fund and Enhanced Nature Legacy, plan project implementation around long-term effectiveness, often including permanence as an objective or requirement of individual projects, wherever possible.

Going further

To further advance action on Target 8, the federal government will:

- Continue enabling strong alignment between Canada's implementation of international commitments on climate change and nature under both the UN Framework Convention on Climate Change and CBD.
- Continue working to minimize the impacts of climate action on biodiversity across existing and new policies, programs, and legislation.

The federal government may also explore additional opportunities, including:

- Advancing new and innovative solutions that address the nexus between climate change and biodiversity loss.
- Developing an Ocean Climate Action Plan, which could include the use of climate information in decision making.
- Enhancing our understanding of the impacts of climate change and ocean acidification on biodiversity in Canada's oceans, developing risk management and adaptation approaches, and gaining a better understanding of the carbon sequestration potential of our oceans.
- Addressing knowledge gaps to support positive biodiversity conservation outcomes from boreal wildfire management response measures and associated forest management practices.

TARGET 9: SUSTAINABLE USE AND MANAGEMENT OF WILD SPECIES

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."

Note: In the Canadian context, "Indigenous Peoples" have specific and distinct rights, whereas "local communities" does not exist as a formal or legal term. As such, the 2030 Strategy highlights Indigenous Peoples. For a more in-depth explanation, please refer to the Annex 1 introductory text.

Wild species contribute to human well-being by providing nutrition, food security, medicines, livelihoods, and connection to nature. Significant social and economic benefits can be facilitated by management practices that optimize the sustainable public use of wild species. Furthermore, supporting a holistic approach to the conservation and management of wild species that takes into consideration Indigenous stewardship and harvesting rights will help foster partnerships based on respect and recognition.

Current status

The federal government continues to enhance the implementation of legislative tools, regulations, and policies (*e.g., Fisheries Act* and regulations, *Migratory Birds Convention Act, 1994* and regulations, *Species at Risk Act*) that support robust management of wild species while ensuring the customary use of wild species by Indigenous Peoples. These efforts have been implemented in close partnership with provincial and territorial governments, who largely hold jurisdictional responsibility for wild species (terrestrial wildlife, forests, and freshwater fisheries) management, and in consultation with Indigenous Peoples. Furthermore, the implementation of modern treaties has led to collaborative conservation, management, and sustainable use of wildlife, including fish and migratory birds. The effectiveness of efforts to achieve Target 9 is closely dependent on actions taken on Targets 4 (halting species extinctions and reducing extinction risks) and 5 (harvesting and trade of wild species).

Many fish stocks in Canada are consistently harvested at or below approved levels using established sustainable management approaches, while new and adaptive approaches are being developed. For example, stock assessment models are being developed that incorporate predation by seals, sea lions, and other predators. The management of fisheries by the federal government has been implemented in collaboration with PT governments, Indigenous Peoples, co-management partners, and stakeholders. Similarly, migratory game birds within federal responsibility have healthy populations and are anticipated to meet 2030 sustainable population milestones. Thanks to the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada, multi-jurisdictional protection and recovery actions are already underway for each of the identified federal, provincial, and territorial shared priority species. Efforts toward improved timber harvest practices are underway through the continued implementation and enhancement of sustainable forest management principles across all publicly owned and some private forested lands (see Target 10). In addition, PT governments are leading programs and initiatives focused on wild species management (including terrestrial wildlife, forests, and freshwater fisheries) enhancing biodiversity under their respective legislative framework and regulations.

Collaboration is central to managing wild species in a way that also benefits people and their well-being. Indigenous Peoples have traditionally stewarded and continue to steward wild species, and maintain rights and enhanced access to harvest wild species in traditional and treaty territories. The federal government's approach is focused on deepening collaboration and building capacity to assess and effectively manage culturally significant species, such as salmon, polar bears, and caribou.

Challenges and opportunities

Although efforts are underway across Canada to ensure the management and use of wild species is sustainable, addressing challenges and associated opportunities could help Canada reach Target 9 as well as other closely related targets (e.g., Targets 4 and 5). This includes helping ensure the application of an ecosystem-based approach in the marine environment. With regards to protecting and encouraging the customary sustainable use of wild species by Indigenous Peoples, there are opportunities to support Indigenous-led management actions, co-development and implementation of management plans, and traditional ways of living and cultural values through food sovereignty. Ensuring consistency with federal laws and the United Nations Declaration on the Rights of Indigenous Peoples will help make sure harvesting rights are respected and support Indigenous leadership, interests, and values on wild species management actions. Furthermore, limited progress has been made on the Pan-Canadian Approach to Wildlife Health, which is essential to identifying and reducing wildlife health threats. Capacity building, collaboration (including partner-led and Indigenous-led initiatives), and active networks to share tools and knowledge will help close the remaining gaps to achieve Target 9.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Pursuing the sustainable management of wild species that are culturally important to Indigenous Peoples	DFO and ECCC are engaged in ongoing identification of priorities, cooperative action planning, investments, implementation, and monitoring to improve conservation outcomes at a multi-species level through the **Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada** (see Target 4). DFO's **Pacific Salmon Strategy Initiative** aims to conserve and restore Pacific salmon and salmon habitat, an important culturally significant species for the people, communities, and ecosystems that depend upon their sustainability. (Link to Target 5) Federal departments are increasing collaboration and co-development of federal environmental research and stewardship activities and priorities with Indigenous partners via the **Interdepartmental Indigenous STEM (Science, Technology, Engineering, and Mathematics) Cluster**. PC supports opportunities to weave Indigenous Knowledge and Indigenous conservation initiatives for **species of cultural importance** (cultural species) into multi-species action plans.
Supporting sustainable fisheries	DFO is continuing to apply the *Fisheries Act* **Fish Stocks Provisions,** which include a legislative obligation to take into account the biology of the fish and the environmental conditions affecting the stock, through additional regulatory prescription of major fish stocks (see Target 5).

AREA OF ACTION	HIGHLIGHTS
	DFO is expanding implementation of the **Sustainable Fisheries Framework** (SFF), including developing reference points and other components of the precautionary approach framework for all key stocks per the annual SFF Work Plan, which provides the basis for ensuring that Canadian fisheries support conservation and sustainable use of resources. (Link to Target 5)
Reducing impacts on non-target species	DFO is developing a Whalesafe Gear Strategy, a long-term strategy for testing and implementing whalesafe fishing gear in Canadian fisheries to help alleviate whale entanglements in fishing gear, including the use of rope-on-demand fishing gear in high-risk areas of entanglements for North Atlantic right whales. (Link to Targets 4 and 5)
Implementing legislation and regulations	DFO, ECCC, and PC implement legislation and regulations (*Fisheries Act* and regulations, *Migratory Bird Convention Act* and regulations, *Species at Risk Act*) and initiatives for fisheries and wild species management within federal responsibilities. In addition, the federal government supports the implementation of modern treaties (where applicable) for the conservation, management, and sustainable use of wild species. (Link to Targets 4 and 5)
Revisiting federal legislation to help ensure compliance with the United Nations Declaration on the Rights of Indigenous Peoples	Several departments (e.g., AAFC, CIRNAC, ECCC, DFO, NRCan, PC) are working to ensure consistency of federal laws with the United Nations Declaration on the Rights of Indigenous Peoples (the UN Declaration) and implement the *UN Declaration Act* Action Plan (2023-2028).
Supporting Indigenous food security and capacity building, and Indigenous fisheries	DFO is **supporting Indigenous communities and organizations** as they establish, grow, and maintain the capacity to develop commercial fishing and aquaculture enterprises; manage food, social, and ceremonial fisheries and related habitats; provide fisheries, habitat, science, and oceans-related services; and participate in advisory or co-management processes through the implementation of programs (e.g., Aboriginal Fisheries Strategy and Aboriginal Aquatic Resources and Oceans Management; Atlantic, Pacific, and Northern Integrated Commercial Fisheries Initiatives; DFO-Coast Guard Reconciliation Strategy; Indigenous Program Review & Action Plan for the Renewal and Expansion of DFO's Indigenous Programs). The **Arctic and Northern Policy Framework** (led by CIRNAC) guides federal priorities, activities, and investments in the Arctic to 2030 and beyond, and better aligns Canada's national and international policy objectives with the priorities of Northerners. AAFC, CanNor, CIRNAC, and ISC have implemented several programs and initiatives that support **Indigenous food systems and food security** (e.g., Food Policy for Canada, Harvesters Support Grant and Community Food Programs Fund, Nutrition North Canada Nutrition Education Initiative, Northern Isolated Community Initiatives Fund).

AREA OF ACTION	HIGHLIGHTS
Supporting meaningful participation and leadership of Indigenous Peoples and building capacity to manage and use wild species	ECCC, DFO, NRCan, and PC's investments and participation in the biodiversity Working Group of the **Arctic Council** (Conservation of Arctic Flora and Fauna – CAFF) support projects and planned activities that promote the conservation and sustainable use of Canadian Arctic flora and fauna. Canada also supports the engagement of Indigenous Peoples in CAFF activities. DFO, ECCC, and PC are **building capacity for Indigenous-led actions** for wild species management and use, and/or habitat protection, such as the Indigenous Guardians program.
Advancing science and research	See science needs identified in Target 5.

Going further

To further advance action on Target 9, the federal government will:

- Further expand the Harvesters Support Grant/Community Food Programs Fund, which will help ensure Indigenous Peoples can exercise harvesting rights (e.g., hunting, trapping, gathering, fishing) in the lands, waters, and ice, as they have for millennia, and support communities that have become isolated due to climate change.

The federal government may also explore additional opportunities, including:

- Reducing risk of pathogen spillover and impacts to non-target species through a collaborative multi-sectoral approach to identifying and reducing wildlife health threats in support of One Health initiatives and the Pan-Canadian Approach to Wildlife Health.
- Expanding work with PTs and Indigenous partners on One Health initiatives to improve coordination and implement actions to address cross-cutting priorities.
- Expanding and accelerating the development of a systematic implementation of an ecosystem approach to fisheries management for federally managed fish stocks and fisheries to further promote healthy ecosystems, sustainable fisheries, and opportunities to support the economic prosperity of the fishing industry.
- Expanding the Blue Economy Strategy to help maintain healthy ecosystems that are essential to ocean-based industries and creating equitable and sustainable livelihoods in existing and emerging maritime sectors.
- Strengthening policy coherence among federal, provincial, and territorial governments to facilitate consistent programming to ensure sustainable management and use of wild species.
- Identifying opportunities to work with PTs and Indigenous partners to address unregulated harvest of unlisted wild plants outside of protected areas.
- Considering further action to protect the customary sustainable use of wild species (e.g., cooperative development of training opportunities and programs that facilitate intergenerational knowledge sharing of stewardship and harvesting practices).

TARGET 10: SUSTAINABLE MANAGEMENT IN KEY PRODUCTIVE SECTORS

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."

Sustainable management and use of biodiversity is an ongoing and evolving goal for Canada's agriculture, aquaculture, fisheries, and forestry sectors—together the productive base for Canada's bioeconomy.[38] These sectors are important drivers in the Canadian economy, providing substantial domestic and international socio-economic benefits, including food security, employment, essential commodities, and support for livelihoods. Many of the benefits from these sectors arise from nature and contribute to the maintenance and enhancement of Canada's strong sustainability reputation on the global stage (e.g., enabling trade). Effective management practices can enhance the resilience of landscapes and ecosystems, for example, through climate-adapted regeneration[39] or increased habitat connectivity.[40] At the same time, if managed unsustainably, these sectors can have a negative impact on ecosystems, biodiversity, and nature's contributions to people, which can also affect public acceptance and market access. The continued success of these sectors depends on maintaining highly interconnected, biodiverse, and healthy ecosystems.

Current status

Canada, through federal, provincial, and territorial orders of government, has in place longstanding management regimes for its key productive sectors. These regimes support the environmental and socio-economic components of adaptive sustainable management and growth of these sectors, promoting biodiversity conservation, nature's contributions to people, and economic opportunities for current and future generations in rural, coastal, and urban settings. Ongoing innovation in production methods has allowed these sectors to improve efficiencies, reduce environmental impacts, and begin to adapt to a changing climate.

The sustainability of these sectors depends on science, data, and expertise from all involved parties, including Indigenous Peoples, to ensure they are resilient, productive, and contribute to food security and livelihoods, while also maintaining ecosystem functions and services. Further progress toward reconciliation with Indigenous Peoples is also key to their sustainability.

Agriculture

Canada's agriculture sector covers 62.2 million hectares (6.3%) of the country's land area and is an important contributor to global food security. Key environmental conditions are monitored through a

[38] The UN Food and Agriculture Organization defines bioeconomy as the production, utilization, conservation, and regeneration of biological resources, including related knowledge, science, technology, and innovation to provide sustainable solutions (information, products, processes, and services) within and across all economic sectors and enable a transformation to a sustainable economy.

[39] Response of natural tree regeneration to climate adaptation treatments in pinus resinosa-dominated forests

[40] Two decades of variable retention in British Columbia: A review of its implementation and effectiveness for biodiversity conservation

series of agri-environmental indicators.[41] For example, the indicator of wildlife habitat capacity on agricultural lands showed a moderate ability for agricultural lands to support wildlife, with a largely stable trend between 2000 and 2020. A decline occurred in some areas, primarily due to a loss of natural and semi-natural land cover (e.g., managed grasslands and wetlands), as well as an increase in annual cropping and urban expansion.[42] In the context of shared jurisdiction and regional differences in agriculture, provinces and territories play an important role in advancing sustainable and biodiversity-friendly agricultural practices that support continued growth of the sector. For example, they regulate the protection and use of land and water resources, as well as nutrient management. They also develop and implement programs to support the on-farm adoption of beneficial management practices, including those co-funded by the federal government under the Sustainable Canadian Agricultural Partnership.

Aquaculture

The federal government, provincial governments, and industry all play an active role in the responsible and sustainable management of aquaculture. The federal government is the lead regulator for aquaculture in British Columbia and Prince Edward Island; elsewhere, the provinces are the lead regulators. In Canada, science-based legislation and regulations were developed to ensure that operators, including aquaculture operators, minimize and mitigate the impacts of their activities on wild fish and fish habitat. As marine ecosystems are continually changing, scientific research is ongoing to ensure the latest knowledge and advice informs management approaches.

Fisheries

Management of fisheries in Canada is linked strongly to Target 5, including the Headline Indicator on sustainability of fish stocks, which draws from DFO's annual Sustainability Survey for Fisheries, a foundational element of Canada's Sustainable Fisheries Framework (see Target 5). Relevant information and advice from science, stakeholders, and Indigenous communities help inform appropriate management decisions to ensure fisheries remain healthy and productive and protect biodiversity and fisheries habitats. There are opportunities to transition to more comprehensive ecosystem approaches for managing fisheries. Moving towards an Ecosystem Approach to Fisheries Management (EAFM) can strengthen the current fisheries management framework by explicitly considering fish stock and ecosystem dynamics to better account for multiple pressures, such as changing ocean ecosystems, climate change, and loss of biodiversity. To date, DFO has implemented EAFM opportunistically to varying degrees, in some Canadian fisheries, through considerations of ecosystem variables such as climate, habitat, and key food web interactions, where data and information are currently available. However, EAFM has yet to be undertaken comprehensively or systematically across all federally managed fish stocks and fisheries.

Forestry

In Canada, forest companies operate in a highly regulated environment. Federal, provincial, and territorial policies, including acts and regulations, ensure forests are sustainably managed and conserve biodiversity. About 90% of forests in Canada are situated on Crown land, placing the majority of the country's forested area under the jurisdiction of PTs, which seek to ensure forestry operations are carried out sustainably and with considerations for biodiversity (e.g., maintain diverse habitats,

[41] Agri-environmental indicators
[42] Ability of the agricultural landscape to support wildlife

encourage landscape connectivity). Independent third-party forest certification provides further assurance that a forest company is operating legally, sustainably, and in compliance with world-recognized standards. Approximately 72% of managed Crown forest is certified to at least one sustainable forest management (SFM) standard.[43] The application of SFM in Canada is constantly evolving in response to changing socioeconomic and environmental conditions (e.g., losses due to wildland fire and pests) and new knowledge, seeking to enhance environmental values (e.g., biodiversity), improve forest resiliency, and address the impacts of climate change on forests in Canada.

Challenges and opportunities

With a growing population, rising food security needs, and shifting socio-economic pressures, key productive sectors are being challenged to balance increased productivity with nature-positive and sustainable outcomes. The ecosystems these sectors depend on are facing pressures such as climate change, wildland fires, drought, pollution, invasive alien species, and pests. Direct anthropogenic disturbances, such as urbanization, also contribute to competing land-use pressures. Together, direct and indirect impacts, and their cumulative effects, can result in environmental and socio-economic repercussions, such as alteration of ecosystem types, species composition changes, or conversion away from productive uses. For example, in agriculture, market and other pressures to produce more food, fuel, and fibre can exacerbate unsustainable forms of intensification or land conversion. A focus on ecosystem approaches, enhancing adaptive sustainable management, nature-based solutions, and other innovations (e.g., the circular bioeconomy) offer opportunities to address biodiversity and other environmental issues.

Sustainable management can contribute to efforts to address these pressures (e.g., healthy forests can help mitigate climate change), but stakeholders in these sectors must continue to balance numerous management objectives, integrating biodiversity and environmental concerns with operational realities (e.g., cost of operations). Increased knowledge generation and transfer, coupled with better data to monitor the state of Canada's productive land and seascapes, can further support science-based decision making (e.g., knowledge tailored to regional contexts) to conserve biodiversity without compromising productivity.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Agriculture	Successive **federal-provincial-territorial agricultural policy frameworks** since 2003, including the ongoing Sustainable Canadian Agricultural Partnership (2023-2028), have advanced the socio-economic and environmental sustainability of the sector, supporting it in producing quality food, fuel, and fibre efficiently and in a manner that limits environmental impacts, including on biodiversity. Through programs and support for the development and enhanced adoption of beneficial management practices and technologies within the agriculture sector, these frameworks deliver co-benefits to biodiversity and other environmental issues, including improved soil health, optimized nutrient use, and reduced impacts, among others. The current Partnership's Resilient Agricultural Landscape

[43] The State of Canada's Forests report

AREA OF ACTION	HIGHLIGHTS
	Program supports ecological goods and services through practices like maintaining and restoring grasslands and wetlands. Examples of **other contributing initiatives** include the Species at Risk Partnership on Agricultural Lands (ECCC) to protect species at risk and critical habitat on agricultural land; AAFC's Strategic Plan for Science, which provides a vision for the future of research and development with a strong focus on sustainable agriculture; and other AAFC programs, such as the Agricultural Climate Solutions program (2021-2031) and its Living Labs stream, which works to bring producers and other partners together to co-develop and test innovative solutions to persistent agri-environmental and climate change issues in a real-life environment.
Aquaculture	DFO operates the **Sustainable Aquaculture Program** nationally by working with provincial and territorial authorities to ensure aquaculture is sustainably managed across Canada, as well as the **British Columbia Aquaculture Regulatory Program** to manage the sector in British Columbia. Canada and British Columbia also support aquaculture innovation by identifying alternative technologies that can reduce interactions between aquaculture operations and the environment. Through the **Aquaculture Activities Regulations** (AAR) under the *Fisheries Act*, DFO collects detailed information and data on aquaculture industry activities. Each year, DFO publishes a summary dataset of drug and pesticide use at aquaculture facilities to combat pests and pathogens. The AAR allow aquaculture operators to use drugs and pesticides within specific restrictions to avoid, minimize, and mitigate any potential detriments to fish and fish habitat. To support the sustainable and responsible management of aquatic ecosystems, informed by sound science, areas of **research** focus include interactions between farmed and wild species, including impacts on biodiversity, the health of wild populations, and ecosystem level impacts.
Fisheries	The **Sustainable Fisheries Framework** (SFF) comprises a suite of policies and tools, including the Precautionary Approach policy, designed to help ensure that fisheries in Canada are environmentally sustainable while supporting economic prosperity. DFO will continue to implement the SFF, including implementing the catch monitoring policy to ensure DFO obtains reliable estimates of catches for scientific assessments of stock status and for managing harvest levels. The SFF also includes the Policy on Managing Bycatch, which aims to ensure that fisheries are managed in a manner that minimizes the risk of fisheries causing serious or irreversible harm to bycatch species, and accounts for total catch, including retained and non-retained bycatch. The **Fish Stocks Provisions** (FSP) in the *Fisheries Act* strengthen the federal government's ability to achieve Targets 5, 9, and 10, as the FSP establish legal obligations to maintain fish stocks prescribed by regulation at sustainable levels and implement plans to rebuild those stocks if they become depleted. DFO is also working with partners, including other federal departments (ECCC, NRCan, PC, TC), PTs, and Indigenous Peoples to advance other initiatives, such as the establishment, expansion, and effective management of new and existing protected and conserved areas; activities under the renewed and expanded

AREA OF ACTION	HIGHLIGHTS
	Oceans Protection Plan, the Ghost Gear Program, the development of a Whalesafe Gear Strategy, and the Aerial Surveillance Program for pollution; and international advocacy to conserve the world's oceans.
Forestry	NRCan conducts **scientific research** to develop, enhance, and gather knowledge on Sustainable Forest Management (SFM), including beneficial practices for positive biodiversity outcomes, all to support sustainable management practices. This research fills key knowledge gaps, provides national data, monitoring, and reporting on the state of forests. It is taken up by PTs to inform and enhance SFM practices, policies, and legislation across jurisdictions in the context of biodiversity, climate change, natural disturbances, and human disturbance. For example, areas of science interest include new decision-support tools for forest management, the development of silviculture prescriptions for climate change adaptation, and new tools for predicting the outcomes of forest management planning on bird habitat. NRCan also works to **enhance relationships and increase collaboration** with PTs (e.g., through the Canadian Council of Forest Ministers), Indigenous Peoples, industry partners, NGOs, academia, and other federal departments, to continuously advance the environmental and socio-economic performance of Canada's forest sector, including on emerging issues, such as the circular forest bioeconomy. For example, through the Indigenous Forestry Initiative, NRCan supports Indigenous participation in industry- or government-led SFM planning, as well as the braiding of Indigenous Knowledge and western science. NRCan's annual **State of Canada's Forests Report** presents certain Montréal Process[44] sustainability indicators, showing trends in forests and the forest sector. It also presents thematic content showing economic and social benefits provided by forest ecosystems, as well as challenges and opportunities facing Canada's forests and forest sector, notably with regard to the conservation of biodiversity. NRCan works with PT partners to maintain Canada's **national forest monitoring and reporting** capabilities via the National Forest Inventory, National Forest Information System, National Forestry Database, and National Forest Carbon Monitoring Accounting and Reporting System. NRCan also works with PTs to enhance these systems through the Forest Systems Information and Technology enhancement initiative and enhanced forest inventory technologies, which support better data and information for forestry operations and planning related to the health, integrity, and carbon footprint of forest ecosystems in Canada.
Other sectoral approaches	Led by ECCC, the Priority Sectors initiatives for agriculture and forestry are underway to develop Strategic Conservation Frameworks for Species at Risk that address significant impacts on biodiversity. This work is being undertaken in collaboration with partners and stakeholders. It aims to provide sector decision makers a coherent and unified approach to implement innovative ecological approaches that conserve and recover species at risk and biodiversity, while supporting broader sector sustainability. The agriculture sector framework is

[44] The Montréal Process

AREA OF ACTION	HIGHLIGHTS
	anticipated for publication in summer 2024 and the forest sector framework by the end of 2025.

Going further

To further advance action on Target 10, the federal government will:

- Complete development of a Sustainable Agriculture Strategy, to establish a long-term vision (to 2050) and approach to agri-environmental issues, with biodiversity as one of five priority areas, to, among other things, provide guidance on data challenges, improve opportunities for knowledge transfer, and leverage partnerships.
- Develop a National Forest Resilience Strategy to better understand gaps and identify opportunities to increase positive outcomes for nature resilience and help inform innovative practices and decision making in Canada's managed forests.
- Ensure that Canada's approach to defining sustainable forest management is consistent with Canada's commitment to the KMGBF.

The federal government may also explore additional opportunities, including:

- Expanding and accelerating the development of a systematic implementation of an ecosystem approach to fisheries management for federally managed fish stocks and fisheries to further promote healthy ecosystems, sustainable fisheries, and opportunities to support the economic prosperity of the fishing industry.
- Further supporting Indigenous-led management, such as watershed management activities.
- Advancing other sustainability initiatives and innovations in key productive sectors, including those led by the sector or value-chain, such as supporting bioeconomy opportunities, scaling up collaborative research and development activities to spur innovation, facilitating the valuation of ecosystem services, enhancing knowledge of cumulative effects, and applying new management tools (e.g., scenario planning).

TARGET 11: ECOSYSTEM SERVICES AND FUNCTIONS

Target 11: "Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as 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."

Ecosystem services, also referred to as nature's contributions to people, are the many ways that people depend on a healthy environment. For example, ecosystem services support life by providing air, water, food, raw materials, and medicines. They support human security by reducing the risk and damage from natural disasters such as floods and wildfires, and they support our mental and physical health, cultural identities, and much more. However, human activity has caused major losses to biodiversity worldwide, including in Canada, and has harmed ecosystems' abilities to provide these services that we all depend on. Most ecosystem services would be far too expensive or even impossible to replace.

Current status

Negative impacts to Canada's environment, society, and economy due to biodiversity loss, climate change, and pollution are already high and are expected to continue. Nature-based solutions[45] (NBS) and ecosystem-based approaches[46] (EbA) are widely seen as important ways of reducing these impacts.

Extensive efforts are underway by different levels of government, NGOs, Indigenous organizations and communities, and academia, among others, to determine, monitor, and report on the condition of Canadian ecosystems and their benefits to people, and to consider these dynamics in decision making (see Targets 14 and 21). However, the full range of benefits resulting from NBS and EbA projects are rarely tracked. Some benefits are particularly hard to measure, such as cultural identity and education, and others reach their full potential long after a project is completed, making it difficult to measure the true success of these projects.

Many actions are already underway across Canada, or are being proposed under other targets, that involve restoring, maintaining, or enhancing ecosystem functions and the benefits that they provide to society. These actions vary in scale of investment, geography, and scope from vast national initiatives to smaller local projects and include multiple actions to build awareness and capacity for NBS and EbA. To date, federal programs supporting natural infrastructure have tended to focus on climate change resilience and disaster risk reduction (e.g., Disaster Mitigation and Adaptation Fund). There is currently limited federal programming dedicated to advancing nature and climate change adaptation outcomes concurrently, as is being done for nature and climate change mitigation (e.g., Natural Climate Solutions Fund).

[45] The United Nations Environment Assembly 5.2 Resolution 5 defines NBS as "actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits."

[46] Decision 14/5 of the CBD defines EbA as "holistic approaches that use biodiversity, and ecosystem functions and services to manage the risks of climate-related impacts and disasters."

Challenges and opportunities

There are currently significant challenges in accounting for the full breadth of benefits to nature and people from the restoration, maintenance, or enhancement of ecosystem functions from NBS and EbA initiatives. Ecosystem services are very diverse, complex, and interconnected, and there is no single metric to assess the overall changes in ecosystem functions and services from NBS and EbA projects. Difficulties remain in assessing the many values of all ecosystem services, except for some services for which there are existing market values such as food crops or timber. In turn, this poses challenges in increasing awareness and accelerating the use of NBS and EbA as cost-effective solutions over more conventional methods (e.g., grey infrastructure), even if they have proven to provide more fulsome solutions to environmental and socio-economic challenges.

Canada's vast and diverse landscapes, freshwater bodies, and seascapes provide enormous potential for NBS and EbA initiatives. When well-designed and implemented, NBS and EbA projects support ecosystem resilience, respect different worldviews, and support reconciliation. Most land in Canada is managed through provincial, territorial, municipal and Indigenous governments, or private landowners. The federal government manages just 6% of Canada's land and freshwater. This makes achieving Target 11 a whole-of-society endeavor.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Improving knowledge on ecosystem functions and services	StatCan is continuing to develop the **Census of Environment**, a program designed to produce environmental data about ecosystems in Canada and the benefits they provide to Canadians, following the UN statistical standard System of Environmental-Economic Accounting—Ecosystem Accounting (SEEA EA). The SEEA EA is a comprehensive statistical framework for organizing data about biodiversity, measuring and valuing ecosystem services, tracking changes in ecosystem assets, and linking this information to economic and other human activity. Under the Enhanced Nature Legacy, PC is working to assess and **map carbon stocks and dynamics** in key ecosystems in Canada's national parks and national marine conservation areas. PC will develop guidance to optimize the synergistic conservation and stewardship of biodiversity and ecosystem carbon in protected and conserved areas.
Empowering Canadians to take action	The **Natural Climate Solutions Fund** includes three separate but related programs: NRCan's 2 Billion Trees program, ECCC's Nature-Smart Climate Solutions Fund, and AAFC's Agricultural Climate Solutions Program. It supports projects that conserve, restore, and enhance wetlands, peatlands, grasslands, and forests, and increase adoption of beneficial management practices on farmland, to increase carbon sequestration and help combat climate change and its impacts, with numerous co-benefits for biodiversity and human well-being. It includes dedicated funding for Indigenous-led Natural Climate Solutions. Led by INFC, the **Natural Infrastructure Fund** supports projects that use natural or hybrid approaches to protect the natural environment, support healthy and resilient communities, and contribute to economic growth and jobs. It supports the creation, expansion, restoration, improvement, or enhancement of tangible

AREA OF ACTION	HIGHLIGHTS
	natural or hybrid infrastructure, such as urban forests, wetlands, floodplains, coastal zones, and stormwater ponds. PC's **National Program for Ecological Corridors** catalyzes action by Canadians by delivering tools and funding to support the identification, advancement, and recognition of ecological corridors across the southern to mid-latitudes of Canada. Corridors help species and ecosystems adapt to climate change and contribute to halting and reversing biodiversity loss. Ecological networks allow species and processes to move freely across large landscapes, which can include urban and near-urban areas.
Building resilience to impacts from climate change	The **National Adaptation Strategy** (NAS) is a whole-of-society strategy that establishes a shared vision for climate resilience in Canada, identifies key priorities for increased collaboration, and establishes a framework for measuring progress. It is structured around five key systems, including Nature and Biodiversity, and Health and Well-being. Alongside the NAS, the **Government of Canada Adaptation Action Plan** outlines how the federal government is contributing to achieving the targets, goals, and objectives laid out in the NAS, through existing programs, including as it relates to Nature and Biodiversity. Ongoing **wildfire and local flood hazard mapping** activities led by NRCan include: Fighting and Managing Wildfires in a Changing Climate program, Forest Mapping for Wildfire Resilience, Emergency Management Strategy (wildfire and floodplain mapping components), and the Flood Hazard Identification and Mapping Program. PS also leads **Canada-wide flood risk mapping and risk management activities** including developing Federally Identified Flood Risk Areas for infrastructure flood risk screening, communicating flood hazard through a Flood Risk Awareness Portal, developing Canada-wide science-based flood risk assessments to inform policy development, federal flood insurance, and modernizing the Disaster Financial Assistance Arrangements. Through the INFC-led **Disaster Mitigation and Adaptation Fund**, the federal government is providing over $3.8B to support structural and natural infrastructure projects to increase the resilience of communities that are impacted by natural disasters triggered by climate change. This includes funding new construction and rehabilitation of natural and hybrid infrastructure projects for climate resilience. NRCan's **2 Billion Trees Research Program** aims to leverage the ability of ecosystems to sequester carbon and reduce atmospheric greenhouse gas (GHG) concentrations through research on novel approaches to support effective tree planting, maximize carbon storage, and optimize co-benefits of tree planting to biodiversity and human well-being under a changing climate.
Improving management of aquatic ecosystems	DFO is developing a strategic plan for advancing an **Ecosystem Approach to Fisheries Management**, which seeks to incorporate ecosystem information into stock assessment, science advice, and management recommendations for a given fish stock or fishery to support fisheries decision making; improve the understanding of how fish stocks and fisheries may be influenced by the

AREA OF ACTION	HIGHLIGHTS
	components of their ecosystems; and support fisheries resilience and adaptative management in pursuit of the dual goals of economic prosperity and ecosystem sustainability. (Link to Targets 5, 9 and 10) Through ECCC's **Strengthened Freshwater Action Plan**, work is underway to monitor, assess, and restore the Great Lakes, Lake Winnipeg, Lake of the Woods, St. Lawrence River, Fraser River, Wolastoq/Saint John River, Mackenzie River, and Lake Simcoe. This work will in part enable the completion of the clean-up of Great Lakes Areas of Concern and achieve Canada's nutrient targets in Lake Erie established under the Canada-US Great Lakes Water Quality Agreement.
Restoring and enhancing ecosystem functions and services	AAFC and ECCC lead various initiatives to increase the on-farm adoption of beneficial practices and technologies that **support biodiversity and other environmental outcomes** such as GHG mitigation, soil health, water quality, conservation and restoration of critical wildlife habitat, and the strengthened resilience of agricultural lands. Programs include the Sustainable Canadian Agricultural Partnership and its Resilient Agricultural Landscapes Program, Agricultural Climate Solutions On-Farm Climate Action Fund, Species at Risk Partnership on Agricultural Land, and Habitat Stewardship Fund. Through DFO's **Aquatic Ecosystems Restoration Fund**, projects are funded to help restore aquatic ecosystems and mitigate human impacts on Canadian coastal and marine environments, including by responding to restoration priorities, restoration and rehabilitation of aquatic habitats, supporting co-benefits of aquatic restoration activities, and local capacity building. ECCC is working on the **conservation, management, restoration, and enhancement of wetlands** for the benefit of people and nature through, for example, the North American Waterfowl Management Plan, the Ramsar Convention, and policies such as the Federal Policy on Wetland Conservation.

Going further

To further advance action on Target 11, the federal government will:

- Improve our understanding of the benefits that NBS and EbA initiatives provide to people and biodiversity by developing tools and guidance for assessing and reporting on benefits, including from Indigenous perspectives.

The federal government may also explore additional opportunities, including:

- Developing criteria and principles for the design and use of Payment for Ecosystem Services initiatives, and associated implementation guidance.
- Further incentives for NBS and EbA actions, for example, focused on community preparedness to climate-related impacts, efforts on Payments for Ecosystem Services, and novel tools and models to properly assess and report on the benefits that these actions provide.

TARGET 12: URBAN GREEN AND BLUE SPACES

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."

Most Canadians live within several hundred kilometers of the US border —the most biodiverse and productive landscapes in Canada—and 70% of those Canadians live in cities.[47] Protecting, restoring, and enhancing urban green and blue spaces can ensure that urban environments continue to provide important ecosystem services and functions for Canadians, while also enhancing habitat and connectivity for wildlife, and reducing the impacts of climate change. There is mounting evidence that urban green and blue spaces play a significant role in the physical, mental, and spiritual health of Canadians, by encouraging higher levels of outdoor physical activity, reducing stress, improving life satisfaction, reducing noise, and improving air quality,[48] to name a few. For these reasons, successful urban planning factors in the protection and enhancement of biodiversity and the use of nature-based solutions (NBS).

Current status

Municipal governments and organizations, civil society, the private sector, and landowners have a key role to play in achieving Target 12, and already have successful initiatives underway to protect, manage, restore, and connect urban green and blue spaces. In 2021, 93% of individuals living in urban areas surveyed said they had a park or green space close to home.[49] However, the long-term trend in urban greenness in Canada decreased from 2000 to 2023, falling by 7.8% over this period. This trend is partly attributable to urban expansion and suburban development,[50] reflecting pressures on land use that will continue as the populations of Canadian cities and towns grow, demonstrating the importance of biodiversity-inclusive urban planning. As of 2021, 31-51% of municipalities have put a biodiversity strategy in place already or are in the process of developing one, while 28-50% of municipalities have biodiversity objectives embedded in other environmental plans.[51]

Several organizations are already taking the lead on providing guidance on biodiversity-inclusive urban planning and natural asset management, such as Local Governments for Sustainability (ICLEI), the Federation of Canadian Municipalities, and the Natural Assets Initiative. Building on, and further enabling these efforts, as well as increasing partnerships with the urban development sector and improving communication between urban planners, ecologists, social scientists, and engineers is needed to meet Target 12.

Provinces and territories also have a crucial role in meeting this target as legislation, guidance, and incentives can further enable the inclusion of biodiversity in decision making and the expansion and

[47] Canada's large urban centres continue to grow and spread
[48] How Does Urban Green Space Impact Residents' Mental Health: A Literature Review of Mediators
[49] Parks and green spaces
[50] Census of Environment: Urban greenness, 2023
[51] Canada's 2020 Final Assessment

enhancement of urban green and blue spaces at the local level. Collaboration between federal and PT governments, such as through Nature Agreements and other mechanisms, is critical.

The federal government is already taking steps to support municipalities in identifying, recognizing, and expanding protected and conserved areas. Through the National Urban Parks Program, Canada is working to create a network of up to six new national urban parks across Canada by 2025. Under the Protected Areas Program, Canada is supporting local governments and organizations in recognizing urban protected areas—139 protected and conserved areas within or near urban areas have been entered into the Canadian Protected and Conserved Areas Database,[52] representing a combined area of over 22,000 hectares.[53] Canada also has several initiatives underway to address species loss in urban areas and to support the implementation of natural infrastructure and NBS.

The federal government is also working to provide data and information to support the mainstreaming of biodiversity in decision making at the local level through initiatives such as the Census of Environment ecosystem accounts, as well as research on how urban and peri-urban green spaces support migratory bird conservation, functional connectivity of urban green spaces, and synergies and trade-offs of NBS for human health and biodiversity. Critical knowledge gaps remain, such as the state of urban ecosystems, the vulnerability of those ecosystems, and quantifying the value of NBS.

Challenges and opportunities

A key challenge to meeting this target is balancing necessary urban development, including housing and transportation, with biodiversity protection and climate action. When managing lands and urban parks, there is a need to balance human use, safety, and biodiversity protection. Target 12 is an opportunity to improve how we design, build, and live in communities, including how to meet housing needs and infrastructure development while also reducing our environmental footprint and impacts on biodiversity, protecting and enhancing ecosystem services, improving human health, and enhancing climate resilience using NBS.

Municipalities have the urban planning expertise and awareness of community needs to undertake this work, but may benefit from support from the federal government and others to account for biodiversity in urban planning and decision making, such as through natural asset management. It is imperative that urban plans, land-use plans, and associated strategies and polices are nature-positive, advance multiple goals, and are developed through inclusive and collaborative processes.

For Indigenous Peoples living in urban areas, access to land and waters remains a cornerstone of cultural, social, and spiritual practices. Through Target 12 initiatives, Canada can advance reconciliation with Indigenous Peoples and support reconnection with lands and waters by promoting Indigenous leadership and stewardship of urban blue and green spaces.

To ensure that everyone benefits from increased access to nature, Canada will need to incorporate best practices promoting equity, diversity, and inclusion in urban planning and project management. For example, ensuring that urban green and blue spaces are accessible by public and active transportation can support access to nature by everyone.

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[52] Canadian Protected and Conserved Areas Database

[53] Partners working with municipalities across Canada to contribute to national conservation network, supporting nature and halting biodiversity loss

What we're doing

AREA OF ACTION	HIGHLIGHTS
Creating a network of national urban parks	Through the National Urban Parks Program, PC is working in collaboration with Indigenous governments, municipalities, provinces, conservation organizations, park advocacy groups, and academia to designate green and blue spaces in major urban centres as National Urban Parks that will conserve biodiversity, connect people with nature, and advance reconciliation with Indigenous Peoples. PC is currently working with partners to designate and implement a national urban park in Windsor, Ontario. PC continues to explore opportunities with partners for national urban parks in Edmonton, Halifax, Saskatoon, Victoria, and Winnipeg, as well as to identify other potential candidate sites to begin early engagement, as part of its efforts to designate 15 new National Urban Parks by 2030.
Recognizing municipal protected and conserved areas	Through collaborative partnerships with NGOs, ECCC will continue to explore opportunities to add locally protected areas to Canada's national conservation network. Up to eight municipalities will be identified and supported in their efforts to expand protected areas within their jurisdiction by 2030.
Supporting species at risk recovery in urban areas	Through the **Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada**, ECCC is working with the urban development sector and in Priority Places to identify policies, tools, and programs that could benefit species at risk and migratory birds in urban and peri-urban areas. By 2025, Canada will develop a strategic conservation framework for species at risk in urban and near-urban areas to be used by regional and local planning authorities and governments. Under Enhanced Nature Legacy, PC's **National Program for Ecological Corridors** is working to identify and recognize ecological corridors across the southern to mid-latitudes of Canada to help species and ecosystems adapt to climate change and contribute to halting and reversing biodiversity loss. Ecological networks allow species and processes to move freely across large landscapes, which can include urban and near-urban areas.
Deploying NBS and natural infrastructure to support climate resilience	Through commitments in the **National Adaptation Strategy and Government of Canada Adaptation Action Plan**, ECCC is deploying NBS and natural infrastructure to help mitigate the impacts of a changing climate, increase access to urban green and blue spaces, and enhance urban biodiversity. As part of the Natural Climate Solutions Fund, NRCan's **2 Billion Trees program** funds tree planting projects and expands urban forests and urban green spaces through its Urban Lands stream. By 2031, the Urban Lands stream will support the planting of approximately five million trees. INFC is also taking steps to support **structural and natural infrastructure projects**, including in urban green and blue spaces, to increase the resilience of communities impacted by natural disasters through the Disaster Mitigation and Adaptation Fund. The Natural Infrastructure Fund supports

AREA OF ACTION	HIGHLIGHTS
	natural and hybrid infrastructure projects that deliver services to Canadians, such as climate change resilience, climate mitigation, environmental quality, improved access to nature, or enhanced biodiversity and habitats.
Demonstrating federal leadership on biodiversity and NBS	The Greening Government Strategy (TBS) aims to maximize the use of natural infrastructure and other NBS to protect physical assets and implement climate-resilient groundskeeping using native species and practices.
Providing data and information	StatCan is continuing to develop the Census of Environment, a program designed to produce environmental data about ecosystems in Canada and the benefits they provide to Canadians, following the UN statistical standard System of Environmental-Economic Accounting—Ecosystem Accounting (SEEA EA), and may include an urban ecosystem account.
Connecting people with nature	PC's Learn-to Camp programming supports the development of a community of stewards to help foster an appreciation for biodiversity.

Going further

To further advance action on Target 12, the federal government will:

- Work with PTs to explore opportunities to address barriers that limit the establishment of green and blue spaces, and urban park areas, through various options, including future Nature Agreements.

The federal government may also explore additional opportunities, including:

- The development of guidance, tools, and solutions to support communities in integrating biodiversity and ecosystem services in their natural asset accounting sheets and decision-making and planning processes.
- Additional support for establishing, restoring, and enhancing urban green and blue spaces and building local capacity to implement urban biodiversity initiatives (e.g., research and monitoring, action on invasive alien species, wildlife crossings and ecological connectivity, urban NBS).

TARGET 13 / 15C: ACCESS TO GENETIC RESOURCES AND BENEFIT-SHARING

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."

Target 15c: "Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions: (c) Report on compliance with access and benefit-sharing regulations and measures, as applicable."

Genetic resources[54] touch the lives and well-being of every Canadian. They are used in a range of scientific, environmental, public health, and commercial applications, such as developing new medicines and vaccines; tracking emerging pathogens; improving animal breeds, crop yields, and climate resilience to support food security; increasing forest resilience through tree breeding programs; developing biological pest controls; and modifying industrial processes. They are also used for cultural purposes by Indigenous Peoples. Canada is home to genetic resources that include crops and native plants, livestock, and marine and Arctic extremophiles whose characteristics contribute to research in multiple disciplines. Research and development on genetic resources can contribute to conservation and sustainable use, generate a diverse range of non-monetary and monetary benefits, and contribute to innovation. Research on genetic resources may also be informed by or with knowledge held by Indigenous Peoples.

Fair and equitable sharing of the benefits arising from use of genetic resources is the third objective of the CBD (and is embedded in related treaties on agriculture and marine biodiversity[55]). Target 13 extends to the use of digital sequence information (DSI) and "traditional knowledge[56] associated with genetic resources." Increasingly, the use of genetic resources involves sequencing DNA and RNA and openly sharing "digital sequence information on genetic resources", a term Canada considers to cover genetic sequence data. In other countries, the development of "access and benefit-sharing" (ABS) measures that respect Indigenous Peoples' rights and support their participation in valorizing and safeguarding the genetic resources within their traditional lands and territories has enabled the flow of benefits from the commercialization of genetic resources directly to Indigenous Peoples through mutually agreed-upon terms. This direct support enhances their rights to development and self-determination, including further enabling their involvement in conservation.

[54] Genetic resources are defined in the CBD as material of plant, animal, microbial, or other origin containing functional units of heredity, of actual or potential value. In practice, this term covers organisms, specimens, and samples containing DNA, but human genetic resources are excluded.

[55] Food and Agriculture Organization International Treaty on Plant Genetic Resources for Food and Agriculture, and the Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ Agreement)

[56] The KMGBF term "traditional knowledge" is used here when directly referencing the KMGBF, while "Indigenous Knowledge" is used when talking about Target 13 in the Canadian context.

Current status

Canada continues to engage on ABS in international negotiations and facilitates access to ex situ collections. Several laws of general application may apply to accessing certain biological resources in Canada. Policy exists related to plant genetic resources for food and agriculture, but there is currently no comprehensive policy or guidance document on Canadian ABS-relevant measures. There is a lack of clarity for potential users of Canadian genetic resources and no guidance on commercial bioprospecting (e.g., searching for wild species that could be used in commercial products like medicines) in Canada or how to comply with ABS in other countries. Federal, provincial, territorial, Indigenous, and stakeholder collaboration will be key to fully achieving Target 13, with specific stakeholder engagement for Target 15c.

More specifically, Target 13 can be separated into components:

- Measures at all levels to ensure benefit-sharing – There are ABS-relevant legal and policy measures at federal, provincial, and territorial levels that regulate how certain biological resources may be accessed from certain areas. They are not comprehensive and do not focus explicitly on ensuring fair and equitable benefit-sharing. There have been few recent ABS capacity building efforts.
- What is used to generate benefits – Existing ABS-relevant measures touch on genetic resources (in that biological resources may contain DNA and/or RNA), but not commercial bioprospecting. Few are designed to address sharing benefits from associated Indigenous Knowledge, nor from the use of DSI. International discussions on a multilateral mechanism for DSI benefit-sharing are still underway.
- Facilitating appropriate access to genetic resources and associated traditional knowledge – While this is clearer in the context of specimens in ex situ gene banks, control and related obligations over in situ genetic resources vary across Canada, and obligations related to associated Indigenous Knowledge are in flux.
- Significant increase in benefits shared by 2030 – Levels of current benefit-sharing are largely unknown and unmeasurable, except in the specific context of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) Multilateral System for ABS.
- Benefit-sharing in accordance with international ABS instruments – Canada implements the ITPGRFA and the World Health Organization Pandemic Influenza Preparedness Framework, but has further work to do to fully meet its CBD ABS obligations and is not a Party to the Nagoya Protocol on ABS.

Regarding Target 15c, Canada does not currently have measures for businesses to report on compliance with relevant ABS laws of other countries.

Challenges and opportunities

Action on ABS is challenging. It is a complex issue, involving diverse actors, jurisdictions, fora, rights, and interests. An effective ABS system must balance the needs and perspectives of both providers and users of genetic resources. Significant effort and compromise will be required to build workable frameworks that support both reasonable access and meaningful benefit-sharing. There is currently low public and sectoral awareness of ABS and the potential economic and socio-cultural value of Canadian genetic resources. In addition, many potential providers of genetic resources and associated Indigenous Knowledge lack capacity to manage access requests or negotiate mutually agreed terms for benefit-

sharing. However, action on Target 13 is an opportunity to provide clarity and guidance for Canadian and foreign users of Canadian genetic resources, foster alignment with international obligations and processes, advance reconciliation and support Indigenous research priorities, and increase Canada's influence in global discussions.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Engaging in international efforts related to access and benefit-sharing (ABS)	The federal government undertakes coordinated engagement in ABS-related international negotiations to ensure coherence between Canada's commitments. These international efforts include the enhancement of the Multilateral System for ABS of the International Treaty on Plant Genetic Resources for Food and Agriculture (led by AAFC), the development of the Pandemic Agreement and update of International Health Regulations (PHAC), further elaboration and operationalization of provisions on marine genetic resources and digital sequence information (DSI) in the BBNJ Agreement (DFO), the development of a new disclosure instrument on intellectual property and genetic resources (ISED, GAC), and a new CBD multilateral mechanism for sharing benefits from DSI use (ECCC).
Maintaining ex situ collections	Canada conserves, shares, and mobilizes knowledge on genetic resources via gene banks such as Plant Gene Resources Canada (AAFC), the National Tree Seed Centre (NRCan), Animal Genetic Resources of Canada (AAFC), Canadian Collections of Fungal Cultures (AAFC), and the Live Gene Bank for Inner Bay of Fundy Atlantic Salmon (DFO). In addition, some Canadian ex situ collections are imaging their specimens, sequencing specimens' DNA, and digitizing information to make data publicly available on international databases, notably those under the International Nucleotide Sequence Database Collaboration.
Undertaking genomic surveillance	PHAC is working with provincial and territorial partners to diversify and rapidly scale up infrastructure for genomic surveillance of pathogens (including whole-genome sequencing in Canada for COVID-19), which will contribute to the detection and tracking of evolving pathogens for public health, including for One Health surveillance.

Going further

To further advance action on Target 13, the federal government may explore additional opportunities, including:

- Providing greater clarity to users and providers of genetic resources, sharing best practices for ABS, and identifying and assessing additional measures that could allow Canada to become a Party to the Nagoya Protocol.
- Developing guidance on research and commercial bioprospecting.
- Enabling users of genetic resources and associated Indigenous Knowledge to share information on benefit-sharing and compliance actions to measure progress toward domestic and global targets.

TARGET 14: MAINSTREAMING OF BIODIVERSITY VALUES

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."

Target 14 is essential to meeting our collective goal to halt and reverse biodiversity loss by 2030. Policy decisions around the world continue to underrepresent and underestimate biodiversity's vital social, cultural, and economic contributions, and its intrinsic value, leading to continued biodiversity loss and externalities that can undermine efforts to protect nature. Mainstreaming biodiversity will not only promote the appropriate valuation, conservation, and sustainable use of biodiversity, but will also help to shift society's understandings of and relationships with nature.

Current status

In Canada, efforts are underway to improve the integration of biodiversity into decision making. Biodiversity is being considered by all levels of government in many policies and processes. For example, the national system of environmental accounts, a framework that integrates data to show the link between the environment and the economy, now includes data and analytical products pertaining to ecological assets, services, and benefits to people. Through this system, Canada is producing data for several key ecosystems and working to expand to others. In addition, several provinces and territories have dedicated biodiversity strategies or plans (see Annex 3), and municipalities have made progress integrating biodiversity into their planning and activities.[57] In the private sector, the international Taskforce on Nature-related Financial Disclosures is working to enable organizations to integrate nature into financial decision making and shift their financial flows toward nature-positive outcomes (see Target 15a), and some sectors and organizations have adopted voluntary nature-related standards.

Target 14 also calls for the progressive alignment of all relevant activities, and fiscal and financial flows, with the goals and targets of the KMGBF, which Canada has already begun to do through recent and ongoing efforts, including through the 2020 Biodiversity Goals and Targets for Canada[58] and investments in nature conservation.

Despite improvements in mainstreaming biodiversity, progress has been uneven, and the scale of action needed to achieve overall alignment with the KMGBF is extensive. Mainstreaming to date has not fully reflected the breadth of biodiversity values in ecological, social, cultural, and economic terms, including recognizing the importance of biodiversity regardless of human use. Federal, provincial, and territorial governments are responsible for integrating biodiversity into policies and decision-making processes in areas of their respective jurisdiction. The federal government also has a leadership role in convening and coordinating with partners and stakeholders to advance collective mainstreaming efforts, and reaching Target 14 will require collaboration and efforts by all.

[57] Canada partially met its 2020 target on the integration of biodiversity into municipal planning and activities (see Table 2 in Annex 5).
[58] See Table 2 in Annex 5.

Challenges and opportunities

Target 14 provides opportunities to include more integrated approaches to nature in decision making, enhance policy coherence and accountability, and apply lessons learned from other mainstreaming efforts (e.g., climate change, gender). Balancing biodiversity and other objectives remains a key challenge. For example, actions to attain climate goals do not always align with conservation, and economic objectives are often considered to be at odds with nature-sustaining goals. However, it is possible to protect nature while ensuring sustainable economic development with the right approaches, such as providing opportunities for holistic and innovative solutions (e.g., see UN FAO Aspirational Principles and Criteria for a Sustainable Bioeconomy[59]).

Valuing biodiversity can be complex, relying on ecological, social, cultural, and economic methods and modes of documentation, while also facing data limitations. Where appropriate and done with respect, learning from and weaving Indigenous Knowledge with biodiversity mainstreaming can contribute to reconciliation as well as more comprehensive understandings and inclusion of the diverse values of nature. Respecting and upholding Indigenous rights is essential on its own, but also necessary for mainstreaming biodiversity.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Integrating biodiversity considerations into decision making and activities	Beginning in 2024, the new **Climate, Nature, and Economy Lens**, led by ECCC and implemented through the Cabinet Directive on Strategic Environmental and Economic Assessment, will ensure that biodiversity effects (positive or negative) are considered in proposals submitted to Cabinet, the Prime Minister, and the Minister of Finance for decision. Lens considerations include mitigation measures and links to the 2030 Strategy, where relevant. This new directive replaces the Cabinet Directive on the Environmental Assessment of Policy, Plan, and Program Proposals. Under the ***Impact Assessment Act***, led by IAAC, effects related to biodiversity impacts for major projects are assessed, mitigated, and monitored, as appropriate. Implementation of the Act also includes: • Regional assessments (e.g., assessment of offshore wind development), which provide information, analysis, and regional context in relation to a variety of valued components, including biodiversity, to inform and improve future Impact Assessments and decision making in areas of existing or anticipated development. • Strategic assessments, which examine existing or proposed federal policies, plans, or programs relevant to impact assessment. TBS' **Greening Government Strategy** is a set of commitments that apply to all core government departments and agencies in order to transition the Government of Canada's operations (real property, fleets, procurement, and national safety and security) to net-zero by 2050. It includes commitments on biodiversity and nature-based solutions.

[59] Food and Agriculture Organization of the United Nations: Aspirational principles and criteria for a sustainable bioeconomy.

AREA OF ACTION	HIGHLIGHTS
	Various INFC initiatives support the effective application of **natural infrastructure and nature-based solutions** to deliver community services and benefits to Canadians, including climate resilience, climate change mitigation, enhanced biodiversity and habitats, and access to nature.
Building capacity to understand and measure biodiversity values	StatCan is continuing to develop the **Census of Environment**, a program designed to produce environmental data about ecosystems in Canada, including terrestrial, freshwater, marine and coastal ecosystems, and the benefits they provide to Canadians, following the UN statistical standard System of Environmental-Economic Accounting—Ecosystem Accounting (SEEA-EA). Led by ECCC and operationalized by StatCan, Canada is working with the United States and Australia through the **Partnership of Cooperation on Natural Capital Accounting, Environmental-Economic Accounting, and Related Statistics**, a new initiative that aims to facilitate shared learnings, leverage expertise, and work toward comparability of approaches to natural capital accounts and environmental economic statistics, guided by SEEA-EA. In alignment with Canada's Cost-Benefit Analysis Guide for Regulatory Proposals, ECCC and DFO are advancing the **integration of ecological goods and services** into regulatory cost-benefit analyses and modelling. ECCC also maintains and applies tools to support the mainstreaming of biodiversity values, such as developing practical applications from the **Ecosystem Services Toolkit** to assess the diverse values of ecosystem services.
Working with others to promote biodiversity awareness, integration, and mainstreaming	The federal government works with partners to promote **mainstreaming of biodiversity across public and private activities**, such as through ongoing collaboration at existing federal-provincial-territorial committees responsible for conservation, wildlife, and biodiversity, as well as sustainable resource management and use. Co-developed Indigenous Nature Tables enable ongoing collaboration between the federal government and Indigenous representatives, providing a space for dialogue and strategic solutions for shared biodiversity priorities. Through the **Priority Sectors Initiative** (ECCC), work is underway with partners and stakeholders in the agriculture, urban development, and forest sectors to develop Strategic Conservation Frameworks for Species at Risk that address significant impacts on biodiversity. The **National Conservation Exchange pilot** (ECCC) is developing and testing a science-based approach for assessing and providing recognition for the biodiversity and bio-cultural benefits of conservation projects to incentivize private sector and industry conservation investments. PC is advancing the **valuation of ecological goods and services for protected areas**, including exploring change over time and ways to integrate into decision making. PC is also building relationships with other

AREA OF ACTION	HIGHLIGHTS
	park and land management organizations in North America and abroad to address gaps in valuation approaches and alignment in application. The CSA, PSPC, and the Montreal Port Authority are collaborating on the **smartHarbour** initiative, which aims to develop solutions using Earth observation to mitigate the potential environmental impacts of the future Port of Montreal expansion project. Solutions seek to leverage satellite data to monitor variables of key biodiversity relevance, such as water quality, state of aquatic grass beds, wetlands, and terrestrial vegetation. ECCC is developing a **National Environmental Learning Framework** to increase awareness of biodiversity, climate change, and other environmental issues in K-12 youth, their educators, and their families. Set for release by 2025, the framework will support Canadians' abilities to make informed and responsible decisions with regards to actions that may affect the environment. Canada will continue to **engage with partners at the International Seabed Authority**, encouraging Parties and inviting other governments to ensure that, before deep seabed mineral exploitation activities take place: • The impacts on the marine environment and biodiversity are sufficiently researched and the risks understood; • The technologies and operational practices ensure effective protection of the marine environment and biodiversity; and • Appropriate rules, regulations and procedures are put in place by the International Seabed Authority, in accordance with the best available science and Indigenous Knowledge, and the precautionary and ecosystem approaches, and consistent with United Nations Convention on the Law of the Sea and other relevant international law.

Going further

To further advance action on Target 14, the federal government will:

- Seek to strengthen accountability through its commitment to introducing a nature accountability bill in 2024, which, if passed into law, would establish an accountability and transparency framework—with meaningful checkpoints—to advance implementation of the KMGBF at the federal level.
- Take steps towards developing and implementing an Effects Management Framework to help mainstream biodiversity in regulatory decision making. Grounded on the principles of the mitigation hierarchy, adaptive management, and inclusion of Indigenous perspectives, this framework would enable consistent, risk-based considerations for managing the effects of human activities on biodiversity.

The federal government may also explore additional opportunities, including:

- Continuing to advance the integration of biodiversity and alignment with the 2030 Strategy across federal decision making, including by reviewing and revising policies and programs, where appropriate.

- Capacity building to support governments and sectors in conceptualizing and considering the multiple values of biodiversity, working in collaboration to understand, respect, and include Indigenous Knowledge systems and values, where appropriate.
- Strategies to enhance co-benefits of action on climate and pollution to address the triple crises in an integrated manner, while seeking to maximize co-benefits in novel ways (e.g., connections with health, culture).

TARGET 15A: BUSINESS' ROLE

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."

Note: for 15(b) refer to Target 16, and for 15(c) refer to Target 13.

More than half of the world's economic output is moderately or highly dependent on nature and, according to the World Economic Forum, biodiversity loss is estimated to be among the top ten risks to the global economy.[60] By assessing the risks and opportunities associated with nature, businesses can better understand and address their impacts on biodiversity and the risks posed by biodiversity loss to their operations, supply and value chains, and portfolios. Additionally, financial disclosures to investors and other providers of capital can enable a shift of financial flows away from nature-negative outcomes toward nature-positive outcomes.

Current status

While progress has been made in Canada on the implementation of mandatory climate-related financial disclosures, international and domestic efforts to promote biodiversity-related financial disclosures across the economy are at an early stage.

In March 2022, the federal government joined the Taskforce on Nature-related Financial Disclosures (TNFD) Forum, a global multi-disciplinary consultative group of institutions aligned with the TNFD's mission and principles. The TNFD released its recommendations in September 2023. In April 2024, the International Sustainability Standards Board announced that it will conduct research related to the disclosure of risks and opportunities associated with biodiversity, ecosystems, and ecosystem services and will decide whether standard setting is required. While the TNFD's scope is somewhat broader than the focus of Target 15a in terms of coverage, the TNFD framework aligns with the target's requirement to disclose biodiversity-related dependencies, impacts, and risks, and is expected to serve as a key vehicle for countries to meet this target. Given the publication of the TNFD framework is recent, adoption internationally and in Canada is still limited.

There is much work to do to support the mainstreaming of biodiversity disclosures and address key barriers that companies may face in assessing, monitoring, and disclosing their biodiversity-related risks, impacts, and dependencies. Encouraging, enabling, and ensuring that large and transnational companies and financial institutions conduct biodiversity-related financial disclosures will require coordination across federal, provincial, and territorial financial regulators and standard setters.

[60] The Global Risk Report 2024 (19th Edition)

Challenges and opportunities

The work of key organizations developing global baselines for nature- and climate-related disclosures, such as the TNFD, the International Sustainability Standards Board, and others, present ongoing opportunities to inform Canada's approach to biodiversity-related disclosures. While building from international work, Canada must consider the alignment and interoperability between various reporting standards; the lack of available, high-quality, and relevant data across value and supply chains; and the lack of fit-for-purpose indicators and metrics to measure biodiversity-related impacts, risks, and dependencies. Capacity building for assessing and disclosing biodiversity-related risks, impacts, and dependencies will also be essential given limited existing expertise and capacity within companies on biodiversity. In addition, small- and medium-sized enterprises, though not specifically the focus of the target, may be impacted by disclosures from large and transnational companies and financial institutions. Implementation of Target 15a must acknowledge the importance of developing proactive strategies and engagement with businesses of all sizes to minimize potential burden and understand their challenges.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Leveraging the work of international bodies developing frameworks and standards	ECCC will continue to monitor and participate in the work of international organizations that seek to enable biodiversity-related disclosures, including through: • Reviewing the Taskforce on Nature-related Financial Disclosures' disclosure framework, its guidance for organizations to adopt the framework, and its work to address data-related challenges with respect to the corporate assessment and reporting of nature-related issues. • Monitoring the work of other organizations in the climate and nature disclosure space, including the International Sustainability Standards Board, Global Reporting Initiative, and others, as appropriate.
Supporting climate-related disclosure in Canada	The federal government will continue working with provinces and territories to move toward mandatory climate-related financial disclosures across a broad spectrum of the Canadian economy, providing a building block to prepare companies for biodiversity-related disclosures.

Going further

To further advance action on Target 15a, the federal government will:

- Seek advice from key partners, such as federal and provincial regulators, the private sector, Indigenous partners, and biodiversity experts on how the federal government could support the implementation of biodiversity-related disclosures through legal, administrative, or policy measures, and the implications of such disclosures for businesses, particularly small- and medium-sized enterprises.
- Identify existing datasets and information relevant to financial decision making, as well as existing monitoring, reporting, and verification processes that could be leveraged for, or

streamlined with, biodiversity-related disclosure (e.g., reporting standards, sustainability assessments, third-party certification schemes, due diligence initiatives).

- Encourage international and domestic standard setters, such as the International Sustainability Standards Board and the Canadian Sustainability Standards Board, to develop nature-related financial disclosure standards and work with Canadian Crown corporations toward potential future adoption of the standards once they are complete.

The federal government may also explore additional opportunities, including:

- Advancing capacity building to enable companies to begin monitoring, assessing, and transparently disclosing their risks, dependencies, and impacts on biodiversity. This could include developing partnerships with public or private sector organizations to support businesses and raise awareness of the impact of biodiversity on business risks and opportunities.
- Working collaboratively with PTs to advance nature disclosures throughout the economy, by building on the lessons learned from climate disclosures and early adopters of voluntary nature disclosures.

TARGET 16 / 15B: SUSTAINABLE CONSUMPTION

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."

Target 15b: "Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions: (b) Provide information needed to consumers to promote sustainable consumption patterns."

Targets 16 and 15b aim to promote sustainable consumption to lessen our environmental impact in an equitable way and live in harmony with nature. Overconsumption is one of the key reasons why we are losing biodiversity. That is why rethinking how we make, use, and dispose of things in Canada is needed to meet the objectives of the 2030 Strategy. Businesses also have a part to play to share information to help people make sustainable choices that protect biodiversity.

Current status

Canada has one of the highest rates of material consumption in the world.[61] In 2020, only about 6% of the materials consumed in Canada were recycled and used again.[62] This pace of consumption can lead to overexploitation of natural resources and land-use change, as well as increased emissions that drive biodiversity loss through climate change impacts. These outcomes can disproportionately affect Indigenous communities. One important way to fix this is by creating an equitable circular economy where our diverse needs can be met using fewer materials and making less waste. Doing this not only helps the economy and environment, but also keeps people healthier and happier.

The federal government encourages people in Canada to consume sustainably through a range of programs (see Figure 3), such as the successful Food Waste Reduction Challenge and the announcement made in Budget 2024 on home appliance repair. To meet the objectives of the 2030 Strategy, it is equally important that Indigenous Peoples, provinces and territories, municipalities, NGOs, industry, and communities continue leading efforts toward a more circular economy in Canada. Implementing take-back programs, innovating and investing in waste reduction and management, providing science-based education to the public about sustainable consumption, and offering community services that promote sharing and avoid waste are all solutions to help us move toward a more sustainable Canada.

[61] Turning point: The expert panel on the circular economy in Canada
[62] Ibid.

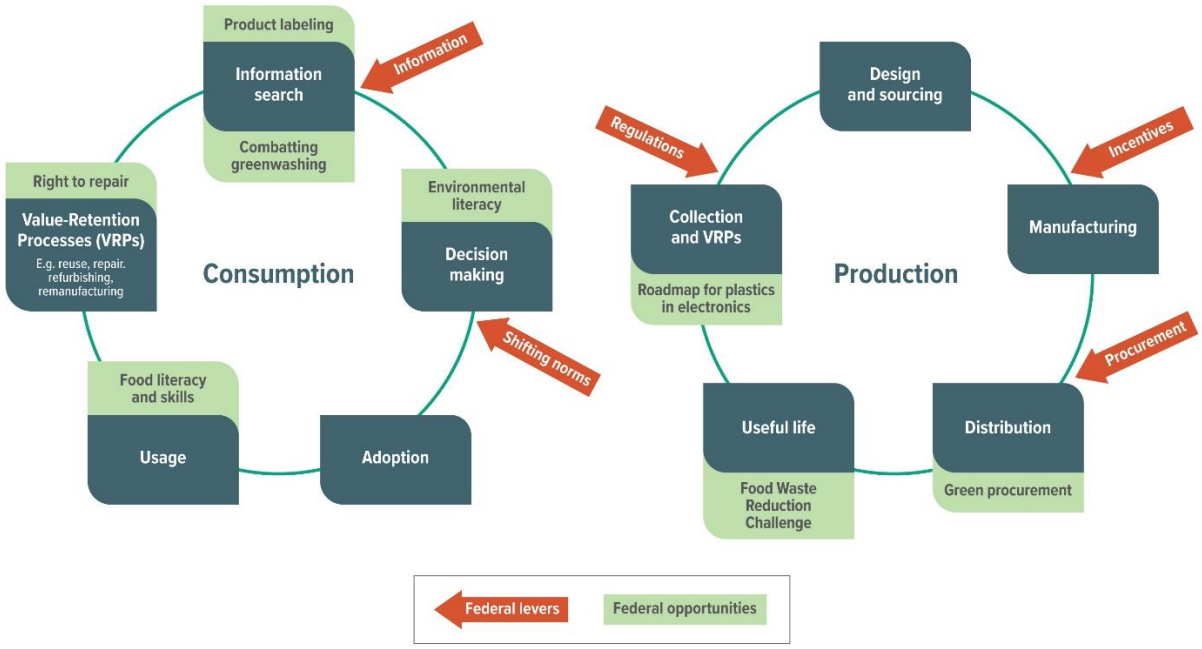

Figure 3 - Illustrative examples of federal levers and opportunities to advance circularity throughout the consumption and production cycles

Challenges and opportunities

While Canada is moving toward a more sustainable and circular economy, there is still a long way to go. Although more waste is being diverted from landfills, the total amount of waste is still increasing in Canada.[63] To meet the Canada-wide waste reduction goals of 30% by 2030 and 50% by 2040,[64] we need to do more. This requires not just individual participation, but also changes in how institutions, businesses, and society as a whole operate.

Canadians' consumption choices are impacted by several factors, including their income, cultural background, where they live, and how easy it is to find sustainable products. Further, as the cost of living goes up, affordability and accessibility dominate decision making. In rural, remote, and northern regions there are many examples of how people live connected to the land and in harmony with nature; however, the impacts of affordability and accessibility are felt much more acutely. This means that we need to find solutions that fit the unique situations of people across Canada.

Indigenous Knowledge and leadership are crucial to creating a more sustainable and circular economy in Canada. Indigenous perspectives offer different ways of thinking that can help us find better solutions for the environment, while supporting reconciliation and reciprocity.

In Canada, there are gaps in what we know, including Canada's overall material footprint, how products are moved through the economy, and how much food is lost and wasted. Because of this, we cannot fully measure progress on Targets 16 and 15b. What we do know is that a whole-of-society transformation is required to reduce consumption so that biodiversity can thrive. Although federal programs can help us move closer to meeting the objectives of the 2030 Strategy, strong collaboration

[63] Solid waste diversion and disposal
[64] Canadian Council of Ministers of the Environment

and direct action from all actors in society are needed. For example, NGOs play an important role in communicating about and creating a culture of sustainability. Cities are also important leaders in testing new solutions and enabling citizen action.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Supporting the transition to a more circular economy	Federal efforts to support the transition to a more circular economy to reduce consumption, waste, and greenhouse gas emissions: • **Engagement** – ECCC is working with industry, other governments, and partners to advance circularity and promote more sustainable consumption and production. ECCC will complete six engagement sessions by 2025-26. • **Circular plastics economy** – CIRNAC, DFO, ECCC (lead), HC, NRC, NRCan, StatCan, and TC are working to advance a circular plastics economy in different ways (e.g., science, innovation, mobilizing Canadians, international actions). • **Right to Repair (R2R) and value-retention processes** (remanufacturing, refurbishment, repair, and reuse) – ECCC and ISED are working to extend the use and useful life of products. Budget 2024 announced the introduction of a targeted repair framework for home appliances and electronics. A Roadmap to Extend the Life of Plastics in End-of-Use Electronics will be published in 2024, and bills C-244 and C-294 are before the Senate to amend the *Copyright Act* in support of R2R. Proposed amendments to the *Competition Act* would address an anti-competitive refusal to provide a means of diagnosis or repair. • **Food Policy for Canada** – The $20M Food Waste Reduction Challenge (led by AAFC) offered prize funding for delivering novel solutions to reduce food loss and waste across the supply chain. • **Bioeconomy programming** – NRCan and AAFC lead programming in the forest and agricultural sectors to support the sustainable provision of forest biomass, and agricultural bioeconomy initiatives for pre-market innovation. For example, NRCan funds research on supply chain traceability for timber products, informing sustainable consumption and preventing illegal logging. • **Mining sector** – NRCan is helping embed circular economy principles in the mining cycle through the Canadian Minerals and Metals Plan and the Critical Minerals Traceability Project Grant (under the Canadian Critical Minerals Strategy).
Advancing products policy	ECCC promotes innovative designs that improve the quality of supply of plastics to the recycling stream, works to strengthen public trust in recycling systems and bioproducts, and supports informing Canadians' purchasing and disposal decisions. By 2025, an instrument to strengthen **labelling for plastics recyclability and compostability** will be implemented. ISED is **enhancing protections for consumers and the environment** and supporting consumers in making decisions informed by the environmental impacts of products. This includes by addressing misleading greenwashing

AREA OF ACTION	HIGHLIGHTS
	claims through proposed amendments to the *Competition Act*, to require that representations about the environmental or climate benefits of a product or business must first have to be adequately substantiated. ECCC and HC are continuing **efforts to require businesses to better inform Canadians** of the impacts of consumer products to minimize the impacts of pollution on the environment and human health, and will publish a labelling strategy on chemicals of concern in products in 2024.
Improving environmental literacy	ECCC is leading the implementation of the National Environmental Learning Framework, which aims to increase youth and their educators' and families' awareness of environmental issues, such as biodiversity loss, and support Canadians in taking environmentally responsible actions, including through the Environmental Literacy Fund. This initiative will build further capacity for outreach and education, encouraging and enabling Canadians to make sustainable consumption decisions.
Transforming government operations	The **Greening Government Strategy** (led by TBS) is a set of commitments to transition the federal government to net-zero carbon and climate-resilient operations, while also reducing environmental impacts beyond carbon, including on waste, water, and biodiversity. The **Policy on Green Procurement** (ECCC, PSPC, SSC, TBS, DFO NRCan) integrates environmental performance considerations into procurement decision making. As part of these efforts, by 2030, the federal government will divert from landfill at least 75% by weight of non-hazardous operational and plastic waste and strive to achieve 100% diversion from landfill of construction and demolition waste.
Undertaking science, research, and capacity building	Federal **engagement on behavioural science** can inform action and communication on environmental issues. For example, the Program of Applied Research on Climate Action applies behavioural science insights and methods to promote climate action (AAFC, ECCC, NRCan, PCO). **Research on economic sectors** helps support sustainable production, such as NRCan's Critical Minerals Research and Development and Demonstration Program to support resilient critical minerals supply, and AAFC's Strategic Plan for Science, which guides future research and development with a strong focus on sustainable agriculture. ECCC's **Food Waste Prevention and Diversion Research and Capacity Building Fund** helps support local government research and capacity-building initiatives to prevent and divert food waste from landfills. Other ISC-led **capacity-building initiatives** include: • Nutrition North Canada, which empowers Indigenous communities by promoting education and access to locally sourced foods, thereby reducing environmental impacts. • First Nations Solid Waste Management Initiative, which aims to improve the capacity of First Nations communities on reserves to develop sustainable waste management systems.

Going further

To further advance action on Target 16/15b, the federal government will:

- Develop a Food Loss and Waste Reduction Action Plan that outlines efforts to cut food waste in half by 2030 through a series of measures to drive system-wide collaboration and action.
- Explore how to advance circularity and circular value chains from an agricultural perspective through a Sustainable Agriculture Strategy.

The federal government may also explore additional opportunities, including:

- Improving how we measure and track Canada's transition to a more circular economy, including assessing international standards.
- Applying behavioural science methods and insights to help make sustainable choices more desirable and accessible for people in Canada.
- Enhancing traceability in Canada's forest sector to support the development of tools that enable traceability and geolocation for forest products.

TARGET 17: BIOSAFETY/BIOTECHNOLOGY

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."

Article 8(g) of the UN CBD calls upon Parties to establish or maintain means to regulate, manage, or control the risks associated with the use and release of living modified organisms (LMOs) resulting from biotechnology that are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity, taking into account the risks to human health. Biosafety measures are indispensable for ensuring that LMOs resulting from biotechnology are as safe as their conventional counterparts, and that any necessary environmental stewardship measures are implemented. The biosafety aspect of Article 19 seeks to ensure that processes and approaches to ensuring biosafety are made available and shared equitably, especially in developing countries.

Current status

Canadian legislation and regulations governing products of biotechnology, including the *Canadian Environmental Protection Act, 1999* (CEPA), provide a robust, science-based framework that helps to ensure products of biotechnology used in Canada are safe for both the environment and human health. Canada's sectoral approach, where specific federal departments oversee specific sectors aligned with their mandate, is reflected in legislation and regulations covering agriculture and food, pest management, safe use of pathogens/toxins, and the environment and human health as a whole. Regulations are proactively reviewed and updated to ensure they meet the new challenges posed by this rapidly evolving issue. Similarly, Canada has a robust, science-based regulatory system to address biosafety, through which science-based departments and agencies regularly review, update, and implement new policy and guidance solutions, and enact specific amendments to their regulations.

Recent guidance updates related to foods and plants with novel traits (under the *Food and Drugs Act* and *Seeds Act,* respectively), reflect the ongoing process of regulatory review and modernization. Moreover, the update to CEPA and proposed amendments to the New Substances Notification Regulations (Organisms) will integrate more open public engagement, in addition to better aligning these regulations with the current state of modern biotechnology. Canada's biosafety framework and regulatory programs are under federal jurisdiction; however, provinces and territories are kept abreast of developments on a regular basis, and Indigenous Peoples, municipalities, experts, and NGOs are consulted on an ad hoc basis.

In addition to its regulatory framework, Canada shares information and develops consistent biosafety approaches in international fora (e.g., the CBD and the Organisation for Economic Co-operation and Development – OECD) and makes this information available publicly.

Challenges and opportunities

While Canada is well placed to meet this target through the continued implementation of its existing regulatory programs, the implementation of Canada's obligations under Article 8(g) and Article 19 could be further improved. For example, Canada's regulatory approach with regards to biosafety focuses on assessing the environmental and human health risks associated with organisms as an end product,

rather than the process or technology used to develop them. Furthermore, CEPA applies to all living organisms, whether they are genetically modified or not. There are thus opportunities to help ensure that those discrepancies are either addressed or continue to not create impediments to the implementation of Canada's obligations.

Further development and verification of containment standards for LMOs and best practices would allow the biotechnology industry and private and public research facilities the ability to safely conduct their activities, as well as increase compliance promotion and strengthen capacity in biosafety measures for introduced organisms. Response to rare events of accidental release remains an area for improvement, although care is taken in the regulatory review, management, and control of risks identified with LMOs. Domestic and international horizon scanning for rapidly evolving LMOs, particularly in the area of artificial intelligence for the development of LMOs, also require continued efforts.

Finally, most federal agencies and departments in Canada that regulate LMOs have begun shifting toward enhanced public engagement initiatives, which include provinces and territories, Indigenous Peoples, and industry, among others, thus increasing awareness. There is an opportunity for Canada to be a world leader in this regard.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Performing regulatory reviews	ECCC and HC are undertaking a planned regulatory review and will propose amendments to the New Substances Notification Regulations (Organisms) to address issues identified as part of the update to the *Canadian Environmental Protection Act* by early 2025. In addition, they perform ongoing reviews (approximately every five years) of biosafety-related regulations and associated off-cycle policy and guidance implementation to address pressing issues or newly identified gaps.
Advancing science and research	ECCC is continuing to work with academic partners to **identify the benefits and costs of Canadian biotechnology products** within environmental realms. This includes consideration of the socio-economic benefits and costs to Indigenous communities. ECCC continues to identify where improvements in open science can help with the rapid transmission of knowledge on the benefits and risks of biotechnology. HC is taking the **recommendations of the Council of Canadian Academies' independent assessment** on gene-edited organisms for pest control (released in 2023) into consideration and implementing changes where feasible.
Strengthening capacity for biosafety measures	ECCC and HC are working to publish an **updated context-dependent microbial risk assessment framework** in 2024. ECCC and HC will carry out **mandatory consultations** when assessing whether a new living organism that is a vertebrate animal, a prescribed living organism, or group of living organisms, is toxic or capable of becoming toxic. The federal government also **collaborates with the Organisation for Economic Co-operation and Development** Secretariat and Member

AREA OF ACTION	HIGHLIGHTS
	countries in the development of biosafety consensus documents (e.g., microalgae).

Going further

To further advance action on Target 17, the federal government will:

- Work to complete proposed amendments to the New Substances Notification Regulations (Organisms) to address issues identified as part of the update to CEPA.
- Conduct a gap analysis of biosafety priorities within biotechnology research and review and collaborate with OECD Member countries with regards to research and guidance documents on safety in biotechnology.
- Undertake an analysis of Canada's potential ratification of the Cartagena Protocol and pursue Canada's participation in horizon scanning in synthetic biology, particularly in the area of artificial intelligence.
- Proactively share information with stakeholders on its biosafety approaches, its regulatory decisions, and the potential adverse impacts of the introduction of specific living organisms into the Canadian environment (e.g., Higher Organism Risk Assessment Framework, initiative on standards for containment measures of living organisms).
- Enhance its communication and capacity-building efforts, notably by updating web content on biotechnology, developing and implementing a stakeholder engagement strategy, continuing to conduct compliance promotion activities, and conduct public webinars on various biosafety and biotechnology topics.

The federal government may also explore additional opportunities, including:

- Considering biosafety issues should reviews of CEPA-equivalent acts (i.e., *Pest Control Products Act, Seeds Act*, *Feeds Act*, *Fertilizers Act*, *Health of Animals Act* and Regulations) take place.

TARGET 18: NEGATIVE AND POSITIVE INCENTIVES

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 per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity."

Note: The numerical value of $500B represents a global target that all Parties to the UN CBD have committed to collectively achieving.

Incentives can significantly impact biodiversity in ways that promote the conservation and sustainable use of nature, but they can also inadvertently promote harmful behaviours that contribute to biodiversity loss. Harmful incentives can lead to the overexploitation of natural resources, reduced soil fertility, greater levels of pollution, and weakened environmental protection. Many of these negative outcomes impact both the long-term economic viability of those who work with nature and the wider public that relies on nature. Public financing needs to be effectively and efficiently allocated toward those activities that create the best outcomes for Canadians and their well-being, without undermining the long-term sustainability of our natural assets. Well-designed incentives can lead to positive nature outcomes while supporting a more equitable and sustainable economy.

Current status

Article 11 of the CBD seeks to promote economically and socially sound measures that act as incentives for the conservation and sustainable use of biodiversity. In recent years, Canada has been scaling up positive incentives for biodiversity (per indicator 18.1). A non-exhaustive list of recent efforts includes the Canada Nature Fund, the Natural Climate Solutions Fund, the Low Carbon Economy Fund, the EcoAction Community Funding Program, and many of the Green Infrastructure programs delivered through various departments. Target 18 work, in concert with related targets, will further advance Canada's efforts to scale up positive incentives for the conservation and sustainable use of biodiversity.

Target 18 also calls for the reform of harmful incentives. Like many of its global partners, Canada's progress toward both identifying, and eliminating, phasing out, or reforming the full suite of incentives that may be harmful for biodiversity is at a very early stage of development. Separately, in July 2023, Canada was the first G20 country to deliver on its commitment to phase out inefficient fossil fuel subsidies (IFFS), including being the first country to release a rigorous analytical guide that both fulfills our commitment and transparently supports action. These efforts provide critical insights for developing a broader catalogue and assessment framework for federal incentives related to biodiversity. To advance Target 18, efforts will need to be considered across a similarly broad cross-section of the Canadian economy to reflect the important interactions between people and the planet. As well, efforts will need to be undertaken in consultation with a wide spectrum of partners, in recognition of important sectoral implications, and in acknowledgement of the role and jurisdiction of other levels of government and Indigenous Peoples.

Challenges and opportunities

Globally, the benefits derived from nature and its diversity of goods and services has been estimated to be approximately $125 trillion annually. Progress on Target 18 is an opportunity to support our nature-based economy by optimizing public financial resources for biodiversity conservation, sustainable use, and benefit sharing. We can build on existing work related to phasing out IFFS and benefit from lessons learned; however, addressing biodiversity incentives implies additional complexity and the scope of assessment required will be broader. For example, while efforts to address IFFS have indirect impacts across the whole economy, incentives have mainly focused on a single sector (oil and gas). In contrast, incentives that impact biodiversity are used in many sectors of Canada's economy. Scalability in the approach, analysis of multiple policy outcomes and trade-offs with other environmental and socio-economic issues, and appropriate implementation pathways must be considered. Analysis will be essential to advancing this target in a manner that reflects Canadian values and interests. For example, the federal government will need to ensure policy coherence in its approach to climate and biodiversity subsidies, as subsidies that are strategically important from a climate/net-zero economy perspective could have environmental consequences for biodiversity, if not planned accordingly.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Eliminating inefficient fossil fuel subsidies (IFFS)	In July 2023, Canada released the Inefficient Fossil Fuel Subsidies Assessment Framework and Guidelines, the first country to deliver on G7 and G20 commitments to phase out IFFS. The Assessment Framework is used to determine which tax and non-tax measures constitute an IFFS, while the Guidelines are meant to avoid the creation of any new inefficient subsides. Building off this work, the federal government is now in the process of developing a plan to phase out public financing for fossil fuels by fall 2024. These efforts will inform how to approach plans under Target 18 to eliminate, phase out, or reform incentives that are harmful to biodiversity.
Investing in nature-positive actions	The federal government invests in the conservation and sustainable use of biodiversity. For example, recent historic investments include Canada's five-year $2.3B Enhanced Nature Legacy initiative to recover species at risk and protect ecosystems, landscapes, and biodiversity in Canada. Innovative tools are also being tested to scale up nature-positive investments, such as the pilot National Conservation Exchange (led by ECCC) to recognize the biodiversity value of private sector and industry conservation investments.

Going further

To further advance action on Target 18, the federal government will:

- By mid-2025, undertake foundational work to define incentives, including subsidies, compile an inventory of incentives from sectors and activities that may have an impact on biodiversity, and develop a framework to assess incentives for their impacts.
- Build on current or planned initiatives to address negative incentives affecting biodiversity, seeking to harness synergies and enhance coherence with other initiatives. For example, once

entered into force, the World Trade Organization's Agreement on Fisheries Subsidies will help in addressing certain negative incentives in the marine fisheries sector.

- By 2030, substantially and progressively reduce the value of incentives and subsidies with harmful impacts on biodiversity, starting with the most harmful, while scaling up positive incentives for the conservation and sustainable use of biodiversity through work on other targets. This work will include developing an implementation plan, with key partners, to eliminate, phase out, and/or reform incentives, in a proportionate, just, fair, effective, and equitable way.

The federal government may also explore additional opportunities, including:

- Considering how work on incentives can enable complementary nature-positive activities, such as improving the availability and reporting of information related to incentives, and better understanding how to apply biodiversity impact assessments in future policy development.
- Sharing lessons learned and innovative solutions with international partners and domestic stakeholders.

TARGET 19: RESOURCE MOBILIZATION – FINANCIAL RESOURCES

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 national biodiversity strategies and action plans, by 2030 mobilizing at least 200 billion United States dollars per year, 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 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."

Notes:

- *In the Canadian context, "Indigenous Peoples" have specific and distinct rights, whereas "local communities" does not exist as a formal or legal term. As such, the 2030 Strategy highlights Indigenous Peoples. For a more in-depth explanation, please refer to the Annex 1 introductory text.*
- *Numerical values represent global targets that all Parties to the UN CBD have committed to collectively achieving.*

Action to mobilize resources must be taken if biodiversity loss is to be halted and reversed. Support from developed countries like Canada is essential to making conservation efforts possible in developing countries. Canada's existing approach to official development assistance (ODA) recognizes that the poorest and most vulnerable countries require support to meet our collective environmental goals. At the same time, ODA alone cannot fill the biodiversity financing gap. Substantially and progressively increasing resources from all sources—both internationally and in Canada—is essential.

Current status

Biodiversity finance is still nascent, perceived as more complex and in competition with finite climate funding. Initial efforts from Canada are underway but additional actions are needed to fully meet this target by 2030. Domestically, approximately $12.5B in federal government domestic resources for nature were announced in recent years, including Enhanced Nature Legacy funding and Project Finance for Permanence (PFPs). Canada has raised $9B through two green bond issuances, raising capital to finance green government initiatives, including terrestrial and aquatic biodiversity. There is also a positive trend in new biodiversity investments from other actors, including the important role of

provinces, territories, and municipalities, as well as philanthropic initiatives matching federal investments in several programs, but it is too early to assess if these will grow sufficiently to fill the funding gap.

Internationally, federal funding for developing countries has been planned and announced until 2026. This includes $5.3B in climate finance (2021-2026), which dedicates 20% of funding to projects that leverage nature-based climate solutions and contribute to biodiversity co-benefits, $350M to a new International Biodiversity Program, as well as $241.8M to the Global Environment Facility eighth replenishment, which dedicates 36% of resources to the biodiversity focal area. Considering the current global funding gap and available public resources, it is essential to integrate funding for multiple environmental issues and aim for co-benefits. Canada also endorsed the COP28 Joint Statement on Climate, Nature, and People, committing to scale finance and investments for climate and nature in a synergistic manner.

Canada will also continue to prioritize mobilizing philanthropic and private sector finance, as governments alone cannot deliver the financing needed to halt and reverse biodiversity loss. Based on identified needs, public funding is deployed as a market and community builder, as a catalyst for additional capital, or as pioneering capital in under-invested areas. Canada is working with climate and environment funds, Multilateral Development Banks, and International Financial Institutions who have strong relationships with the private sector and a range of innovative financial tools that can be leveraged. For example, 25% of funds invested in the Global Biodiversity Framework Fund are expected to be programmed through Multilateral Development Banks and International Financial Institutions.

Challenges and opportunities

Meeting the financial goals of this target at a global level will require a collective doubling by 2025 and tripling by 2030 of current annual contributions by all actors in the international public finance space. This means all relevant international and domestic actors, including governments at all levels, the financial industry, philanthropists, the private and non-profit sectors, Indigenous Peoples, and community-based groups must work collaboratively to scale up investments in biodiversity and advance innovative ways to mobilize resources to support biodiversity outcomes.

Increasing resource mobilization for biodiversity is a unique opportunity to support long-term productivity and growth. This is especially true for Canada, a largely resource-based economy, as at least half of the world's Global Domestic Product is dependent on nature, and biodiversity loss and ecosystem collapse is identified as the third-highest risk to economic growth on a ten-year horizon in the 2024 World Economic Forum Global Risk Report. Clear regulatory signals, market-based instruments, natural capital accounting and valuation, access to reliable and relevant local biodiversity data for business decision making, and the availability of innovative risk-reducing blended finance instruments are among the key elements necessary to build the foundation to successfully increase financial resources for biodiversity in Canada.

Building on existing actions, such as leveraging Indigenous-led nature initiatives (e.g., PFPs) and Canada's Green Bond Program, the government is exploring the potential of a broad suite of tools to spur nature-positive investments and the expansion of programs focused on climate-related finance to leverage their existing nature-positive activities for biodiversity funding. There is an opportunity to capitalize on successful initiatives such as the Net-Zero Challenge to create a space for collaboration with the private sector and foment their commitment to nature-positive activities.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Delivering federal nature and biodiversity domestic funding	Recent federal funding for nature and biodiversity amounting to approximately $12.5B is managed by various departments, including ECCC, DFO, PC and NRCan, and focuses on a series of priorities including species at risk, conservation, and restoration, among others. Some of these investments include: • $1.3B for the Nature Legacy investments • $2.3B for the Enhanced Nature Legacy fund • $976.8M for Marine Conservation Targets • Up to $800M for Project Finance for Permanence (to support up to four Indigenous-led conservation initiatives) • $5B to the Natural Climate Solutions Fund
Mobilizing capital through green bonds	Canada issued its first green bond in March 2022, which saw a successful 7.5-year, $5B issuance, and a final order book of over $11B, and successfully completed its second $4B issuance in March 2024. Green bonds unlock private financing to speed up projects such as green infrastructure and nature conservation.
Implementing Canada's International Biodiversity Program	New and additional funding of $350M was announced in 2022 to advance conservation efforts and support developing countries in implementing the KMGBF. GAC manages the funding with policy support from ECCC. This includes Canada's announcement of $200M as the first country to pledge to the Global Biodiversity Framework Fund. Other supported projects will be selected and implemented between April 2024 and March 2026.
Contributing to the Global Environment Facility (GEF)	Canada is the seventh largest donor to the GEF with its recent 2022-2026 pledge. The GEF supports developing countries in meeting their obligations under several multilateral environmental agreements, including the CBD. Canada's contribution is managed by GAC, who holds Canada's seat on the GEF Council with support from ECCC. The GEF-8 biodiversity focal area will be the most funded of all (36% of the $5.33B replenishment), in addition to other focal areas and integrated programs that also support KMGBF targets.
Delivering the nature-based solutions and biodiversity co-benefits component of Canada's climate finance	Canada dedicates 20% of its $5.3B climate finance commitment (2021-2026) to projects that leverage nature-based climate solutions and contribute biodiversity co-benefits. It recognizes that while climate change is a key driver of biodiversity loss, the conservation and sustainable use of biodiversity is also crucial to mitigating and adapting to climate change. GAC is responsible for this initiative, in collaboration with ECCC.

Going further

To further advance action on Target 19, the federal government will:

- Continue to identify how it can better use its funding instruments and convening power to attract private sector resources for a whole-of-society effort to protect, conserve, and restore nature at the domestic and international levels.

The federal government may also explore additional opportunities, including:

- Developing a national resource mobilization plan and exploring models of public-private partnerships, blended finance, impact funds, green bonds, and fiscal incentives to de-risk and spur investments and help build a nature-positive economy.
- Supporting development of natural capital accounting and valuation, the development of biodiversity-related tools for the financial sector, and leveraging existing voluntary private sector initiatives, such as the Net-Zero Challenge.
- Creating a public listing of companies' nature-positive activities to facilitate private sector involvement and recognition.
- Providing the support and tools necessary to mainstream biodiversity more deeply within the Canadian economy.

TARGET 20: CAPACITY BUILDING – OTHER RESOURCES FOR IMPLEMENTATION

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."

In order to implement and achieve the goals and targets of the KMGBF, countries must have the necessary capacity and expertise. Many countries with high levels of biodiversity lack resources and face internal challenges in advancing and applying scientific knowledge and technology, slowing the rate at which biodiversity can be conserved globally. Canada is well positioned to play a role in sharing knowledge and information, contributing to global capacity building, and supporting implementation strategies, while also learning from other countries.

Current status

Target 20 is closely related to the Long-Term Strategic Framework for Capacity-Building and Development under the CBD, which includes a vision that by 2030, governments and relevant non-government actors will have the requisite capacities to effectively and sustainably contribute to the achievement of the goals and targets of the KMGBF. Efforts are still needed to attain this vision. Developing countries, in particular Least Developed Countries and Small Island Developing States, as well as countries with economies in transition, are seeking increased international assistance for capacity building to support the implementation of the KMGBF.

Canada has committed over $1.65B in biodiversity-related official development assistance for the period of 2021-2026. Existing priority actions include implementing Canada's $350M International Biodiversity Program (2023-2026), Canada's $241.8M (2022-2027) contribution to the eighth replenishment of the Global Environment Facility, and the Nature-based Solutions and Biodiversity Co-benefits component of the International Climate Finance Program. While these commitments are noted in the Target 19 implementation plan, they also contribute to Target 20, as they include support for capacity building and development, technology transfer, and technical and scientific cooperation. Canada also provides technical assistance to partner countries, including developing countries, via the implementation of environment commitments associated with Free Trade Agreements, bilateral Memoranda of Understanding on environmental cooperation, as well as via scientific and technical cooperation between federal departments and foreign counterparts on nature-related issues.

Contributions can come from many different communities, organizations, and knowledge systems. For example, recognizing the importance of Indigenous environmental leadership and the unique knowledge, practices, and experiences of Indigenous Peoples around the world, the new Global Biodiversity Framework Fund will allocate a 20% aspirational target for Indigenous-led initiatives in developing countries to protect and conserve biodiversity. Also, the Indigenous Peoples Partnering for Climate initiative aims to foster partnerships between Indigenous Peoples in Canada with Indigenous Peoples in developing countries to build the latter's climate resilience. The initiative emphasizes the importance of Indigenous leadership for climate change adaptation and the protection of biodiversity.

Challenges and opportunities

Many of the programs, tools, and knowledge we have developed for conserving nature in Canada are transferable. There are strong programs and organizations in Canada devoted to biodiversity studies and conservation in other countries, as well as practices and innovations that can be shared for capacity building. Capacity building can also be supported in other international efforts, such as under the National Biodiversity Strategy and Action Plan (NBSAP) Accelerator Partnership or via the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. It will be critical to ensure approaches are inclusive and regionally appropriate, respecting the circumstances, priorities, and capabilities of different parties. Biodiversity conservation is a long-term endeavour and there will be time lags between capacity-building efforts and outcomes for biodiversity. For example, the focus of the International Biodiversity Program will be on investing in developing country capacity (i.e., outputs) with a limited change in actual behaviour expected (i.e., outcomes) until 2030 and beyond.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Partnering with other countries for the conservation and sustainable management of global biodiversity	ECCC works collaboratively with domestic NGOs in several Latin American countries to build capacity in scientific research, monitoring, conservation outreach, and education for the protection of migratory birds and to align migratory bird conservation needs with those of people in working landscapes, Indigenous communities, and domestic biodiversity.
Undertaking bilateral technical cooperation on biodiversity	Canada will continue to collaborate with key partner countries on scientific and technical cooperation, including as part of the implementation of its free trade agreements and memoranda of understanding on environmental cooperation.
Integrating biodiversity considerations into international climate finance	Led by GAC, the federal government has committed to allocating a minimum of 20% of its $5.3B climate finance commitment (2021-2026), over $1B, to projects that leverage nature-based climate solutions and contribute biodiversity co-benefits. Through this programming, Canada supports developing countries in building the capacity needed to design, develop, and implement nature-based climate solutions that also benefit biodiversity, while considering the needs of Indigenous Peoples and diverse stakeholders, including women and youth.
Contributing to the Global Environment Facility (GEF)	Canada's $241.8M contribution to the eighth replenishment of the GEF (2022-2026) includes contributions to the biodiversity focal area. Through its programming, the GEF supports developing countries in building capacity to meet their obligations under the CBD. Canada also leverages its Council seat on the GEF to advocate for capacity-building support to Least Developed Countries and Small Island Developing States. In the most recent eighth replenishment (US$5.33B), 36% of resources were dedicated to the Fund's biodiversity focal area.

Going further

The federal government may explore additional opportunities, including:

- Supporting and sharing information and lessons learned with international partners on KMGBF implementation.
- Strengthening collaboration between stakeholders to increase the effectiveness of existing actions, expand their reach, and ensure that they directly target identified capacity-building needs.

TARGET 21: KNOWLEDGE SHARING

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, in accordance with national legislation."

Note: In the Canadian context, "Indigenous Peoples" have specific and distinct rights, whereas "local communities" does not exist as a formal or legal term. As such, the 2030 Strategy highlights Indigenous Peoples. For a more in-depth explanation, please refer to the Annex 1 introductory text.

Achieving Target 21 is essential for inclusive, evidence-based decision making and reaching all 2030 targets. Data, information, and knowledge are the building blocks that tell us about the state of biodiversity, allow us to identify and implement priority actions, as well as track, evaluate, and report on our progress. The best available data, information, and knowledge from western science and Indigenous Knowledge must be made accessible to everyone—be they Indigenous Peoples, governments, industry, or individuals—while respecting and upholding Indigenous data sovereignty. Mobilizing biodiversity data, mobilizing people, and mobilizing insights will help Canadians connect to nature and empower them to understand and value biodiversity. It will also provide Canada's private sector (e.g., resource companies, housing developers) with the information needed to ensure decisions are aligned with conservation objectives, thereby providing certainty and reducing avoidable delays.

Current status

Canada has a strong and growing biodiversity data, information, and knowledge base, but it needs to be scaled up and mobilized to achieve Target 21. The 2020 Biodiversity Goals and Targets for Canada Final Report showed that progress was made on knowledge sharing targets (Targets 14 and 15, see Table 2 in Annex 5), but at an insufficient rate. Achieving Target 21 requires the equitable consideration of both Indigenous Knowledge and western science, guided by the *UN Declaration Act*'s implementation and Indigenous data sovereignty principles, such as First Nations' principles of ownership, control, access, and possession (OCAP®), Principles of Ethical Métis Research, National Inuit Strategy on Research, and CARE Principles. It also requires participation from all of society for maximum impact.

The federal government collects and openly publishes data and information to support conservation decision making. For example, the Open Science and Data Platform (ODSP) lets users access over 150,000 records from federal, provincial, and territorial governments to better understand the cumulative effects of human activities, including on biodiversity. The ODSP features educational content, scientific publications, and geospatial datasets focused on a variety of topics, including biodiversity, species at risk, and forests, and is exploring onboarding information from external sources to broaden understanding of cumulative effects.

Canada has extensive biological collections that document species over time and space, which are gradually being digitized for greater impact. Provincial and territorial governments also gather biodiversity data and are working to enhance accessibility through initiatives like Conservation Data Centres. Despite these efforts, biodiversity data remains dispersed and often inaccessible. By harnessing

the potential of this data, Canada can support conservation decision making, navigate trade-offs in a transparent way, and support industry in making informed, sustainable choices.

To meet the scale of the 2050 vision, knowledge must be shared across all of society, with the federal government acting as a convener and contributor.

Challenges and opportunities

Despite progress made on open data, more work is needed to increase the integration, interoperability, and accessibility of valuable biodiversity data. Data management infrastructures must be able to keep up with vast and increasing rates of data collection. Good practices across the full lifecycle of data, from collection to publication, are critical for stronger, better-informed policies and planning, and improved program and service delivery.

Target 21 is an opportunity to support Indigenous self-determination, data sovereignty, and equity in knowledge systems, and to recognize and revitalize Indigenous cultures and languages, which cannot be separated from Indigenous Knowledge systems. Open data principles are not always acceptable to Indigenous Peoples because of previous extractive practices and the lack of structures in place for appropriate data protection.

The synthesis of the significant volume of biodiversity data and information into knowledge to support decision making requires considerable effort and coordination. Authoritative sources can play a key role in combating misinformation and ensuring the best-available information is used for conservation, but clear communication and governance across the many decision-making bodies—both internationally and domestically—is needed to reduce duplication and improve conservation outcomes. Working to achieve Target 21 is an opportunity to leverage technology, stimulate innovation, harness the contributions of citizen science, and ultimately create a strong network of biodiversity institutions.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Collecting and publishing data and information	DFO, ECCC, NRCan, and PC deliver and/or support a variety of initiatives to collect, manage, and disseminate **biodiversity information**—including data collected through citizen science—such as ECCC's Wild Species report, NRCan's State of Canada's Forests report, Birds Canada's NatureCounts platform, DFO's Aquatic Species at Risk mapping tool, and the Canadian Environmental Sustainability Indicators program. In addition, federal departments house important biological collections, manage and mobilize their associated data (e.g., AAFC, NRCan), and collect biodiversity data as part of their mandate (e.g., DFO, ECCC, PC). Federal departments will continue to publish data to enable interoperability and reuse. StatCan is continuing to develop the **Census of Environment** (CoE), which is designed to present environmental data about ecosystems and the benefits they provide to Canadians, following the UN statistical standard System of Environmental Economic Accounting – Ecosystem Accounting. The CoE will track changes in ecosystem assets and link this information to economic and other human activities.

AREA OF ACTION	HIGHLIGHTS
	CSA, ECCC, NRCan, and other federal partners continue to advance Canada's **Satellite Earth Observation (SEO) Strategy**, recognizing the contributions of SEO data to national priorities like biodiversity conservation.
Supporting Indigenous Knowledge systems and data sovereignty	There are several existing efforts led by AAFC, CIRNAC, DFO, ECCC, IAAC, NRCan, and PC, including dedicated groups working to recognize, elevate, guide, and incorporate Indigenous Knowledge in federal decision making; projects and programs designed to increase involvement of and collaboration with Indigenous Peoples in knowledge generation related to conservation and sustainable use; support for Indigenous data sovereignty; and work to enhance the equitable consideration of Indigenous Knowledge to assist in assessing, mitigating, and monitoring effects related to biodiversity impacts for major projects under the *Impact Assessment Act*.
Synthesizing and sharing existing knowledge and generating new knowledge	ECCC is leading Canada's contribution on the **Continental Assessment of Biodiversity**, a shared report with Mexico and the US that focuses on policy options to conserve biodiversity in the face of climate change. (Link to Target 8) Work to build and share **knowledge to support conservation decision-making** is ongoing and spans all targets. Key areas include coastal and marine ecosystems and marine protected areas (DFO, ECCC, NRCC, NRCan, PC, TC); fisheries resources (DFO, ECCC); species at risk, habitats, and ecosystems (DFO, ECCC, PC); terrestrial protected areas, lands, and forests (AAFC, ECCC, NRCan, PC); marine pollution response (DFO, ECCC); and migratory birds (ECCC). Knowledge sharing mechanisms exist both domestically (e.g., National Boreal Caribou Knowledge Consortium) and internationally (e.g., Commission for Environmental Cooperation).
Raising awareness	ECCC is developing a **National Environmental Learning Framework** to increase awareness of biodiversity, climate change, and other environmental issues in K-12 youth, their educators, and their families. Set for release by 2025, the framework will support Canadians' abilities to make informed and responsible decisions with regards to actions that may affect the environment.

Going further

To further advance action on Target 21, the federal government will:

- Assemble and publish an online compendium of biodiversity resources to facilitate access to trusted sources of data and information.

The federal government may also explore additional opportunities, including:

- Improving the availability of existing data and information through data digitization, secure storage, and open publication, including facilitating access to authoritative information about the state of biodiversity and enhancing links among domestic and international data platforms.
- Filling critical knowledge gaps (e.g., invasive alien species, migratory birds, species at risk) and undertaking priority monitoring and assessments of ecosystems, biodiversity, and conservation actions.

- Co-developing approaches to bridge, braid, and weave Indigenous Knowledge and western science to support conservation actions and contribute to making the equitable consideration of diverse knowledge systems standard practice in biodiversity conservation.
- Mobilizing knowledge and strengthening two-way communication between knowledge generators and decision makers from all sectors to ensure that decision making and reporting are supported by best-available knowledge.

TARGET 22: INCLUSION OF INDIGENOUS PEOPLES, WOMEN/GIRLS, YOUTH/CHILDREN, PERSONS WITH DISABILITIES, AND ENVIRONMENTAL HUMAN RIGHTS DEFENDERS IN DECISION MAKING

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."

Notes:

- *In the Canadian context, "Indigenous Peoples" have specific and distinct rights, whereas "local communities" does not exist as a formal or legal term. As such, the 2030 Strategy highlights Indigenous Peoples. For a more in-depth explanation, please refer to the Annex 1 introductory text.*
- *While Targets 22 and 23 are very closely related due to the intersectionality of sex, gender, and other identity factors, Target 22 focuses on Indigenous women, Indigenous girls, and Indigenous 2SLGBTQI+ individuals and Target 23 focuses on gender equality and supporting a holistic gender-responsive approach to the 2030 Strategy.*

Target 22 is horizontal and touches all targets in the 2030 Strategy. It is crucial that transformative change be driven by the experiences and knowledge of Indigenous Peoples—including Indigenous Peoples who are off-reserve and not represented by existing agreements or National Indigenous Organizations—as well as women, girls, 2SLGBTQI+ individuals, children, youth, persons with disabilities, and environmental human rights defenders (EHRDs). Strong and meaningful collaboration ensures diverse viewpoints and knowledge systems are respected in decision making.

Current status

Indigenous Peoples

For a successful 2030 Strategy, the expertise and leadership of First Nations, Inuit, and the Métis Nation should be prioritized. This involves creating direct pathways for Indigenous Peoples to engage in co-development and be active participants in how decisions are made to support biodiversity conservation. The federal government has a duty to consult and accommodate Indigenous Peoples regarding decisions that may potentially adversely affect their rights. Indigenous Peoples possess constitutionally protected Treaty and Aboriginal Rights under Section 35 of the *Constitution Act, 1982* and the *UN Declaration Act*. Further, while recognizing the rights, lands, territories, and resources of Indigenous Peoples,[65] the federal government aims to ensure decisions are made through meaningful engagement guided by the principles of free, prior, and informed consent (FPIC).

The 2030 Strategy supports the *UN Declaration Act*, its 46 articles,[66] and Canada's *UN Declaration Act* Action Plan (2023-2028). The Action Plan was developed with Indigenous Peoples to outline concrete actions the Government of Canada needs to take in partnership with Indigenous Peoples to implement the Declaration's principles and rights. Indigenous leadership in designating and managing protected

[65] Principles respecting the Government of Canada's relationship with Indigenous Peoples
[66] *UN Declaration on the Rights of Indigenous Peoples Act*

areas (PAs) and other effective area-based conservation measures (OECMs) is crucial for reconciliation, with over 100,000 km^2 of Indigenous-led PAs and OECMs established in Canada.

Indigenous women, Indigenous girls, and Indigenous 2SLGBTQI+ individuals

Indigenous women, girls, and 2SLGBTQI+ individuals hold specialized Indigenous Knowledge and have had unique experiences. The Truth and Reconciliation Commission identified that colonialism contributes to their disempowerment. Studies like the 2017 National Inquiry into Missing and Murdered Indigenous Women and Girls (MMIWG) Interim Report highlight the devaluation of Indigenous women's perspectives, leading to high rates of violence against them. The federal government is addressing the discrimination and violence they face through initiatives such as the Federal Pathway to Address Missing and Murdered Indigenous Women and Girls and 2SLGBTQQIA+ People. The International Union for Conservation of Nature (IUCN) found that there is a complex and interlinking nature of gender-based violence across three main contexts: access to and control of natural resources; environmental pressure and threats; and environmental action to defend and conserve ecosystems and resources.[67] The CBD's Gender Plan of Action outline measures to prevent and respond to gender-based violence, while emphasizing the need to restore Indigenous women's and girls' sacred connection with biodiversity and nature.

Children and youth

The voices of children and youth need to be meaningfully considered in biodiversity conservation decision making because they will inherit this planet. One way their voices are heard is through the Environment and Climate Change Youth Council (ECCYC), which gives young people a chance to share their perspectives about what they think is important to help protect and conserve biodiversity in Canada. The ECCYC and the Canadian Youth Biodiversity Network ensure that young people from different backgrounds get a chance to join the formal Canadian Delegation at CBD Conference of the Parties meetings.

Persons with disabilities

Canada has legislation such as the *Accessible Canada Act* (ACA), which aims for a barrier-free country by 2040. Federal departments must publish accessibility plans every three years, and the ACA's principle of "Nothing Without Us" emphasizes consulting persons with disabilities[68] in government decisions. For instance, PC's Accessibility Action Plan (2022-2025) shows their commitment to removing barriers in parks for everyone, regardless of disability.

Environmental human rights defenders

In Canada, many EHRDs are Indigenous Peoples and advocate for everyone's right to a safe, healthy, and sustainable environment. Although GAC has released best practices in their report, Voices at Risk, to aid discussions with EHRDs, governments, communities, and businesses, understanding their firsthand experiences to inform biodiversity decisions is important.

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[67] According to the IUCN, patterns of gender-based violence are observed across environmental contexts, affecting the security and well-being of nations, communities, and individuals, and jeopardizing meeting objectives that help conservation objectives.

[68] Disability "means any impairment, including a physical, mental, intellectual, cognitive, learning, communication or sensory impairment — or a functional limitation — whether permanent, temporary or episodic in nature, or evident or not, that, in interaction with a barrier, hinders a person's full and equal participation in society" - *Accessible Canada Act*

Challenges and opportunities

There is a need to improve the general understanding of the challenges, obstacles, and enabling factors that Indigenous Peoples, women, girls, 2SLGBTQI+ individuals, children, youth, persons with disabilities, and EHRDs encounter when looking to participate actively and meaningfully in biodiversity decision-making processes. Target 22 offers an opportunity to establish baseline data and explore different data collection methods to help uncover trends on how different people participate in biodiversity decision-making fora. This data could inform innovative thinking on inclusivity in biodiversity decision making, as well as strong and effective policies and programs that protect biodiversity and benefit everyone.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Advancing reconciliation	Implementing the *UN Declaration Act* across the federal government is crucial for renewing Canada's relationship with Indigenous Peoples, emphasizing the importance of free, prior, and informed consent (FPIC). The **2023-2028 *UN Declaration Act* Action Plan** includes measures related to the environment and conservation initiatives, focusing on shared governance and decision making with Indigenous Peoples. The 2030 Strategy must align with Indigenous rights as per the Declaration, requiring meaningful consultation and cooperation. The **National Benefit Sharing Framework** at NRCan ensures direct benefits for First Nations, Inuit, and the Métis Nation from major resource projects.
Supporting Indigenous-led conservation and stewardship	Federal initiatives showcasing **Indigenous-led conservation** include Project Finance for Permanence, Indigenous Guardians programs, and Indigenous-Led Area-Based Conservation efforts. Additionally, initiatives like Enhanced Nature Legacy and the Oceans Management Contribution program highlight the involvement of Indigenous Peoples. Indigenous partners actively contribute to establishing Canada's **Nature Agreements**, such as the Tripartite Framework Agreement between Canada, British Columbia, and the First Nations Leadership Council, which aims to strengthen nature conservation province wide. Internationally, the federal government supports Indigenous-led initiatives through its $200M commitment to the **Global Biodiversity Framework Fund**. PC is co-designing and co-developing an **Indigenous Stewardship Policy** with the Indigenous Stewardship Circle to enhance Indigenous Peoples' roles in decision-making processes for protected areas. The Indigenous Stewardship Circle provides ongoing advice to PC.
Ending violence against Indigenous women, Indigenous girls, and Indigenous 2SLGBTQI+ individuals	In response to the Truth and Reconciliation Commission's Calls to Action, the Government of Canada launched the National Inquiry into Missing and Murdered Indigenous Women and Girls (MMIWG) in 2016. This led to the launch of the MMIWG National Action Plan: Ending Violence Against Indigenous Women, Girls, and 2SLGBTQQIA+ People, and the Federal Pathway to Address Missing and Murdered Indigenous Women, Girls, and 2SLGBTQQIA+ People. Canada's approach to addressing the root causes of violence against Indigenous women, girls, and 2SLGBTQI+ individuals is

AREA OF ACTION	HIGHLIGHTS
	rooted in their sacred connections with lands and waters, through respecting cultural and spiritual approaches.[69]
Enhancing equitable consideration of Indigenous Knowledge in impact assessments	IAAC is leading work to enhance the equitable consideration of Indigenous Knowledge and western science that aims to better assist in assessing, mitigating, and monitoring, as appropriate, effects related to biodiversity impacts for major projects under the *Impact Assessment Act*.
Engaging with Indigenous Peoples on national biodiversity policy	Co-developed distinctions-based Indigenous Nature Tables enable ongoing collaboration between the federal government and the Métis Nation, First Nations, and Inuit representatives, fostering inclusive dialogue and strategic solutions for shared biodiversity priorities.
Ensuring a diverse Canadian Delegation at international fora	ECCC and PC will continue to engage Indigenous Peoples, women, youth, and stakeholders to ensure diverse perspectives at international meetings, such as at the CBD or IUCN Congress, and to help shape Canada's negotiating positions.
Engaging with youth on biodiversity and nature	Within Canada and supported by ECCC, the Environment and Climate Change Youth Council provides advice to the Minister of Environment and Climate Change and ECCC on key environmental and climate issues, including biodiversity conservation. Internationally, ECCC ensures that youth are also offered opportunities to join Canada's formal delegation to the CBD meetings and works closely with the Global Youth Biodiversity Network and Canadian Youth Biodiversity Network to help identify youth delegates.
Upholding the rights of persons with disabilities	The Government of Canada ratified the **United Nations Convention on the Rights of Persons with Disabilities** in 2010. This is an international treaty aimed at protecting the rights and dignity of persons with disabilities without discrimination. The ***Accessible Canada Act*** aims to benefit all persons, including persons with disabilities, through the realization of a Canada without barriers. The **Disability Inclusion Action Plan** is a comprehensive, whole-of-government approach to disability inclusion.
Making national parks accessible	To ensure that all visitors have meaningful and safe experiences at Canada's national parks while being mindful on how to improve ecological integrity outcomes, PC will continue to implement strategies focused on protecting biodiversity while continuing to improve accessibility and inclusion at national parks.

[69] The Final Report highlights the links between resource development projects and violence against Indigenous women, girls and 2SLGBTQQIA+ people. One of the Calls to Justice focuses on the need for a comprehensive GBA Plus within impact assessment to uncover and address project impacts on Indigenous women, girls and 2SLGBTQQIA+ people.

AREA OF ACTION	HIGHLIGHTS
Implementing other federal tools and approaches encouraging diverse participation in biodiversity conservation	Several federal instruments exist to encourage and promote diversity and inclusion in biodiversity decision-making processes and access to information. Such tools include the fairness and inclusion lens used in the Quality of Life Framework, the Gender-Based Analysis (GBA) Plus tool, the *Species at Risk Act* Section 11 Conservation Agreements, Intergovernmental Partnership Agreements, the creation of ECCC's Indigenous Science Division, the Nature Advisory Committee, PC's Indigenous Fire Circle, as well as the Youth Impact Analysis and the Children's Rights Impact Assessment Tools.

Going further

To further advance action on Target 22, the federal government will:

- Work on new approaches to funding that would enable federal departments to work toward a one-window strategic partnership approach for external partners, including Indigenous Peoples, to support the implementation of the 2030 Strategy.
- Review the CBD's Gender Plan of Action and assess how best to meet the objectives of this plan that are relevant in Canada and promote full, equitable, inclusive, and effective participation of Indigenous women, Indigenous girls, and Indigenous 2SLGBTQI+ individuals in biodiversity decision-making processes.

The federal government may also explore additional opportunities, including:

- Developing an internal framework to streamline and strengthen opportunities for Indigenous Rights holders.
- Exploring how the federal GBA Plus tool could be applied more effectively and broadly in a biodiversity context, to better consider intersectional perspectives (i.e., how multiple identity factors are interdependent and often combined).
- Enhancing implementation of the ACA in a biodiversity conservation context.
- Exploring opportunities to better understand the links between human rights work and biodiversity conservation (e.g., exploring how meaningful indicators could be developed to measure progress and how data could be disaggregated using an intersectional lens).

TARGET 23: GENDER EQUALITY

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."

The impacts of biodiversity loss, climate change, and other environmental issues can be experienced differently by people of all genders due to pre-existing social inequalities. Strategies for preventing biodiversity loss must involve and empower women and gender-diverse individuals, while acknowledging their unique experiences and needs.

Gender equality means that women, girls, and gender-diverse people can participate fully in all areas of life. This leads to an inclusive and democratic society where everyone benefits from equal rights, access to opportunities, and the ability to reach their full potential. At the same time, identity goes beyond sex and gender. This target supports an intersectional approach that reflects how other factors, such as age, disability, education, ethnicity, economic status, geography (including rurality), language, race, religion, and sexual orientation may impact how different groups experience biodiversity policies. For example, the 2030 Strategy supports the unique experiences of Indigenous women and gender-diverse people in decisions related to biodiversity, including by reflecting their leadership, specific connections to nature, and the particular ways that they are affected by biodiversity loss.

Intersectional action on gender equality makes biodiversity decision making more inclusive, supports the three objectives of the CBD (the conservation of biodiversity, the sustainable use of the components of biodiversity, and the fair and equitable sharing of the benefits arising out of the use of genetic resources), and is fundamental to meeting the objectives of the 2030 Strategy. Federal leadership is important to ensure women, girls, and gender-diverse people can take part in decisions about biodiversity, within Canada and beyond its borders, to make sure their voices are heard and their needs are met.

Current status

Women in Canada and around the world experience the mental and physical health effects of environmental issues, including biodiversity loss and climate change, more intensely than men. They are among the most vulnerable populations worldwide when it comes to dealing with biodiversity issues. Despite this, women are significantly underrepresented in decision-making processes on the environment, biodiversity loss, and climate action. They are also often underrepresented in particular sectors of the economy and within governments, including those related to the environment.

Canada is seen as an international leader in promoting gender equality with an intersectional lens. Gender-responsive approaches and considerations are being advanced throughout Canada through environmental actions. In Canada, gender equality rights are already protected in existing legislation, including the *Charter of Rights and Freedoms* as part of the Constitution of Canada, and the *Canadian Gender Budgeting Act*. These rights are further supported by several legal and policy instruments, such

as the Gender-Based Analysis (GBA) Plus.[70] This analytical tool is used widely to help the development of responsive and inclusive laws, policies, programs, and initiatives.

The federal government also plays a leadership role in international conventions and commitments focused on gender equality. For example, the Feminist International Assistance Policy puts gender equality and the empowerment of women and girls at the forefront of Canada's efforts to fight poverty and build peace globally. Canada has committed that 95% of its bilateral international development assistance will target or integrate gender equality, of which a specific portion (15%) will be targeted toward initiatives dedicated to advancing gender equality.

While the federal government has several existing action plans, lenses, and frameworks that guide how gender equality can be included in policies and programs, more work is needed to understand how existing efforts and gender-responsive approaches can apply directly in biodiversity policy and program development to meet Target 23. The language used in this target specifically focuses on women and girls. However, the federal approach goes beyond this by respecting intersectionality and inclusivity, including perspectives from gender-diverse people through its legislation and policies on gender equality.

Challenges and opportunities

Implementing the 2030 Strategy is an opportunity to revisit existing federal projects and explore the ways in which information and data collection could help develop a better understanding of the perspectives, needs, and challenges faced by women, girls, and gender-diverse people, specifically in relation to nature and biodiversity. This is an opportunity for the federal government to be a leader and continue advocating for the integration of gender perspectives in discussions and decisions about biodiversity. The federal government could not only meet this target by taking actions aimed at addressing gender inequality but could go beyond global expectations by implementing approaches aimed at addressing its root causes.

What we're doing

AREA OF ACTION	HIGHLIGHTS
Implementing Gender-Based Analysis (GBA) Plus	For nearly 30 years, the application of GBA Plus has been recognized as a key priority in federal decision making and in the development of federal policies, programs, initiatives, and legislation. GBA Plus is a tool to evaluate how women, men, girls, and gender-diverse people may experience programs, policies, processes, and initiatives. It takes an intersectional approach. The 2030 Strategy has undergone a GBA Plus analysis to understand the unique potential impacts of these policies and programs on different groups. This analysis helps anticipate and mitigate institutional and social barriers to accessing and benefiting from actions taken. To advance this important tool, ECCC is continuing to evaluate and enhance the application of GBA Plus in biodiversity decision making.

[70] Between 1995 and 2002 Canada built on its commitments through the GBA Plus tool for women's equality, and the consideration of issues of diversity between and among Canadian women and men became increasingly prominent in the federal policy context. To establish a more inclusive tool, the federal government added "Plus" in 2011. WAGE, Introduction to GBA Plus.

AREA OF ACTION	HIGHLIGHTS
Upholding commitments in the 2022 to 2026 Federal Sustainable Development Strategy (FSDS)	The FSDS takes a whole-of-government approach to bring sustainable development goals (SDGs), targets, milestones, and implementation strategies to across 101 federal organizations. Under Chapter 5 of the FSDS ("Promote Canadian Women's Participation in the Environmental and Clean Technology Sector") and SDG Goal 5, ECCC champions gender equality in both participation and decision-making fora on biodiversity. The implementation of FSDS Chapter 5 includes disaggregating data to better understand the context that different women, girls, and gender-diverse people participate in within environmental sectors and activities, including biodiversity conservation.
Implementing the Feminist International Assistance Policy (FIAP)	The FIAP, led by GAC, commits the federal government to having 15% of bilateral international assistance programming specifically targeting gender equality and the empowerment of women and girls, and a further 80% integrating gender equality objectives. This applies to international assistance investments in biodiversity, such as the $1B from the Climate Finance Envelope for projects that leverage nature-based solutions and contribute to biodiversity co-benefits.
Supporting international implementation of the KMGBF	Canada's $350M International Biodiversity Program (official development assistance), led by GAC, will support developing countries in implementing the KMGBF in a way that advances gender equality and the inclusion of all voices. This program includes a $200M contribution to the Global Biodiversity Framework Fund (GBFF). Projects supported under the GBFF will include the meaningful engagement and participation of women and girls as an important part of the design and objectives of each project to achieve biodiversity-positive outcomes.
Using other foundational federal tools, plans, and initiatives	Several other federal tools, plans, and initiatives will continue to contribute to advancing gender equality generally in biodiversity fora. These include the Gender Results Framework (WAGE), the Quality of Life Framework (TBS), the Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls (CIRNAC), the federal commitment to ending violence against women and girls, the federal 2SLGBTQI+ Action Plan (WAGE), as well as the *United Nations Declaration on the Rights of Indigenous Peoples Act* and the measures of the *UN Declaration Act* Action Plan (2023-2028) outlined in Table 3 in Annex 5.

Going further

To further advance action on Target 23, the federal government will:

- Continue to facilitate the adoption of relevant actions in the Gender Plan of Action in both national and international contexts and will continue to encourage other countries to do the same with the aim of better integrating gender considerations in global and national biodiversity plans and policies.
- Seek to strengthen and align existing federal approaches to gender-responsive and gender-transformative strategies to support and inform gender equality in biodiversity fora.

The federal government may also explore additional opportunities, including:

- Identifying indicators to measure diversity and inclusion in biodiversity decision-making processes in Canada.
- Reviewing existing methodologies of biodiversity data collection to see if and how they could be disaggregated using an intersectional lens.
- Enhancing the application of the GBA Plus tool in biodiversity conservation by putting more focus on intersectionality (i.e., how multiple identity factors are interdependent and often combined).

Annex 2: Overview of the Domestic Biodiversity Monitoring Framework

The Domestic Biodiversity Monitoring Framework (DBMF) will help account for the actions we have committed to, report on the results achieved, inform us about key trends or changes in nature, and signal whether biodiversity loss has halted and begun to reverse in Canada. Where possible, the DBMF will measure performance by allowing us to make links between our commitments, actions, and biodiversity outcomes, giving us the opportunity to adapt or improve our efforts.

The DBMF includes the mandatory 26 headline indicators found in the CBD's Monitoring Framework of the Kunming-Montreal Global Biodiversity Framework (KMGBF),[71] most of which use existing internationally accepted standards and definitions (e.g., from the International Union for Conservation of Nature). As headline indicators are common measures that all countries can universally report upon, they do not always reflect our domestic situation, encompass the full breadth of the target, or provide true signals about biodiversity in Canada. For example, the KMGBF indicator *5.1 Proportion of fish stocks within biologically sustainable levels* does not address other types of wild species that are harvested in Canada. Therefore, the DBMF includes additional domestic indicators that help address elements of the targets not covered by the headline indicators.

Many of the domestic indicators and measures in the DBMF already exist within various federal government monitoring and reporting programs. These indicators represent a small proportion of those currently in use across Canada. By using a relatively conservative number of existing indicators, along with new indicators where necessary, the DBMF will tell a focused and succinct story about biodiversity. It is not intended to be a comprehensive measure of all aspects of biodiversity.

The KMGBF Monitoring Framework identifies the period of 2011 to 2020 as the baseline for countries to assess progress against. A first step will be to establish a baseline for new indicators. For the 2026 and 2029 reporting periods the indicators will be assessed against their baselines, using the most recent measurements.

The DBMF contains a mix of direct and indirect indicators of the status of biodiversity, indicators on whether planned actions are underway, and performance indicators of how well those actions are working. While there has been an effort to focus on direct indicators of biodiversity status, there is not always sufficient information or knowledge to be able to do so.

Certain indicators could apply to multiple targets. For instance, some species-specific indicators (e.g., those under Targets 4 - Species recovery, and 5 - Exploitation of species) could also apply to ecosystem-level targets (e.g., Targets 2 - Ecosystem restoration, and 3 - Protected and conserved areas). Some indicators can also be used to refine others or create new measures altogether. For example, in measuring progress toward the restoration of degraded areas (indicator 2.2), we can compare results to indicator A.2 measuring the change in area of natural ecosystems. For simplicity, each indicator in the DBMF is only tied to the target with the strongest and clearest relationship to it.

No living thing exists in isolation. Any effects on an element of biodiversity can have minor to far-reaching implications on biodiversity as a whole and the benefits it provides to humans. Individual indicators often signal conditions that are the consequence of cumulative effects in the form of multiple

[71] Monitoring Framework for the Kunming-Montreal Global Biodiversity Framework

or repeated actions affecting genes, species, and/or ecosystems. For example, the impact of constructing a single road is not restricted to the natural habitat directly paved over but also the noise, exhaust, and wildlife collisions by vehicles on the road, as well as the influx of humans and subsequent settlement. It is important to look beyond the individual indicators and monitoring framework to understand the cumulative interactions of different factors driving the signal sent by an indicator.

The DBMF indicators are national in their scope, and do not necessarily address regional conditions. Ideally, the full story about the status of biodiversity should collectively reflect local, regional, provincial, and territorial efforts in addition to the federal programs noted in the table below. Therefore, it is important to look at other indicators and monitoring programs across Canada to ensure a full detailed picture of biodiversity. Considering provincial, territorial, Indigenous, or municipal programs and measures alongside the DBMF is encouraged to strengthen overall monitoring. Likewise, there are other groups, such as the Alberta Biodiversity Monitoring Institute or the Ontario Biodiversity Council, that provide valuable information and perspectives.

Some aspects of the CBD's Monitoring Framework for the KMGBF will likely be subject to change until the Framework is agreed upon at the sixteenth meeting of the Conference of the Parties (COP16). This means parts of the DBMF may also change to reflect developments at the international level (e.g., revising headline indicators that are still under development). Domestic indicators currently in the DBMF are seen as final versions, and are not likely to change unless they become redundant or are otherwise affected by the release of new or revised headline indicators.

Going further with the DBMF

Measuring the variety and current state of species and ecosystems is difficult, but Canada is well positioned to take this challenge on. The indicators in Canada's Domestic Biodiversity Monitoring Framework are drawn from years of collective knowledge, research, experience, and analysis. Nevertheless, there is more that we can do to better understand whether societal change needed to stop and reverse biodiversity loss is happening, commitments and actions to conserve biodiversity are occurring, and biodiversity loss has halted and begun to reverse. Part of doing better is determining how will Indigenous Knowledge Holders be part of how we monitor biodiversity across the land, water, and ice?

The Government of Canada may explore additional opportunities, including:

- Increasing the detail of IUCN Red list of Ecosystems assessments for Canada that can be applied locally and regionally.
- Improving our ability to identify degraded lands and waters, and to track and measure ecosystem restoration activities.
- Working to increase our knowledge of species sub-populations to better estimate species genetic diversity.
- Increasing in-house capacity to determine the rate of invasive alien species establishment.
- Increasing the scope of our assessment of coastal eutrophication.
- Expanding our measurement of chemicals, including pesticides, in the environment, and providing complementary indicators that better reflect Canada's risk-based approach.
- Developing an indicator to address the effect of ocean acidification on marine life.

- Improving our data holding and analysis regarding the benefits we receive from wild species, the services provided by ecosystems, and the sustainable management of agriculture.
- Building on our assessment of sustainable forest management by including biodiversity-focused indicators of sustainability.
- Improving the assessment of the proportion of green and blue spaces in urban areas that are for public use for all.

High-level version of Canada's Domestic Biodiversity Monitoring Framework

Indicators marked with an asterisk (*): an agreed up-to-date methodology did not exist for this indicator. Methodology recommendations from The Ad Hoc Technical Expert Group are currently being considered at the international level.

Target	Indicator	Indicator Type	What it measures	Reporting Source/ Organization	Status
1	**A1 - Red List of Ecosystems**	Headline	Risk or threat status for ecosystem types.	Canadian Environmental Sustainability Indicators	Under development– data incomplete for Canada
1	**A.2 Extent of natural ecosystems**	Headline	TBD-CBD The extent in area of natural ecosystems.	StatCan	Existing/in use
1	**1.1 Percent of land and seas covered by biodiversity-inclusive spatial plans***	Headline	TBD-CBD The area of Canada's territory with existing spatial planning or effective management processes.	TBD	Under development
1	Land-use change	Domestic	This indicator measures the amount of land-use change from 2010 to 2015. It reports the proportion of agricultural land that has been converted to settlement and the amount of forest that has been converted to cropland or settlement in Canada south of 60° North.	Canadian Environmental Sustainability Indicators	Existing/in use
1	Extent of Canada's wetlands	Domestic	Extent of wetlands in Canada.	Canadian Environmental Sustainability Indicators	Existing/in use
2	**2.2 Area under restoration***	Headline	Percent of degraded lands under restoration.	TBD	Under development
2	Restoring the Great Lakes Areas of Concern	Domestic	This indicator assesses progress toward the restoration of Canada's 12 Areas of Concern	Canadian Environmental	Existing/in use

Target	Indicator	Indicator Type	What it measures	Reporting Source/ Organization	Status
			and the five Areas of Concern shared with the United States.	Sustainability Indicators	
2	Progress toward Canada's pledge to the Bonn Challenge	Domestic	Terrestrial ecosystems under restoration (area by ecosystem types).	TBD (IUCN's Restoration Barometer)	Under development
3	**3.1 Coverage of protected areas and other effective area-based conservation measure** (Domestic indicator – Canada's conserved area)	Headline	Terrestrial and inland water, and coastal and marine areas that are conserved and managed.	Canadian Environmental Sustainability Indicators	Existing/in use
3	Ecological integrity of national parks	Domestic	The Ecological integrity of national parks indicator summarizes the condition (good, fair, poor) and trend (improving, stable, declining) of ecosystems within 42 national parks.	Parks Canada, Canadian Environmental Sustainability Indicators	Existing/in use
4	**A.3 Red list Index**	Headline	The Red List Index value indicates how far a set of species has moved overall toward extinction.	TBD	Existing/in use
4	**A.4 The proportion of populations within species with an effective population size > 500**	Headline	TBD-CBD Genetic diversity within species populations. The proportion of populations within an overall species population with a genetically effective population size > 500, for 100+ representative species.	TBD	Existing/in use
4	Species at risk population trends	Domestic	Population and distribution trends of species at risk and their consistency with the objectives in final recovery strategies or management plans. Provides the at-risk status of specific key native species per biome, such as	Canadian Environmental Sustainability Indicators	Existing/in use

Target	Indicator	Indicator Type	What it measures	Reporting Source/ Organization	Status
			representative species of caribou, plants, whales, and pollinators.		
4	Canadian species index	Domestic	The average percentage change in the sizes of Canadian vertebrate species populations.	Canadian Environmental Sustainability Indicators	Existing/in use
4	General status of wild species	Domestic	Summary of the general status of species in Canada. It also highlights the general status of particular groups of species, as well as the general status in each region (provinces, territories, and oceanic regions).	Canadian Environmental Sustainability Indicators	Existing/in use
5	**5.1 Proportion of fish stocks within biologically sustainable levels**	Headline	Comparison of harvest rates with established harvest limits, providing a direct measure of whether we are managing the use of these resources within ecosystem limits. Measured using the domestic indicator Harvest levels of key fish stocks.	Canadian Environmental Sustainability Indicators	Existing/in use
5	Status of key fish stocks	Domestic	The status of key fish stocks.	Canadian Environmental Sustainability Indicators	Existing/in use
5	Proportion of migratory bird game species with healthy populations that support sustainable hunting with non-restrictive bag limits and season length	Domestic	Proportion of game species with healthy populations that support sustainable hunting with non-restrictive bag limits and season length.	ECCC	Existing/in use
6	**6.1 Rate of invasive alien species establishment**	Headline	TBD-CBD	Canadian Environmental Sustainability Indicators	Under development

Target	Indicator	Indicator Type	What it measures	Reporting Source/ Organization	Status
6	Rate of response to detected IAS	Domestic	Percent of [newly] detected IAS with an appropriate response plan in place.	TBD	Not existing/ requires development
7	**7.1 Index of coastal eutrophication potentia**l	Headline	Headline indicator, augmented by five domestic indicators addressing phosphorous (P) and nitrogen (N) in Great Lakes, Lake Winnipeg and the St. Lawrence River.	7.1 Headline: TBD Augmented: Canadian Environmental Sustainability Indicators	Under development /Existing/in use
7	**7.2 Aggregated Total Applied Toxicity***	Headline	TBD-CBD	TBD	Under development
7	Plastic particles in the Northern Fulmar	Domestic	The proportion of Northern Fulmars (bird species) with 0.1 grams or more of plastic in their stomachs.	Canadian Environmental Sustainability Indicators	Existing/in use
7	Air Pollutant Emissions	Domestic	Air pollutant emissions indicators track emissions from human activities of six key air pollutants: sulphur oxides (SO_X), nitrogen oxides (NO_X), volatile organic compounds (VOCs), ammonia (NH_3), carbon monoxide (CO) and fine particulate matter ($PM_{2.5}$).	Canadian Environmental Sustainability Indicators	Existing/in use
7	Levels of highly hazardous chemicals in biota	Domestic	Chemical levels in animals harvested as traditional food of Northern Indigenous Peoples, and identified as contaminants of concern to whales.	CIRNAC, ECCC	Existing/in use
7	Indicator of the risk of water contamination by pesticides	Domestic	This indicator evaluates the relative risk of water contamination by pesticides across agricultural areas in Canada.	AAFC	Existing/in use
8	Land-based greenhouse gas emissions and removals	Domestic	The indicator provides annual estimates of Canada's GHG emissions and removals from managed lands. Examples include	Canadian Environmental	Existing/in use

Target	Indicator	Indicator Type	What it measures	Reporting Source/ Organization	Status
			agricultural land, wetlands, settlements, and managed forests.	Sustainability Indicators	
8	Sea ice in Canada	Domestic	The area of sea in Canada covered by ice during the summer season.	Canadian Environmental Sustainability Indicators	Existing/in use
8	Snow cover	Domestic	Snow cover change from year-to-year and over time. The indicators report spring snow cover extent, annual snow cover duration, and March snow water equivalent.	Canadian Environmental Sustainability Indicators	Existing/in use
8	Water quantity in Canadian rivers	Domestic	Water flows in rivers across Canada from 2001 to 2019 and by monitoring station in 2021.	Canadian Environmental Sustainability Indicators	Existing/in use
9	**9.1 Benefits from the sustainable use of wild species***	Headline	Social, economic and environmental benefits from the sustainable management and use of wild species.	TBD	Under development
9	**9.2 Percentage of the population in traditional occupations***	Headline	Percent of people in traditional, biodiversity dependent, occupations.	TBD	Under development
10	**10.1 Proportion of agricultural area under productive and sustainable agriculture**	Headline	Assessment of progress toward sustainable agriculture.	TBD	Existing/in use
10	**10.2 Progress toward sustainable forest management**	Headline	Canada's forests are managed sustainably: proportion of forest area under a long-term forest management plan, forest area annual net change rate, above-ground biomass stock in forests, proportion of forest area located within legally established protected areas, and forest area under an	NRCan	Existing/in use

Target	Indicator	Indicator Type	What it measures	Reporting Source/ Organization	Status
			independently verified forest management certification scheme.		
10	Biodiversity focused indicators of sustainable forest management	Domestic	Assessment of the state of select species and habitat diversity in Canada's forests assessed through forest area by forest type and age class and state of forest associated species.	NRCan	Under development
10	Ability of the agricultural landscape to support wildlife	Domestic	This indicator reports the ability of agricultural land to provide breeding habitat for wildlife.	Canadian Environmental Sustainability Indicators	Existing/in use
11	**B.1 Services provided by ecosystems***	Headline	Trends in value of provisioning ecosystem services for which there is national scale data.	StatCan	Under development
11	Water quality in Canadian rivers	Domestic	The indicator classifies the water quality of rivers into five categories to give an indication of the ability of a river to support the plants and animals that live in or use the water.	Canadian Environmental Sustainability Indicators	Existing/in use
12	**12.1 Average share of the built-up area of cities that is green/blue space for public use for all**	Headline	TBD-CBD	StatCan	Under development
12	Designation of new national urban parks	Domestic	Number and area of national urban parks.	Parks Canada	Existing/in use
12	Percentage of tree canopy cover in urban areas (urban greenness)	Domestic	Urban greenness reflects the presence and health of vegetation in urban areas and is a measure of urban ecosystem condition. This indicator uses data from satellite imagery to track greenness across cities. These data broadly represent vegetation across the	TBD	Under development

Target	Indicator	Indicator Type	What it measures	Reporting Source/ Organization	Status
			whole of the city, reflecting parks and other publicly and privately owned green spaces and features.		
13	**C.1 Indicator on monetary benefits received ***	Headline	TBD-CBD	TBD	Not existing/ requires development
13	**C.2 Indicator on non-monetary benefits***	Headline	TBD-CBD	TBD	Not existing/ requires development
14	Global binary indicator only – TBD.				
15	**15.1 Number of companies reporting on disclosures of risks, dependencies and impacts on biodiversity***	Headline	Percent of large and transnational companies and financial institutions disclosing their biodiversity-related risks, dependencies, and impacts.	TBD	Under development
15	Business action on sustainability	Domestic	Businesses adopt select environmental practices as per Sustainable Development Goal 12.	Canadian Indicator Framework, ECCC	Existing/in use
16	Solid waste diversion and disposal	Domestic	The total quantity and the quantity per person of non-hazardous solid waste diverted and disposed by municipal governments and businesses in the waste management industry. The waste diversion rate by source (residential and non-residential) and the types of materials diverted are also reported.	Canadian Environmental Sustainability Indicators	Existing/in use
16	Sustainable water use	Domestic	New indicator including the following existing indicators: water availability in Canada, residential water use in Canada, and water withdrawal and consumption by sector.	Canadian Environmental Sustainability Indicators	Under development

Target	Indicator	Indicator Type	What it measures	Reporting Source/ Organization	Status
16	Amount of plastic waste disposed of at landfill and incineration sites across Canada	Domestic	This indicator measures the annual amount, in tonnes, of plastic waste disposed of at landfill and incineration, both with and without energy recovery, across Canada.	ECCC	Existing/in use
17	Global binary indicator only – TBD.				
18	**18.1 Positive incentives in place to promote biodiversity conservation and sustainable use**	Headline	TBD-CBD	TBD	Under development
18	**18.2 Value of subsidies and other incentives harmful to biodiversity that have been eliminated, phased out or reformed**	Headline	TBD-CBD	TBD	Under development
19	**D.1 International public funding, including official development assistance (ODA) for conservation and sustainable use of biodiversity and ecosystems**	Headline	Canada's monetary contributions to other countries related to the conservation and the sustainable use of biodiversity.	GAC	Under development
19	**D.2 Domestic public funding on conservation and sustainable use of biodiversity and ecosystems**	Headline	Domestic public funding across all governments related to the conservation and the sustainable use of biodiversity.	TBD	Under development
19	**D.3 Private funding (domestic and international) on conservation and sustainable use of biodiversity and ecosystems***	Headline	TBD-CBD	TBD	Under development
20	Global binary indicator only – TBD.				

Target	Indicator	Indicator Type	What it measures	Reporting Source/ Organization	Status
21	**21.1 Indicator on biodiversity information for monitoring the Kunming-Montreal Global Biodiversity Framework**	Headline	TBD-CBD Mobilizing biodiversity data, information, and knowledge for change.	TBD	Not existing/ requires development
22	Trends in linguistic diversity and number of speakers of Indigenous languages	Domestic	Number of speakers of Indigenous languages among First Nations, Inuit, and the Métis Nation.	TBD	Existing/in use
23	Global binary indicator only – TBD.				

Annex 3: Provincial and territorial contributions

Alberta

Overview

The Government of Alberta is committed to conserving Alberta's rich, diverse landscapes and biodiversity for future generations in a sustainable way that is based on the social, economic, and environmental values of Albertans.

Alberta contains a wide variety of natural landscapes, including grasslands, parklands, foothills, boreal forest, the Rocky Mountains, and the Canadian Shield. Conservation outcomes are achieved on a variety of land bases across the province, including private land, our working landscapes, and network of protected areas. Land-use planning, stewardship, science based monitoring, recreational infrastructure, and Alberta's regulatory system are all key tools the Government of Alberta employs to ensure our lands and ecosystems are managed with conservation outcomes in mind.

It is important that the federal government work directly with the Government of Alberta on all matters related to federal efforts on conservation of biodiversity. This will ensure Alberta, using its jurisdictional authority, can manage our conservation efforts in a way that takes into consideration Alberta's context, our diverse and growing economy, and the social benefits that nature provides to the well-being of Albertans.

Alberta supports healthy landscapes in numerous ways:

- The Government of Alberta is making progress on a made-in-Alberta Nature Strategy.
- The Government of Alberta recently completed two of the 11 sub-regional plans in areas where caribou occur. We anticipate completing two more plans in fall 2024.
- We continue to work with Indigenous communities on a cooperative management approach for five wildland parks in northeast Alberta to support Indigenous leadership in conservation.
- Alberta has invested more than $49 million to date through the Caribou Habitat Restoration Program towards replanting and restoring caribou habitat, including treatment of legacy seismic lines.
- We are supporting stewardship by working closely with landowners and agricultural producers on implementing best management practices through various programs such as the Sustainable Canadian Agricultural Partnership, the MULTISAR program, and the Rangeland Sustainability program.
- Our province is collaborating with other partners on programming to support watershed health, such as through the Wetland Replacement Program and Watershed Resiliency and Restoration Program.
- Alberta is supporting sustainable forest management through legislation, regulations, policies, and programs.
- We are committing to develop a framework to guide implementation of nature-based solutions as part of the Emissions Reduction and Energy Development plan.
- The Government of Alberta continues to implement and improve our regulatory system and cumulative effects management frameworks.

British Columbia

Biodiversity strategy	BC Biodiversity and Ecosystem Health Framework - Under development, expected to be released in 2025 with key actions for implementation.
Area-based conservation or land-use strategy	• Modernized Land Use Planning – In progress • Marine Protected Area Network Marine Spatial Planning in the Northern Shelf Bioregion and in Southern BC – In progress • Collaborative Indigenous Stewardship Framework • Great Bear Rainforest Agreement – 2016 onwards • Blueberry River First Nation Implementation Agreement – 2023 onwards • Cumulative Effects Framework • Conservation Lands Program and Strategic Plan
Species / wildlife management strategies	• BC Caribou Recovery Program 2017-2026 • Spotted Owl Recovery • Provincial Stewardship Frameworks for keynote species • Identified Wildlife Management Strategy 2.0 (update to IWMS 2004) • Together for Wildlife Strategy and Minister's Wildlife Advisory Council • BC Wild Salmon Strategy
Invasive alien species strategy	• Controlled Alien Species • Invasive Mussel Defense Program • Invasive Species Strategy for BC (2023-2027) • Feral Pig Early Detection and Rapid Response Plan • Whirling Disease Containment Plan, 2024 • Nechako watershed Reed canary grass mitigation with Nechako First Nations
Other relevant strategies	• Climate Preparedness and Adaptation Strategy, 2022-2025 • Ocean Acidification and Hypoxia Action Plan, released May 2023 • Watershed Security Strategy, implementation expected in 2024 • Co-management - In development; Work began in fall 2022 • Coastal Marine Strategy - In development, planned launch 2024
Area-based conservation target	30% protection of BC's land base by 2030

Overview

British Columbia is committed to conserving provincial biodiversity and ecosystem health. Rich biodiversity and healthy ecosystems support us all and will ensure that the natural environment, as well as communities and their economies, continue to flourish, especially in the face of climate change.

Consistent with the holistic approach of the Kunming-Montreal Global Biodiversity Framework, BC is creating a framework for ecosystem health and biodiversity which can build upon and be implemented through foundational agreements with First Nations and national governments.

This approach is underpinned by the *Declaration on the Rights of Indigenous Peoples Act*, which establishes the United Nations Declaration on the Rights of Indigenous Peoples as BC's framework for reconciliation to respect the human rights of Indigenous Peoples and increase transparency and predictability in our collaborations. BC uses an intersectional lens for Gender Based Analysis through evidence-based advice and decisions for better results for all British Columbians.

Recent accomplishments include the first ever Tripartite Framework Agreement on Nature Conservation (the Agreement). The Agreement was signed in November 2023 by Canada, BC, First Nations Leadership Council, Union of BC Indian Chiefs, BC Assembly of First Nations, and First Nations Summit. It pledges to work towards true and lasting reconciliation and sets priorities for 30% protection of BC's land base by 2030, degraded habitat restoration, species recovery, and knowledge sharing, including 2 Billion Trees, Old Growth Nature Fund, and Together for Wildlife.

In recognition that financing conservation enables permanence, a $300M Conservation Financing Mechanism was launched by BC in October 2023. This unique made-in-BC partnership with the BC Parks Foundation will coordinate with other philanthropic organizations and use crowdsourcing so all British Columbians can support conservation and leverage provincial funding with donations from individuals and the private sector.

With water connecting us all, and the province's deep connection to coastal ecosystems, the Watershed Security Strategy and Fund; and the Coastal Marine Strategy will embed these important aspects of life into the overall framework for ecosystem health and biodiversity.

Key forward actions include, funding the pace of change needed to meet targets; invasive species management; capacity-building; technical and scientific cooperation; and accessibility of knowledge. BC will sustain and forge partnerships to meet the complex challenges for conservation, wildlife and biodiversity.

Current actions

Action	Overview	Relevant target(s)
Biodiversity and Ecosystem Health Framework	Supports local-level planning through improved information, prioritization of ecosystems and enabling partnerships. Enables transformation from management for resource extraction to management for ecosystem health and biodiversity, in partnership with First Nations.	1, 2, 3, 4, 6, 7, 8, 11, 14, 21, 22
Modernized Land Use Planning Program	$7.78M annually supports projects that explore new land use zones, objectives, and impact, identify candidate conservation areas, and work with First Nations for engagement with stakeholders, local government, and the public.	1, 2, 3, 9, 11, 14, 22
Collaborative Indigenous Stewardship Framework (CISF)	$7.3M annually with matching contribution from Canada Nature Fund. Supports modernized land, coastal and marine use planning, forest landscape planning, old growth forest management, field-based monitoring and Guardians/Rangers, cumulative effects assessments, and collaboration toward shared decision making. CISF	1, 2, 3, 5, 9, 10, 20, 21, 22

Action	Overview	Relevant target(s)
	includes 16 First Nations Forums covering close to 80% of the provincial land base and 124 participating Nations.	
Great Bear Sea and Project Financing for Permanence	$60M grant to Coast Funds to support First Nations to co-lead stewardship initiatives, including implementation of the Marine Plan Partnership and the Marine Protected Area Network Action Plan in the Great Bear Sea.	1, 2, 3, 8, 9, 10, 11, 14, 19, 20, 21, 22
Climate Preparedness and Adaptation Strategy	Cross-government strategy for partnerships, knowledge, and decision-making including the Watershed Security Strategy, Healthy Watersheds Initiative, Coastal Marine Strategy, Ocean Acidification and Hypoxia Action Plan, Future Forest Ecosystem Centre, Salmon Restoration and Innovation Fund, Modernized Land Use Planning, and Natural Asset Infrastructure.	1, 2, 4, 5, 7, 8, 9, 10, 11, 13, 14, 15a, 15b, 15c, 16, 17, 19, 20, 21, 22
Together for Wildlife Strategy	Up to $10M annually supports projects that advance wildlife co-management, stewardship, sustainable use, and mitigate threats to populations and habitat.	1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 20, 21, 22

Planned actions

Action	Overview	Relevant target(s)
Trilateral Accord	BC is advancing trilateral collaboration on salmon with the First Nations Fisheries Council and Fisheries and Oceans Canada.	1, 2, 4, 8, 9, 10, 11, 14

Manitoba

Area-based conservation or land-use strategy	• Protected Areas Initiative is a program dedicated to working together with others to build a network of protected and conserved areas that contain biological diversity and unique natural features found across Manitoba. • Crown Land-Use Classification Plans are a key part of Manitoba's conservation and land-use strategy. • The Agricultural Crown Lands Leases and Permits Regulation under the *Crown Lands Act* is a key part of Manitoba's strategy for managing agricultural Crown land and related activities. The Regulation authorizes the use of agricultural Crown land while protecting and conserving biological diversity and mitigating climate change. • The *Manitoba Wildlife Act* and the Designation of Wildlife Lands and Wildlife Lands Regulations provide legal mechanisms for the protection and management of critical habitats for wildlife species. • The Designation of Wildlife Lands Regulation identifies specific wildlife management areas (WMA) for habitat protection, conservation, and possible restoration. Currently 90 WMAs are designated within Manitoba. • The Wildlife Lands Regulation includes the possibility of various management practices to support and enhance biodiversity conservation. • The Wildlife Lands Regulations include enforcement provisions to prevent unauthorized activities in wildlife management areas. • The Sustainable Agriculture Landscapes Framework is a new comprehensive, sustainability-based framework being developed in May 2024.
Species / wildlife management strategies	• Boreal Woodland Caribou Recovery Strategy (2015) guides boreal caribou conservation and recovery within Manitoba.
Invasive alien species strategy	• Manitoba has renewed its commitment to the "Inter-Provincial-Territorial Agreement for the Coordinated Defense against Invasive Species" in 2023. The five-year agreement currently focusses on aquatic invasive species (AIS). • Manitoba is developing a public facing AIS strategy. • Community Forest Grant Agreement allows communities to reduce the impact and limit the spread of Dutch elm disease, enhance their urban forests against new invasive species, and improve urban forestry practices. • Invasive Forest Pest Outreach Program – Don't Move Firewood • Spongy Moth Eradication Programs • Emerald Ash Borer Management and Monitoring
Other relevant strategies	• Manitoba's Water Management Strategy (2022)
Area-based conservation target	• The Manitoba Government has committed to working in partnership with Indigenous Nations as well as environmental advocacy groups and the business community to protect 30% of Manitoba's lands and waters by 2030.

	• An action item under this mandate priority includes a formal MOU signed in January 2024 between the Seal River Watershed Alliance, Indigenous Nations, the Government of Canada, and the Manitoba Government to determine the feasibility of a potential protected area in the Seal River watershed in Northern Manitoba.

Current actions

Action	Overview	Relevant target(s)
Agriculture Crown Land Leasing Program	The Agricultural Crown Lands Leasing Program supports the sustainable expansion of the livestock herd in Manitoba, contributes to ecological goods and services, and provides mitigation and adaptation to climate change. Through land-use coding structures, development on agriculture Crown land is limited, supporting wildlife habitat and species at risk.	3, 10
Association of Manitoba Community Pastures (AMCP)	The Agriculture Crown Land (ACL) program manages approximately 411,000 acres through an agreement with the AMCP. The AMCP must manage the pastures in a sustainable manner, in line with the ACL mandate. Manitoba is moving towards designating these pastures to afford protection from development and maintain vast areas of native pasture and grasslands.	3, 10
Sustainable Canadian Agriculture Partnership	Funding over 5 years (2023-2028) to enhance ecological goods and services from agricultural lands, sustainable agriculture practices, and farm planning that improves environmental performance.	1, 2, 3, 7, 8, 10, 11, 14, 22
The Conservation Trust (2018)	The $102M Conservation Trust was established in 2018 as part of Manitoba's plan to fund activities that promote the conservation of natural resources by creating, conserving, or enhancing natural infrastructure for the benefit of Manitobans.	1, 2, 3, 7, 8, 10, 11
Growing Outcomes in Watersheds (GROW) Trust	Lands enrolled in GROW are used for conservation activities, such as soil health improvements, riparian setbacks, wetland conservation/restoration, grassed waterways, and shelterbelts. Acres of land enrolled in GROW will help to reduce flooding and drought vulnerability and improve water quality and nutrient management. As of March 31, 2023, there are 17,806 acres enrolled in GROW.	1, 2, 3, 7, 8, 10, 11
Provincially Significant Peatlands Regulation (2023)	The *Peatlands Stewardship Act* allows for the designation of provincially significant peatlands, by regulation. Peatlands designated as such are added to the province's protected areas network. Currently, Manitoba has 28,000 hectares designated as provincially significant, and	1, 3, 11, 14

Action	Overview	Relevant target(s)
	additional areas may be designated within the next several years.	
Sustainably Managing Peat Harvesting (ongoing – continuous improvement)	Manitoba has developed a volume-based management framework to ensure that peatlands are being harvested in a sustainable manner. Using machine learning techniques, peat depth and peat age datasets can provide insights into the annual accumulation of peat, by volume. At an ecoregion level, the total annual accumulation of peat (by volume) can be compared to the annual removal of peat (by volume) due to harvesting, and an assessment of the sustainability of the industry can be made. Here, sustainability means that there is always more peat accumulating on the landscape than is being removed due to peat harvesting.	3, 10, 21
Peatland Recovery (ongoing)	The *Peatlands Stewardship Act* requires that peatlands be recovered after peat harvesting has ceased, to be done according to an approved Peatlands Recovery Plan. This involves a return of peatlands vegetation and carbon-accumulating functions to the site. The recovery of peatlands is an important component of sustainability.	2, 6, 10, 11, 20
Boreal Wetlands Conservation Codes of Practice (2020)	The Boreal Wetlands Conservation Codes of Practice are a series of best management practices that describe how to avoid, minimize, and offset for permanent impacts to boreal wetlands that result from the development of resource and access roads and crossings in the boreal region of Manitoba.	1, 2, 3, 11, 20, 21
Manitoba Climate Resilience Training Program	The Manitoba Climate Resilience Training Program is a joint undertaking of Natural Resources Canada and the Government of Manitoba. It aims to create tailored approaches to integrate climate risk and opportunities into decision-making and planning within Manitoba. The Capacity Enhancement in Vulnerability and Risk Assessment Program is Phase 3 of the Manitoba Climate Resilience Training Program aiming to enhance knowledge and capacity of municipalities and watershed districts to better understand climate vulnerabilities, risks (and opportunities), and integrate adaptation into planning and investment decisions. Understanding and planning for climate impacts includes considerations on wildlife, habitat, and aquatic species. A robust healthy biodiverse environment is a buffer to a changing climate and builds resiliency on the landscape to events like drought and floods.	8, 14

Planned actions

Action	Overview	Relevant target(s)
Polar Bear Conservation & Recovery Strategy	Currently under development, the goal of Manitoba's Polar Bear Conservation and Recovery Strategy is to maintain the long-term viability of the threatened Hudson Bay polar bear sub-population through management initiatives within Manitoba, as required under the *Endangered Species and Ecosystems Act*.	4, 8, 9

New Brunswick

Biodiversity strategy	Under development, expected in 2025, to replace *Biodiversity Strategy: Conserving biodiversity and using biological resources in a sustainable manner* (2009).
Area-based conservation or land-use strategy	*Our Forests Are For Everyone: A Long-Term Strategy for Healthy and Sustainable Forests*, 2023-2028. (New Brunswick's forest management strategy).
Species / wildlife management strategies	None and covered under biodiversity strategy and forest management strategy.
Other relevant strategies	• *Our Pathway Towards Decarbonization and Climate Resilience: New Brunswick's Climate Change Action Plan 2022-2027*. • Agriculture Climate Change Strategy, under development, expected in 2025.
Area-based conservation target	Area-based conservation target under development, expected in 2024, to build on *New Brunswick's Nature Legacy.*

Current actions

Action	Overview	Relevant target(s)
Increasing the area on Crown land set aside for conservation from 23% of the Crown forest to 30%, a 210,000 hectare increase.	The forest management strategy "Our Forests Are For Everyone" (announced in August 2023 and being used to guide development of new Crown forest management plans) elevates the importance of biodiversity, considers climate change risk information, and improves biodiversity protection.	1, 5, 8, 10
Assessment of wildlife species, protection assessments and recovery planning	Recovery planning is done, as appropriate, for species that are assessed as Extirpated, Endangered, Threatened, and Special Concern to guide governments, landowners and others in recovery efforts. Legal protection is available under the *Species at Risk Act* for Extirpated, Endangered, and Threatened species, as deemed appropriate by a protection assessment to support their recovery.	4
Biodiversity monitoring	Support is provided for various biodiversity monitoring initiatives led by partner organizations. Monitoring initiatives are generally long term (>10 years) and can be focused on a small number of species/ecosystems or more general surveys focused on many species. Examples include the comprehensive species occurrence surveys within protected natural areas; the New Brunswick Nocturnal Owl Survey focusing on Barred Owl, Great	20, 21

Action	Overview	Relevant target(s)
	Horned Owl, and Northern Saw-whet Owl; and High Elevation Landbird Monitoring focusing on Bicknell's Thrush and other bird species.	

Planned actions

Action	Overview	Relevant target(s)
Biodiversity Strategy for New Brunswick, to be adopted in 2025	To maintain biodiversity and increase resilience through nature-based solutions, the NB Biodiversity Strategy will recognize the sensitivity of biodiversity to climate change, the need to adapt the way New Brunswick manages and uses the natural environment, and the role that nature can play in climate solutions.	Potentially all
New target for protected and conserved areas to be set in 2024	A new target for protected and conserved areas will take New Brunswick beyond protecting 10% of the province's land and freshwater, a target achieved in 2022. New protected and conserved areas will be established in areas identified through conservation planning and existing areas that meet the national standards will be recognized.	1, 3, 4
Publish a list and description of climate change vulnerable species and habitats in 2024.	As an interim measure to the renewed Biodiversity Strategy, the government of New Brunswick is generating a list of climate-vulnerable species and habitats. The list, with a description of the species and habitats, will be published in 2024 and updated as new information becomes available.	1, 4, 21
Develop and begin implementation of an Agriculture Climate Change Strategy by 2025	The action is a commitment within the province's climate change action plan that will support a low-carbon, resilient, and economically sustainable agriculture sector in New Brunswick.	8, 10

Newfoundland and Labrador

Area-based conservation or land-use strategy	Home for Nature – A Protected Areas Plan for the Island of Newfoundland (2020 onward)
Species / wildlife management strategies	Six species at risk recovery plans (such as the Limestone Barrens Species at Risk Recovery Plan; 2021 onward), 10 species at risk management plans (such as the Rusty Blackbird Management Plan; 2020 onward and the Newfoundland Marten Management Plan; under development), the NL Moose Management Plan (2022-2026).
Other relevant strategies	The Way Forward on Climate Change (2019-2024; revision under development)

Overview

- The Government of Newfoundland and Labrador (GovNL) continues to undertake management actions to significantly reduce extinction risk and aid in the recovery and conservation of species at risk.
- Recovery or management plans are drafted for all species listed under the provincial *Endangered Species Act*, and efforts are focused on research and monitoring, public education and stewardship, and recovery. GovNL collaborates with Indigenous Governments and Organizations on species at risk listings, conservation, and recovery.
- The provincial Species Status Advisory Committee continues to assess provincial priority species and makes recommendations to the Minister for listing under provincial legislation.
- GovNL continues to contribute provincial data and information to federal species assessments and recovery documents.
- The Island of Newfoundland population of American marten (Martes americana atrata) was recently downlisted from Threatened to Vulnerable (SARA equivalent of Special Concern) under the provincial *Endangered Species Act*. It was first listed as Endangered in 1996.
- GovNL's draft Boreal Caribou Range Plan, developed with support from Environment and Climate Change Canada aims to conserve important Boreal Caribou habitat; the goal is to maintain each population's habitat with sufficient connectivity to support self-sustainability.
- GovNL is considering a series Critical Habitat Orders and other land protection mechanisms to provide habitat protection for species at risk.
- GovNL's habitat stewardship program has resulted in restoration of habitat for endemic species.
- In 2020, GovNL released 'A Home for Nature - Protected Areas Plan for the Island of Newfoundland' for public engagement. This Plan provides a foundation for protected areas planning and increased conservation efforts on the Island portion of the province. Public engagement on ten of the proposed protected areas is ongoing.
- GovNL has assessed previously unreported areas using the national Decision Support for inclusion in the Canadian Protected and Conserved Areas Database. Wetlands protected under a provincial-municipal stewardship agreement and a large urban park, Pippy Park, were added.
- The Governments of Canada and NL are collaborating with Indigenous Governments and Organizations and other partners on a feasibility assessment for the establishment of a South Coast Fjords National Marine Conservation Area and adjacent terrestrial protected area. The

Government of Canada and Nunatsiavut Government have completed a feasibility assessment for the establishment of a Torngat Mountains National Marine Conservation Area.

- GovNL is collaborating on a project entitled "Retention of NL wetlands in aid of climate change mitigation" with municipalities and private landowners to identify important wetlands, develop formal habitat conservation plans, and sign habitat conservation agreements.
- GovNL manages big and small game and furbearers for sustainable consumptive use via a licencing system. Many sources of data inform decisions around quota development including winter population census, population modeling, license return harvest statistics, and public opinion.

Current actions

Action	Overview	Relevant target(s)
Significant wetlands identification and conservation	$124,000 in funding in 2023-24 to support partner organizations in working with municipalities and private landowners in NL to identify important wetlands, develop formal habitat conservation plans, and sign habitat conservation agreements.	1, 3, 4, 8, 11, 12
Environmental Protection Guidelines for Forestry Operations in Newfoundland and Labrador	These guidelines provide on-the-ground procedures used by Forest Managers and operators to ensure sustainable use of the forest resource without degrading the environment. The guidelines are designed to prevent and control degradation of soil, water, and vegetation, prevent disturbance during sensitive caribou calving and post-calving seasons, and protect breeding raptors and their nests.	1, 4, 5, 9, 10, 14
Limestone Barrens Species at Risk Recovery Plan	This Recovery Plan guides recovery efforts for ten endangered plant species, three of which are found nowhere else on Earth. The Plan identifies 85 km^2 of critical habitat for seven species, and outlines recovery and management actions to protect and recover all ten species, including further research, monitoring, habitat restoration, and community education and outreach.	1, 2, 3, 4, 8, 20, 21
Home for Nature – Protected Areas Plan for the Island of Newfoundland	This plan provides a foundation for protected areas planning and increased conservation efforts on the Island portion of the province. Public engagement is ongoing to work towards formal establishment of new protected areas under provincial legislation.	1, 3, 4, 8, 11, 12, 22
The Way Forward on Climate Change 2019-2024 (with next 5-yr draft under development)	Through the Pan-Canadian Framework, GovNL committed to reduce greenhouse gas emissions from all sectors of the economy, stimulate clean innovation and growth, build resilience to a changing climate, and develop a carbon program tailored to meet the unique circumstances of NL. The plan received input from Indigenous organizations and governments, the public, and other stakeholders and outlines actions to be implemented across all of government including	8

Action	Overview	Relevant target(s)
	decarbonizing the electricity sector, introducing a carbon program, and building capacity to enhance climate resilience particularly in northern Indigenous communities.	

Planned actions

Action	Overview	Relevant target(s)
	All above actions are ongoing and will continue into the future	

Northwest Territories

Area-based conservation or land-use strategy	Healthy Land, Healthy People 2023-2028, to replace Healthy Land, Healthy People (2016-2021)
Species / wildlife management strategies	The NWT has a number of a range of wildlife management and species at risk management plans and recovery strategies: • Recovery Strategy for Peary caribou (due July 2024) • Recovery Strategy for Dolphin and Union caribou (due August 2025) • Recovery Strategy for Barren- ground caribou (2020) • Recovery Strategy for Boreal caribou (2017) • Recovery Strategy for Hairy braya (2015) • Recovery Strategy for Northern leopard frog (2017) • Recovery Strategy for Western toad (2017) • Recovery Strategy for Wood bison (2020) • Management Plan for Northern mountain caribou (2023) • Management Plan for Little brown myotis (2020) • Management Plan for Northern myotis (2020) • Management Plan for Polar bear (2017) • Bathurst Caribou Management Plan (2021) • Bathurst Caribou Range Plan (2019) • Beverly and Qamanirjuaq Caribou Management Plan (2013) • Taking Care of Caribou Management Plan: Cape Bathurst, Bluenose-West and Bluenose-East Barren-ground Caribou Management Plan (2011) • Porcupine Caribou Harvest Management Plan (2010)
Invasive alien species strategy	The recently established NWT Council on Invasive Species, Pests and Pathogens relies on other territorial and national strategies and legislation that include guidance on management of invasive species.

Current actions

Action	Overview	Relevant target(s)
Implementation of species at risk recovery strategies and management plans	Collaboratively developed goals are set for the management or recovery of specific species, and actions are identified to meet these goals. However, specific management plans or recovery strategies do not commit any party to actions or resource expenditures; implementation is subject to the appropriations, priorities, and budgetary constraints of the participating Management Authorities.	4, 9
Healthy Land, Healthy People work plan (2023-2028)	If all candidate areas in the Healthy Land, Healthy People work plan are established, the NWT would contribute 19% of the NWT's land and freshwater (2.56% of Canada) towards biodiversity protection. This statistic includes both established and candidate protected areas and	1, 3, 11, 14, 20, 21, 22, 23

Action	Overview	Relevant target(s)
	conservation areas. Conservation areas contribute as Other Effective Area-based Conservation Measures.	
The NWT Project Finance for Permanence (PFP) **"Our land for the future"**	The PFP will be a tool by which funding can be provided to support biodiversity protection in the NWT. The Government of NWT, Canada, and Indigenous governments are currently negotiating a PFP.	1, 3, 4, 5, 8, 9, 14, 19, 20, 21, 22, 23
Gwich'in and Sahtu Land-Use Plans	Regional land-use plans are in place in the Gwich'in and Sahtu Regions. The plans are developed by Regional Land Use Planning Boards, and the Government of NWT is one of three approving parties. The Government of NWT will continue to consider biodiversity interests in the review of Planning Board-led amendments to regional land-use plans, and in the regularly scheduled review of the regional plans.	1, 3, 8, 11, 14, 22
Regional Land-Use Planning	The Government of NWT supports the development and completion of land-use plans in all regions of the NWT in collaboration with Indigenous governments and the federal government.	1, 3, 8, 11, 14, 22

Nova Scotia

Biodiversity strategy	Covered under the following legislation: • *Biodiversity Act* (2021) • *Environmental Goals and Climate Change Reduction Act* (2021), section 10 – Land Protection goals - Collaborative Protected Areas Strategy - An Action Plan for Achieving 20 Per cent (2023) - Implement and ecological forestry approach for Crown Lands (the triad model of forest management that prioritizes the sustainability of ecosystems and biodiversity in Province (2023)
Area-based conservation or land-use strategy	• Collaborative Protected Areas Strategy - An Action Plan for Achieving 20 Per cent (2023) • Our Parks and Protected Areas: A Plan for Nova Scotia (2013), Ministerial mandate to complete plan
Species / wildlife management strategies	• State of Harvested Species in Nova Scotia: Large Mammals (2017) • Collaborative Management Plan for Moose on Cape Breton Island (expected 2024) • Recovery strategies and management plans under the Nova Scotia *Endangered Species Act*
Invasive alien species strategy	• The Nova Scotia Invasive Species Council is active and is supported through provincial Habitat Conservation Fund. • Invasive Species of Nova Scotia: Identification and Information Guide (2022) Mersey Tobeatic Research Institute – Funded by the Nova Scotia Habitat Conservation Fund.
Other relevant strategies	• Nova Scotia Wetland Conservation Policy (amended 2019) • Our Climate, Our Future - Nova Scotia's Climate Change Plan for Clean Growth (2022) • Old-Growth Forest Policy for Nova Scotia (2022)
Area-based conservation target	Legislated target of 20% of Nova Scotia's land and water mass protected by 2030 (*Environmental Goals and Climate Change Reduction Act* – 2021).

Overview

Nova Scotia is a leader in the conservation of biodiversity, passing one of the first, comprehensive endangered species acts in the country in 1998, and passing the *Biodiversity Act* in 2021.

Also in 2021, the government passed the *Environmental Goals and Climate Change Reduction Act* (2021), which contains 28 goals that will reduce greenhouse gas emissions, grow the green and circular economies, improve the health and sustainability of Nova Scotia's environment, and move us to clean and renewable energy. The act includes a legislated timeline to protect 20% of Nova Scotia's lands and water by 2030. In 2023, we released the Collaborative Protected Areas Strategy for Nova Scotia, which sets the direction to achieve this conservation goal.

Current actions

Action	Overview	Relevant target(s)
Commitment to protect 20% of Nova Scotia's land and water by 2030	The Collaborative Protected Areas Strategy for Nova Scotia sets the direction to achieve this conservation goal.	1, 2, 3
Implementation of the Forest Practices Review	The Government of Nova Scotia is adopting a new approach to forestry management. Ecological forestry is a fundamental shift that protects ecosystems and biodiversity, supports economic growth, and keeps forests healthy and sustainable.	1, 4
Species at Risk Policy Renewal Project	The Species at Risk Policy Renewal Project was initiated to provide the framework for development and implementation of biodiversity conservation tools needed to meet legislated conservation and protection requirements.	4
Implementation of the Canada–Nova Scotia Nature Agreement	The Canada–Nova Scotia Nature Agreement, signed on October 10, 2023, sets out target outcomes and early commitments in six key areas: • Increase the amount of protected and conserved areas in the province by 82,500 ha, by March 2026, which will result in protection of close to 15% of the province's land mass. • Creating a pathway to the provincial goal of 20% by 2030, and the federal goal of 30% by 2030, by supporting and accelerating processes that enhance land-use planning • Supporting the Mi'kmaq of Nova Scotia in conservation leadership and care of nature • Species at Risk protection and recovery • Foundational knowledge and information sharing • Support Canada's domestic and international biodiversity commitments including through the implementation of the KMGBF.	4
Biodiversity Act	This act, signed in 2021, provides a foundation to manage risks, such as invasive species or ecosystem loss and diseases, and gives the government authority to act where there are threats or where opportunities for sustainable use of biodiversity exist. The act will serve as a toolkit for biodiversity management and provide a framework for the development of new regulations.	
State of biodiversity reporting	Under the *Biodiversity Act*, Nova Scotia will be producing its first report on the state of biodiversity in Nova Scotia in 2024.	

Nunavut

Biodiversity strategy	None. Nunavut continues to monitor and collect scientific information and traditional on terrestrial wildlife species under the Government of Nunavut's mandate to ensure sustainable use and maintenance of existing biodiversity in the territory while ensuring the rights of Inuit under the Nunavut Agreement are not unjustly impacted.
Area-based conservation or land-use strategy	Nunavut is currently developing a Protected Areas Strategy in collaboration with all Nunavut stakeholders. This strategy will help identify important areas to protect for biodiversity conservation and help Canada achieve its goal to protect at least 30% of Canada's natural ecosystems by 2030.
Species / wildlife management strategies	None. Nunavut has not listed any species at risk under its legislation; however, we continue to work with the Government of Canada on implementing necessary management actions for federally listed species under the *Species at Risk Act*. Examples include the Polar Bear National Management Plan, Peary Caribou and Dolphin Union Caribou Recovery Strategies, Grizzly Bear and Wolverine Management Plans.
Invasive alien species strategy	None. Nunavut works with neighbouring jurisdictions to monitor invasive species as they expand their range northwards into Nunavut's jurisdiction.
Area-based conservation target	None. Most of Nunavut remains an intact arctic wilderness. The Nunavut Land Use Plan (currently under development) has the ability to contribute up to 4% of Canada's terrestrial area and 1% of marine area as conserved.

Overview

The Government of Nunavut follows the guiding principles of the Nunavut Agreement and implements the land claim agreement. Wildlife research and management in the territory is guided by the principles of conservation and includes Inuit participation throughout all aspects of wildlife research and management.

Nunavut participates in Canada's domestic federal-provincial-territorial meetings and sits on the Biodiversity Working Group. The Government of Nunavut will continue to submit data to the Canadian Protected and Conserved Areas Database.

Current actions

Action	Overview	Relevant target(s)
Wildlife monitoring and research	Nunavut's Department of Environment continues to monitor and collect scientific information and traditional on terrestrial wildlife species under the Government of Nunavut's mandate to ensure sustainable use and maintenance of existing biodiversity in the territory while ensuring the rights of Inuit under the Nunavut Agreement are not unjustly impacted.	1, 4, 5, 6, 9, 11, 16/15B, 21

Planned actions

Action	Overview	Relevant target(s)
Protected Areas Strategy	Nunavut is currently developing a Protected Areas Strategy in collaboration with all Nunavut stakeholders. This strategy will help identify important areas to protect for biodiversity conservation and help Canada achieve its goal to protect at least 30% of Canada's natural ecosystems by 2030.	1, 3, 4, 11, 21

Ontario

Biodiversity strategy	Ontario's Biodiversity Strategy (2023 -2030) is a whole-of-society approach; many organizations, including government, take action to meet biodiversity targets.
Area-based conservation or land-use strategy	Ontario's landscape approach to planning on private and public lands is based on a framework that includes numerous strategies and policies to conserve biodiversity.
Species / wildlife management strategies	Policies/strategies developed under various legislation (e.g., *Endangered Species Act, Fish and Wildlife Conservation Act*) support species conservation and management.
Invasive alien species strategy	The Ontario Invasive Species Strategic Plan guides the prevention and management of invasive species in Ontario.

Overview

Ontario's long history of conserving biodiversity is supported by a strong foundation of legislation, policies, programs, and tools to guide protection and sustainable use and to reduce threats. Our biodiversity monitoring and reporting framework supports the creation and sharing of knowledge to inform, educate, and empower all Ontarians to appreciate and take actions to conserve our province's rich biodiversity.

Ensuring a whole-of-society approach has been a cornerstone of Ontario's biodiversity efforts since 2005, when the province released its first biodiversity strategy and formed the Ontario Biodiversity Council. The Council, with more than 40 members from conservation and Indigenous organizations, industry, academia, and government, aims to drive the collective implementation of Ontario's Biodiversity Strategy.

Ontario continues to make progress in expanding its world-class system of protected areas. That system covers almost 11% of our total lands and inland waters and includes more than 1,500 sites across the province. We support partners and recognize the valuable role that individual land stewards play in supporting area-based conservation, restoration, and the protection and recovery of species at risk.

Ontario is committed to the conservation and management of fish and wildlife. We manage the sustainable use of wild native species, recognizing cultural, economic, and social benefits and perspectives. We are advancing work under Ontario's Provincial Fish Strategy, Ontario's Invasive Species Strategic Plan, and Ontario's land-use planning policy framework, which helps maintain the ecological function of our natural heritage, including landscapes like the Niagara Escarpment.

Farmers are important land stewards in Ontario. We help farmers to maintain and enhance soil and plant health, water quality, and agricultural productivity. This includes efficient and responsible nutrient and manure management, and integrated pest management. In addition, we consistently work to reduce environmental risk in the engineering, construction, and maintenance of roads by considering impact mitigation, connectivity, invasive species, species at risk, native seed mixes, and flood management.

Forests are an important part of Ontario's environment, cultures, and economy. Our sustainable forest management framework helps maintain healthy, diverse, and resilient forests by using an adaptive

approach and bringing diverse voices to the table, including First Nations and Métis communities, stakeholders, and the public.

Ontario's efforts to conserve biodiversity are built on the understanding that we can do more together. We will strengthen collaboration with partners and further research, monitoring, and public reporting on biodiversity. We will continue to recognize the many contributions of Indigenous Peoples and strive to promote and support opportunities for Indigenous leadership in conservation. And finally, we are committed to continued and enhanced biodiversity conservation efforts, ensuring sustainable use and development for the health, well-being, and resilience of nature and communities in Ontario.

Current and planned actions

Action	Overview	Relevant target(s)
Area-based conservation - protection and restoration	**Protected areas**: new Monarch Point Conservation Reserve, and Alfred Bog Provincial Park and a 3-year agreement with Canada for up to $9.85M to protect up to 170,000 ha of land (2023). **Wetland Conservation**: 5-year $31M for conservation, enhancement, and restoration and stormwater management. **Greenland Conservation Partnership**: $38M since 2020 to support conservation partners. Additional $20M over next four years (2024-2028). **Other Effective Area-based Conservation Measures (OECMs)**: exploring the potential of areas set aside in forest management plans as OECMs.	2, 3, 4, 6, 8, 10, 11, 12, 19
Species management and recovery	**Species at Risk Stewardship Program**: annual funding of $4.5M (created, enhanced, restored more than 60,000 ha of habitat to date). **Caribou Conservation Agreement**: Ontario-Canada 5-year agreement (~ $30M each jurisdiction) to support caribou conservation actions. **One Health**: $322,500 per year (2022-2025) contribution to the Canadian Wildlife Health Cooperative for wildlife health work.	2, 4, 5, 6, 8, 9, 21
Invasives species	**Ontario Invasive Species Strategic Plan:** additional $16M partner funding (2024-2027) to prevent, detect, and manage invasive species.	2, 6, 11, 14
Taking care of the Great Lakes and its resources	**Great Lakes Local Action Fund**: over $3.7M invested (since 2021) to protect and restore areas in Great Lakes watersheds. **Great Lakes Program**: continued funding to protect, conserve, and restore Great Lakes resources. **Ontario's Flooding Strategy**: wetlands are valuable, includes a focus on preventing wetland loss, working toward net gain.	2, 3, 4, 6, 7, 8, 11
Sustainable management of	Supporting **Best Aquaculture Practices** certification and delivering on **mandatory reporting** for Commercial Fishers and Bait Operators.	5, 9, 10

Action	Overview	Relevant target(s)
working landscapes	Sustainable development through the Ontario ***Mining Act*** and ***Aggregate Resources Act***, such as progressive rehabilitation of lands.	2, 10
	Agriculture Stewardship Initiative (2023): funding activities that support on-farm soil health, water quality and productivity. **Resilient Agricultural Landscapes Program:** support for practices that reduce and sequester carbon and have other co-benefits. **Environmental Farm Plan:** updating to include biodiversity and climate change.	2, 4, 6, 7, 8, 10, 14
	Sustainable forest management practices to reduce and manage risks from fire, insects, and disease. **Tree Seed Transfer Policy**: to conserve genetic diversity and promote forest adaptation to climate change.	2, 6, 8, 9, 10, 21
	Resource revenue sharing: sharing economic benefits from natural resources with First Nations and Métis communities that have signed an Agreement, to support reconciliation.	9, 10, 19, 22
Monitoring, reporting, and research	Long-term monitoring programs and accessible spatial information (e.g., GeologyOntario) to support policy, planning, and management.	14, 21
	Regular reporting on biodiversity, protected areas, natural resources.	14, 21
	Research on species and ecosystem resilience and management, aquatic climate refugia, connectivity, wetland carbon, and more.	21
Mainstreaming and education	**Mandatory learning** about biodiversity in publicly funded schools. **Inter-ministerial biodiversity networks**: support collaboration, coherence, and mainstreaming biodiversity in government business.	14, 16

Prince Edward Island

Area-based conservation or land-use strategy	PEI Significant Environmental Areas Plan
Species / wildlife management strategies	Wildlife Policy for Prince Edward Island
Other relevant strategies	• 2040 Net Zero Framework • Building Resilience: Climate Adaptation Plan
Area-based conservation target	7%

Overview

The Province of Prince Edward Island (PEI) is active in implementing strategies to conserve provincial diversity and contribute to national commitments under Canada's 2030 Nature Strategy. The Province works collaboratively both internally and with Island conservation organizations to implement strategies such as prioritizing and acquiring lands for conservation, implementing best management practices for restoring and enhancing wildlife habitat, filling knowledge gaps related to biodiversity, and working directly with landowners to support conservation measures.

Current actions

Action	Overview	Relevant target(s)
Land protection and securement		
Prince Edward Island Protected and Conserved Areas Network	The Province provides annual funding to acquire and protect ecologically significant lands to protect under the *PEI Natural Areas Protection Act* or the *PEI Wildlife Conservation Act.*	1, 2, 3, 4, 6, 8, 9, 11
Buffer Zone Acquisition Program	The Province provides annual funding to purchase riparian buffer zones to be included in the PEI Protected and Conserved Areas Network.	1, 2, 3, 4, 8, 10, 11
PEI Wetland Conservation Policy	The PEI Wetland Conservation Policy requires that existing wetlands management and protection mechanisms are used to control development in and adjacent to wetlands. This is to ensure no net loss of wetlands and wetland function.	1, 3, 7
Provincial initiatives		
PEI Forest Enhancement Program	The Forest Enhancement Program was established in 2002 to encourage and support sustainable forest management on private land. Activities under the program adhere the Ecosystem-based Forest Management Manual and are eligible for financial support from the Province.	1, 2, 10, 11, 12

Action	Overview	Relevant target(s)
Supporting the PEI Invasive Species Council	The Department of Environment, Energy and Climate Action annually supports the PEI Invasive Species Council to respond to public reports of invasive species, provide support for managing invasive species, promote awareness of invasive species, coordinate early detection and rapid response for priority invasive species, and conduct an annual compilation of invasive species data.	1, 2, 6
Alternative Land-use Services (ALUS) Program	The ALUS Program supports the maintenance, enhancement, and production of ecological goods and services to reduce soil erosion, improve air and water quality, enhance wildlife habitat and biodiversity, sequester carbon and build resilient agricultural landscapes. ALUS provides financial assistance to farmers and farmland owners through a multi-year land-use agreement.	2, 4, 7, 8, 10, 11
Federal-provincial initiatives		
PEI 2 Billion Trees Program	The PEI 2 Billion Trees Program supports the creation of new permanent forest cover on currently unforested lands, in low-forest-cover watersheds and riparian zones, and in urban areas across the province by working with municipalities, local watershed groups, and individual landowners.	2, 7, 8, 10, 11, 12
PEI Forested Landscape Priority Place for Species at Risk Initiative	The forested landscape of PEI was designated as one of the 11 Priority Places for Species at Risk across Canada under the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada. The PEI Forested Landscape Priority Place for Species at Risk Initiative (FLPP) engages conservation partners, Indigenous communities and organizations, and governments to identify and implement actions to advance conservation of forest habitats and the species at risk. Through the FLPP, work is underway to better understand and restore forest ecosystems; improve understanding of the distributions of species at risk and species of conservation concern and their habitats; manage and reduce threats to the forested ecosystem (e.g., invasive species, residential development); promote and support organizations and landowners in sustainable forest management practices; create opportunities for the public to connect with and appreciate forests and species at risk; and conserve important forest ecosystems and species at risk habitat through land acquisition and protection.	1, 2, 3, 4, 6, 8, 10, 11, 12, 14, 20, 21

Action	Overview	Relevant target(s)
Species-specific actions		
Monitoring and mitigating impacts to species of conservation concern	The Province supports monitoring programs for species of conservation concern, including River Otter (*Lontra canadensis*) and Piping Plover (*Charadrius melodus melodus*), and considers critical habitat for species at risk such as Bank Swallow (*Riparia riparia*) when reviewing environmental assessments and development applications.	1, 4
Funding programs		
PEI Watershed Management Fund	The PEI Watershed Management Fund provides financial support to community-based watershed groups on Prince Edward Island. The fund supports the work of the PEI Watershed Alliance and 25 community-based watershed groups across PEI.	1, 2, 3, 4, 6, 7, 8, 10, 11, 12
PEI Climate Challenge Fund	Annual funding to support the development of innovative solutions to the threat of climate change. Projects supported by the PEI Climate Challenge Fund contribute to climate action by adapting to the projected impacts of climate change, and/or reducing greenhouse gas emissions and increasing opportunities for sequestration.	8
PEI Wildlife Conservation Fund	The Province provides annual funding to the PEI Wildlife Conservation Fund to support organizations working on projects that benefit wildlife and wildlife conservation in PEI.	2, 6, 7, 9, 12, 21

Saskatchewan

Overview

The Government of Saskatchewan's vision is for our province to be the best place in Canada to live, work, start a business, get an education, raise a family, and build a life. Our province has unparalleled quality of life, robust economic opportunities, and a commitment to environmental sustainability. Saskatchewan's Ministry of Environment provides science-based solutions, compliance and mitigation measures aimed at protecting the environment, safeguarding communities, and helping to ensure balanced economic growth and a better quality of life for all Saskatchewan residents. Below is a snapshot of the work underway to support Saskatchewan's environmental outcomes in alignment with the broader goals outlined in Saskatchewan's Growth Plan.

Current and planned actions

The Government of Saskatchewan has identified many priorities regarding biodiversity, habitat, and sustainability. Saskatchewan uses a one-government approach to deliver its biodiversity initiatives: collaborative work by multiple ministries and agencies, including non-government organizations within our jurisdiction. These priorities align with many targets identified in Canada's 2030 Nature Strategy.

Saskatchewan's conservation-based plans and policies to support biodiversity and contribute toward Canada's 2030 Nature Strategy include:

Saskatchewan's conservation-based plans and policies	Relevant target(s)
Habitat management plan	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 18, 21, 22
Protected and conserved areas network program	1, 3, 4, 11, 22
Habitat mitigation and sustainable resource extraction through environmental regulatory frameworks	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 18
Provincial Invasive Species and Disease Management Framework	6
Water management strategies and policies	1, 2, 3, 4, 7, 8, 9, 10, 11, 14, 18
Sustainable agriculture practices	1, 2, 3, 4, 7, 8, 9, 10, 11, 14, 18
Sustainable Forest Management	1, 2, 3, 4, 7, 8, 9, 10, 11, 14, 18
Woodland Caribou Range Plans	1, 2, 3, 4, 6, 9, 10, 11, 14
Data management and access (i.e., Habisask)	21, 22
Game Management Plan	5, 9, 11, 14
Fisheries Management Plan	4, 5, 9, 10, 11, 14
Prairie Resilience: a Made in Saskatchewan Climate Change Strategy	1, 3, 7, 8, 11, 15
One Health Program	17
Critical Habitat Research Project	4
Crown Land Pasture Association Invasive Weed Program	6
Pest Biosecurity Program	6
Resilient Agricultural Landscape Program	8
Agricultural Crown land Management Policy and Lease Policy	1, 2, 3, 4, 6, 8, 10, 18

Yukon

Area-based conservation or land-use strategy	• Canada-Yukon Nature Agreement 2023-2026 • Aullaviat/Anguniarvik Traditional Conservation Area Agreement 2024 • North Yukon Regional Land-Use Plan 2009 • Peel Watershed Regional Land-Use Plan 2019 • Yukon Parks Strategy 2020-2030
Species / wildlife management strategies	• Wildlife Conservation and Management Plan for the Yukon North Slope • Management Plan for Aishihik wood bison, revised plan expected in 2024 • Management Plan for the Chisana Caribou Herd, revised plan expected in 2024 • Wolf Conservation and Management Plan 2012 • Management Plan for Elk in Yukon 2018 • Management Plan for Yukon Amphibians 2018 • A Conservation Plan for Grizzly Bears in Yukon 2019
Invasive alien species strategy	The Government of Yukon supports external Yukon Invasive Species Council – Strategic Plan 2021-2025
Other relevant strategies	• Our Clean Future 2020-2030 • Policy for the Stewardship of Yukon's Wetlands 2022 • Cultivating Our Future: 2020 Yukon agriculture policy • Silviculture: Strategic Plan for Yukon Forests 2018
Area-based conservation target	Yukon does not have an area-based conservation target, but in implementing the Canada-Yukon Nature Agreement, Yukon is helping Canada work toward its targets of 25% by 2025 and 30% by 2030.

Overview

The Government of Yukon has a number of overarching initiatives underway that contribute to the 23 targets identified under the KMBGF. These include implementing the Canada-Yukon Nature Agreement, Our Clean Future, the Yukon Parks Strategy, the Wetlands Stewardship Policy, and its day-to-day work. Through these initiatives, the Yukon is a leader in Canada in planning for the future and responsibly managing its lands, waters, and biodiversity. Currently, the Yukon has reported 21.1% of protected lands and waters to the Canadian Protected and Conserved Areas Database and is working with Indigenous partners on areas of conservation interest. The Government of Yukon continues to collaborate with management partners to ensure sustainable management of wildlife species and is working to advance an approach to manage species at risk.

Current actions

Action	Overview	Relevant target(s)
Land-use planning	Dawson Regional Land-Use Planning is currently underway, along with other sub-regional and local area planning (Fish Lake local area plan).	1, 2, 3, 11, 12, 21, 22

Action	Overview	Relevant target(s)
Protecting and conserving land and water	• Implementation of the Canada-Yukon Nature Agreement to work toward protecting and conserving 25% of lands and waters in the Yukon; this includes supporting capacity for Indigenous partners to lead conservation work that will contribute towards 30% by 2030. • Implementation of the Yukon Parks Strategy; this includes moving forward on protecting Agay Mene Territorial Park, as defined in the Carcross/Tagish Final Agreement, and management planning for Dàadzàii Vàn Territorial Park, partnering with Indigenous guardians to build relationships and create programs with our shared goals of conservation as the priority. • Implementation of the Yukon Wetland Stewardship Policy to strengthen our capacity to manage and mitigate wetland impacts caused by human activities.	2, 3, 11, 12, 19, 21, 22
Management of Wildlife	• Under the Canada-Yukon Nature Agreement, working collaboratively with Indigenous partners to develop a management approach for species at risk, as well as enhancing surveying, monitoring, and data collection of wildlife. • Under the 1998 National Accord for the Protection of Species at Risk, work collaboratively with Canada and other jurisdictions to identify and protect species at risk, including the development and implementation of national recovery strategies and management plans for species listed under the federal *Species at Risk Act*. • Implementation of an adaptive management framework for key wildlife populations of biocultural importance to ensure harvest sustainability. • Implementation of the Control Order for Sheep and Goat to control spread of respiratory illness to wild populations (until 2024). • Track and assess conservation status of Yukon species through the Yukon Conservation Data Centre.	4, 5, 9, 10, 11, 19, 21, 22
Our Clean Future program	Under Our Clean Future: a Yukon strategy for climate change, energy, and a green economy; work towards implementing all 178 actions that the Government of Yukon will take to reduce Yukon's greenhouse gas emissions, enhance energy security, adapt to the impacts of climate change, and build a green economy.	7, 8

Planned actions

Action	Overview	Relevant target(s)
Land-use planning	• The Government of Yukon is committed to advancing land use planning with Indigenous partners. • To support informed decision-making, increase data sharing to ensure best available knowledge is available.	1, 2, 3, 11, 12, 21, 22
Protecting and conserving land and water	Under the Canada-Yukon Nature Agreement, make meaningful contributions to Canada's targets to protect and conserve 30% of lands and waters by 2030.	2, 3, 11, 12, 19, 21, 22

Annex 4: First Nations-led conservation: Moving towards transformative, systematic change in Canada

Introduction

The Assembly of First Nations (AFN) is the national advocacy organization that works to advance the collective aspirations of First Nations individuals and communities across Canada on matters of national or international concern. The AFN is mandated by the First Nations-in-Assembly (elected Chiefs or proxies from member First Nations), who have advanced resolutions that prioritize First Nations' leadership in area-based conservation both domestically and internationally. The organization supports First Nations by advocating for legislative and policy change, as well as coordinating and facilitating First Nations-led conservation initiatives.

As leaders in biodiversity protection on our lands, freshwater, and marine waters, First Nations are at the forefront of transformative change to address the biodiversity crisis. The AFN welcomes Canada's recognition of the central role of Indigenous leadership in conservation, and the recognition that First Nations rights, governance, and knowledge systems must be reflected in the development, refinement, and implementation of conservation measures, targets, and goals outlined in the National Biodiversity Strategy and Action Plan (NBSAP). Nonetheless, Canada's commitments toward reconciliation extend beyond conservation action toward upholding and protecting First Nations rights over their lands and waters.

This Annex presents our understanding of a rights-based approach to addressing the biodiversity crisis through promoting and investing in First Nations-led conservation. This means fundamental changes to uplift First Nations governance, laws, knowledge systems, and advancing self-determination. To be holistic and transformative, the Strategy's vision, mission, and goals must be informed by First Nations' perspectives and realities and ensure First Nations' full and meaningful inclusion, every step of the way.

This Annex presents our perspective on upholding First Nations relationship to Mother Earth and how this should inform the promotion of First Nations leadership in Conservation. This provides a guideline when applying First Nations perspectives to the NBSAP, which call for immediate action and transformative change.

Upholding First Nations relationship to Mother Earth

Based on a profound spiritual connection and inherent responsibility to Mother Earth, First Nations have a unique relationship with the natural world that is rooted in reverence, humility, and reciprocity. First Nations' connections to more-than-human beings and the Land, Water, and Air have enabled us to live reciprocally and in balance with all of Creation. Up to 80% of the world's remaining biodiversity is located on the traditional lands and territories of Indigenous Peoples, underscoring the importance of recognizing Indigenous Peoples' rights to own, manage, use, and occupy our lands.[72] Addressing the biodiversity crisis requires a fundamental shift and departure from the colonial understanding of nature, which is rooted in a human-centric and dominant way of being in the world. This consumeristic approach to our natural world focuses on what it can do or provide *for* humankind. First Nations worldview tells of being one with the natural world, which is manifested through teachings of reciprocal relationships and care. These guiding principles, and laws, form the basis of living well and in harmony

[72] A spatial overview of the global importance of Indigenous lands for conservation

with Mother Earth. Central to this is the recognition that all beings share inherent and equal value. Coexistence with and care for all aspects of Creation is a focal point of Natural Law.

Tools such as the First Nations Climate Lens ('Climate Lens'), developed as part of the AFN National Climate Strategy,[73] can be used to better understand the interconnectedness and experiences of First Nations when contemplating biodiversity-related solutions for and by First Nations. Through the Climate Lens, First Nations climate solutions call for systemic change and revitalization of a value system that is grounded in a deep reciprocal relationship with the Land and Water. Similarly, First Nations biodiversity solutions necessitate a recognition that must first restore balance to our reciprocal relationship to Mother Earth.

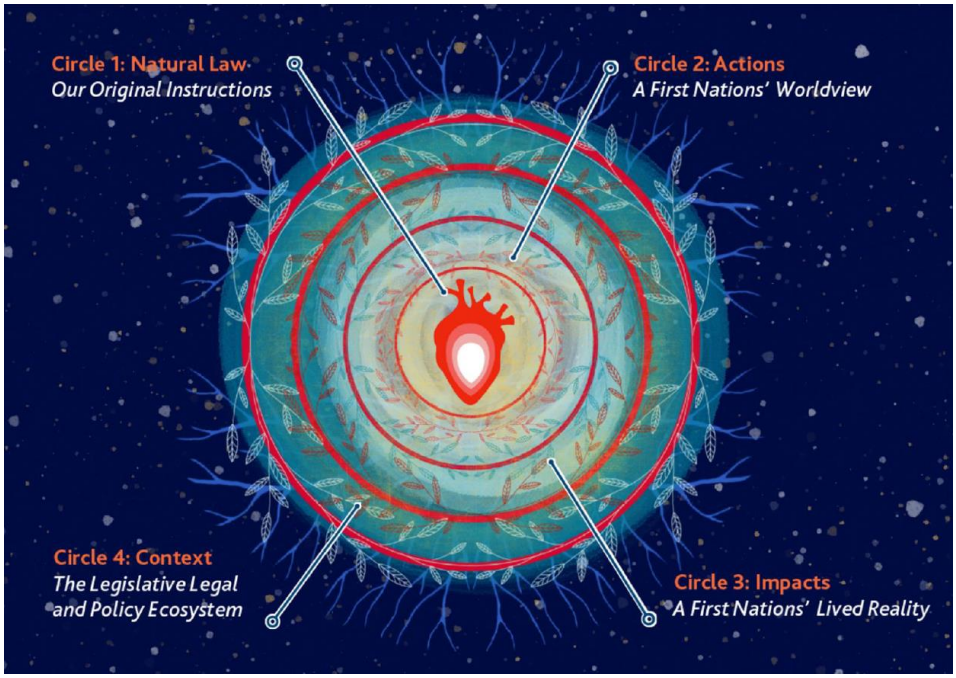

Figure 4. First Nations Climate Lens. The visual work of the First Nations Climate Lens was curated by Atikamekw Nehirowisiw artist Eruoma Awashish, who grew up in the Opitciwan, Quebec.

Promoting First Nations leadership in conservation

Uplifting First Nations governance, laws, and knowledge systems

First Nations face unique environmental risks. Colonialism, in conjunction with capitalism, has shaped where we live, our socio-economic conditions, and how we experience our relationship with Mother Earth. The impacts of climate change and biodiversity loss are inseparable from First Nations lived realities. Climate change and biodiversity loss have had a wide range of impacts on First Nations' ways of life and connection to the land, including acute and chronic health issues, food, water, and housing insecurity, and the loss of languages, among others. Yet while cultural, spiritual, and social connections to the environment increases First Nations' exposure and sensitivity to climate change and biodiversity loss, it also provides a unique source of strength, understanding, and resilience.

[73] AFN National Climate Strategy

There is growing recognition that First Nations contribute immensely to addressing the biodiversity crisis through our ways of being, governance systems, knowledge systems, and innovative practices.[74] This is supported by global evidence that nature is declining less rapidly where Indigenous Peoples have governance and control over their lands.[75] Advancing First Nations' self-determination is thus essential to enabling the restoration of our role as stewards of our lands and waters. The federal, provincial, and territorial legislative, legal, and conservation policy landscape must facilitate and empower First Nations' rights to governance, through Crown recognition and respect for our legal orders and knowledge systems.

First Nations have led contributions toward realizing the Government of Canada's ambitious Nature Agenda of protecting 25% of lands and waters by 2025, and 30% by 2030, through the establishment of Indigenous Protected and Conserved Areas (IPCAs) and Guardian programs. IPCAs exemplify how we, as First Nations, are reasserting our authority and are using our respective governance and knowledge systems to steward our lands and waters. Currently, there is no explicit recognition for IPCAs in Crown legislation within Canada. While there are great examples of IPCAs that have been co-designated under Crown legislation (e.g., *Protected Areas Act*, *National Marine Conservation Area Act*) and collaborative Crown government-First Nation agreements, Crown governments are not currently compelled to recognize IPCAs that First Nations have declared and established under their own jurisdiction and authority.

Since 2018, the Government of Canada has worked collaboratively with First Nations to support the establishment and implementation of IPCAs, and important progress has been made with historic federal funding commitments. Additionally, First Nations are beginning to see similar resource commitments from provincial and territorial governments. Nonetheless, efforts to protect and conserve marine and freshwater environments have been limited and will require a whole-of-government approach to advance First Nations-led conservation. This must begin with a commitment from Crown governments to review current policy and legislative tools to support the meaningful recognition and implementation of First Nations laws in the designation of IPCAs. Additionally, Crown governments must work with First Nations on legislative and regulatory reform to remove barriers to establishing IPCAs and align existing Crown laws with First Nations conservation priorities, laws, and governance systems.

Addressing First Nations capacity needs

The recognition of the critical role of Indigenous Peoples to achieve the ambition laid out in the NBSAP will need to be matched with long-term sustainable resourcing commitments to enable/strengthen First Nations leadership in conservation. First Nations continue to deal with the historic and structural legacy of colonization, resulting in chronic underfunding in many/most areas. Stable and ongoing investments to support the financial, technical, and human capacity needs of First Nations are essential to enabling First Nations' leadership in conservation.

Crown governments must prioritize these financial supports and work with First Nations to identify and secure ongoing and sustained multi-year funding. Innovative conservation financing mechanisms will prove useful in facilitating such ongoing supports, such as the Government of Canda's commitment to implement the four Indigenous-led Project for Finance Permanence (PFP) initiatives. Greater investments should be made to expand these initiatives to make them available to all interested First

[74] Supporting resurgent Indigenous-led governance: A nascent mechanism for just and effective conservation
[75] Global assessment report on biodiversity and ecosystem services

Nations. Crown governments should also work with First Nations to build financing mechanisms that respect their governance authorities and their self-determined conservation and stewardship priorities. These funding models should be stable yet flexible to adapt to the variety of First Nations needs and contexts, and all efforts should be made to reduce policy barriers and minimize the administrative and coordination burden on First Nations.

Applying First Nations perspectives to the NBSAP

Climate change and biodiversity loss impacts are inseparable from First Nations' lived realities, whether directly, due to physical and cultural losses caused by biodiversity degradation, or through the ongoing systemic legacy of colonialism. The colonial human versus nature dichotomy, as well as the ecosystem services and capitalist-based approach, rarely considers the complex and multi-dimensional context of First Nations conservation solutions—such as returning to and living off the land, a focus on food sovereignty, and the linkage between conservation and language revitalization. Given the interconnections between the sectors and systems upon which First Nations rely, the western/colonial dichotomy must be challenged to enable holistic, integrated, and systems-based solutions that address the existential threat that is climate change and biodiversity loss.

The First Nations Climate Lens offers a new narrative—one that veers away from market-based and ecosystem services approaches that presume the continuation of inequitable structures and cultural value systems that have led to the compounding climate and biodiversity loss crisis. Rather than embedding a model of ecosystem services and nature-derived human benefits, these times call for a lucid acknowledgement of the interconnectedness of the three C's—carbon, capitalism, and colonialism—and a recentering of our approach rooted in relationships that value the nexus of people with land, and their mutual reciprocity. Viewing the biodiversity crisis through the First Nations Climate Lens emphasizes the need to change the current systems and structures that perpetuate negative cycles and advance the self-determination of First Nations to reclaim our culture and environmental interconnectedness.

While there is a legislative requirement for the consideration of Indigenous Knowledge, there is limited opportunity in this brief process to substantially consider what this would mean; for example, based on an understanding grounded in First Nations knowledge systems that we are one with nature, rather than compartmentalized units apart from nature. Such an approach recognizes that First Nations knowledge systems, while unique to each First Nation, identify the drivers of the climate crisis and biodiversity loss differently than mainstream systems.

The Truth and Reconciliation Commission (TRC) Calls to Action and the *United Nations Declaration on the Rights of Indigenous Peoples Act* (UNDA) Action Plan provide concrete measures that the NBSAP must align with in the implementation of actions to meet biodiversity goals and targets. In this way, the solutions proposed cannot be separated from the required implementation of these minimum standards. For instance, an over-reliance on ecosystem services and market-based solutions, without a critical investigation of the structurally inequitable ways that these solutions interact with First Nations lived realities, will further harm First Nations and may contribute to what has been described as a new form of climate colonialism.[76] This is particularly acute in the context of forestry, agriculture, conservation, and nature-based solutions, where discussions have largely neglected the presence of

[76] 'A change of heart': Indigenous perspectives from the Onjisay Aki Summit on climate change and Indigenizing climate policy in Canada: A critical examination of the Pan-Canadian Framework and the ZéN RoadMap

First Nations' jurisdiction, rights, and legal systems. Additionally, targets cannot be evaluated and actioned in isolation. Actions should be cross-sectoral to address the linkage between resource extraction projects and related activities and the increased risk of violence against Indigenous women, girls, and 2SLGBTQQIA+ people (Targets 18 and 22).

Conclusion

Since time immemorial First Nations have been, and remain, actively engaged in the careful stewardship of our Lands and Waters in accordance with our inherent Rights, responsibilities, knowledge systems, and legal orders. As the original Peoples of this land, our deeply rooted knowledge systems have fostered our cultural and spiritual ties to Mother Earth and instilled an inherent responsibility to maintain a thriving and abundant environment for future generations.

In its current form, the NBSAP focuses on what nature can provide to humans in the form of 'ecological services', perpetuating the status quo built on capitalism and colonialism, which reinforces the false perception of nature as an extractable resource. A biocultural perspective founded on holistic relationships between humans and nature is required to appropriately envision the societal change needed to achieve transformative action for biodiversity conservation, and this perspective should be adopted when reading the Strategy.

This Annex presents our understanding of a rights-based approach to addressing the biodiversity crisis, which requires Canada to recognize, respect, and promote the rights of First Nations under Section 35 (S.35) of the *Constitution Act of 1982*,[77] the *United Nations Declaration on the Right of Indigenous Peoples Act* (UNDA),[78] the Truth and Reconciliation Commission (TRC) Calls to Action,[79] principles of Free, Prior, and Informed Consent, and First Nations' inherent rights and title.

There is a need for urgent action, the magnitude of which will require transformational shifts in our collective approach to address the biodiversity crisis. First Nations leadership in conservation must be advanced through continued investments, capacity development, and legislative and policy reform. The governance, knowledge systems, and life ways of First Nations offer a critical pathway to achieving our collective conservation ambitions, and re-balancing our relationships with Mother Earth today, and for future generations.

[77] Section 35 of the *Constitution Act 1982* – Background
[78] *United Nations Declaration on the Rights of Indigenous Peoples Act* Action Plan 2023-2028
[79] Truth and Reconciliation Commission of Canada

Annex 5: Target crosswalks

Certain elements of the KMGBF targets and their implementation plans in Annex 1 have been or continue to be addressed by efforts to reach other national and international goals and targets. This annex maps the linkages between KMGBF targets and other frameworks to demonstrate how working toward these collective goals has advanced and will continue to advance progress on others, while highlighting the importance of coherence, complementarity, and cooperation across efforts.

Table 1 shows the alignment between KMGBF targets and the United Nations Sustainable Development Goals.

Table 2 shows the alignment between KMGBF targets and the 2020 Biodiversity Goals and Targets for Canada, as well as a final assessment of progress that was made toward achieving each of the 2020 targets. The 2020 Biodiversity Goals and Targets for Canada were released in 2015 by Canada's federal, provincial, and territorial governments in response to the CBD's Strategic Plan for Biodiversity 2011-2020 and its global Aichi Biodiversity Targets.

Table 3 highlights the relevant *UN Declaration Act* Action Plan measures and their relevance to the domestic implementation of KMGBF targets. Identifying the intersections between Action Plan measures and biodiversity targets will help ensure the 2030 Strategy aligns with Indigenous environmental priorities, interests, and rights as defined in the UN Declaration on the Rights of Indigenous Peoples. Moreover, effective implementation of the *UN Declaration Act* Action Plan requires a comprehensive, whole-of-government approach to ensure seamless coordination between Action Plan measures and other federal policies. In the context of the 2030 Strategy, this coordination will ensure alignment between target implementation and Action Plan measures, prevent duplication of efforts, and mitigate consultation fatigue, thus fostering a harmonized and effective approach to biodiversity conservation and reconciliation efforts.

Table 1 – Target alignment with United Nations Sustainable Development Goals

Sustainable Development Goals	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 No poverty											▒								▒			▒	
2 Zero hunger				▒			▒	▒	▒	▒			▒			▒	▒	▒					
3 Good health and well-being							▒						▒										
4 Quality education																▒							
5 Gender equality																			▒			▒	▒
6 Clean water and sanitation		▒	▒				▒	▒	▒	▒	▒	▒			▒	▒	▒	▒	▒	▒	▒		
7 Afforable and clean energy																							
8 Decent work and economic growth																▒							
9 Industry, innovation, and infrastructure											▒				▒	▒							
10 Reduced inequalities																			▒	▒		▒	▒
11 Sustainable cities and communities			▒				▒					▒							▒				
12 Responsible consumption and production					▒		▒	▒	▒	▒					▒	▒	▒	▒	▒	▒			
13 Climate action		▒					▒	▒			▒		▒				▒		▒				
14 Life below water	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒		
15 Life on land	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒	▒		
16 Peace, justice, and strong institutions																						▒	▒
17 Partnerships for the goals																			▒	▒	▒		

Table 2 – Target alignment with 2020 Biodiversity Goals and Targets for Canada

2020 targets	2020 results	1	2	3	4	5	6	7	8	9	10	11	12	14	18	19	21	22
1 Protected and conserved areas	Marine: met Terrestrial: partially met			▨														
2 Species	Not met				▨													
3 Wetlands	Partially met	▨	▨									▨						
4 Municipal activities	Partially met	▨											▨	▨				
5 Climate change adaptation	Met								▨									
6 Forests	Met										▨							
7 Agriculture	Partially met										▨							
8 Aquaculture	Met					▨					▨							
9 Fisheries	Not met		▨			▨				▨	▨							
10 Pollution	Not met							▨										
11 Invasive alien species	Met						▨											
12 Customary use of biological resources	Unclear if met									▨								▨
13 Innovative mechanisms	Met	▨													▨	▨		
14 Biodiversity science and knowledge	Partially met															▨	▨	
15 Indigenous knowledge	Partially met															▨	▨	▨
16 Inventory of protected spaces	Partially met			▨													▨	
17 Measures of natural capital	Met											▨		▨				
18 Biodiversity in school curricula	Met															▨	▨	
19 Canadians in nature	Met												▨					

2030 targets without a relevant 2020 counterpart: 13, 15-17, 20, 23

2020 Biodiversity Goals and Targets for Canada

Target 1: By 2020, at least 17 percent of terrestrial areas and inland water, and 10 percent of coastal and marine areas, are conserved through networks of protected areas and other effective area-based conservation measures.

Target 2: By 2020, species that are secure remain secure, and populations of species at risk listed under federal law exhibit trends that are consistent with recovery strategies and management plans.

Target 3: By 2020, Canada's wetlands are conserved or enhanced to sustain their ecosystem services through retention, restoration and management activities.

Target 4: By 2020, biodiversity considerations are integrated into municipal planning and activities of major municipalities across Canada.

Target 5: By 2020, the ability of Canadian ecological systems to adapt to climate change is better understood, and priority adaptation measures are underway.

Target 6: By 2020, continued progress is made on the sustainable management of Canada's forests.

Target 7: By 2020, agricultural working landscapes provide a stable or improved level of biodiversity and habitat capacity.

Target 8: By 2020, all aquaculture in Canada is managed under a science-based regime that promotes the sustainable use of aquatic resources (including marine, freshwater and land based) in ways that conserve biodiversity.

Target 9: By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem-based approaches.

Target 10: By 2020, pollution levels in Canadian waters, including pollution from excess nutrients, are reduced or maintained at levels that support healthy aquatic ecosystems.

Target 11: By 2020, pathways of invasive alien species introductions are identified, and risk-based intervention or management plans are in place for priority pathways and species.

Target 12: By 2020, customary use by Aboriginal peoples of biological resources is maintained, compatible with their conservation and sustainable use.

Target 13: By 2020, innovative mechanisms for fostering the conservation and sustainable use of biodiversity are developed and applied.

Target 14: By 2020, the science base for biodiversity is enhanced and knowledge of biodiversity is better integrated and more accessible.

Target 15: By 2020, Aboriginal traditional knowledge is respected, promoted and, where made available by Aboriginal peoples, regularly, meaningfully and effectively informing biodiversity conservation and management decision making.

Target 16: By 2020, Canada has a comprehensive inventory of protected spaces that includes private conservation areas.

Target 17: By 2020, measures of natural capital related to biodiversity and ecosystem services are developed on a national scale, and progress is made in integrating them into Canada's national statistical system.

Target 18: By 2020, biodiversity is integrated into the elementary and secondary school curricula.

Target 19: By 2020, more Canadians get out into nature and participate in biodiversity conservation activities.

Table 3 – Target alignment with *UN Declaration Act* Action Plan measures

UNDA Action Plan item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
9 Ending systemic violence against Indigenous women, girls, and gender-diverse people																							
10 MMIWG and the National Action Plan to End Gender-Based Violence																							
11 Federal 2SLGBTQI+ Action Plan																							
12 Safe and secure resource development for Indigenous women, girls and 2SLGBTQI+																							
20 UNDA Annual Reporting																							
25 Implementing historic and modern treaties/self-government																							
30 Supporting Indigenous data sovereignty																							
32 Guidance on engaging on natural resources projects to obtain FPIC																							
35 Harvesting rights, Indigenous Guardians, and Parks Canada																							
36 Fishing rights – legislative, regulatory, and policy amendments and reforms																							
37 Collaborative fisheries management and fish habitat conservation																							
38 Capacity funding for fisheries, oceans and marine-related services and decision-making																							
39 Support for fisheries Guardians																							
40 Incorporation of Indigenous knowledge related to fisheries																							
41 Pacific Salmon Strategy Initiative																							
42 Marine Indigenous Protected and Conserved Areas																							
46 Indigenous Climate Leadership Agenda																							
47 Indigenous leadership in conservation																							
48 Indigenous science in ECCC scientific inquiry																							

UNDA Action Plan item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
49 Canada Water Agency and the *Canada Water Act*		■					■	■			■	■		■								■	■
50 Federal Sustainable Development Strategy														■									
51 Impact assessments and alignment with UN Declaration	■													■							■	■	■
66 Participation in decision-making, including articles 18 and 19													■	■								■	■
67 Co-development and self-determination													■									■	
68 Participation in decision-making related to consultation and accommodation													■									■	
69 Relationship agreements with Indigenous Women's Organizations																						■	■
72 International issues and United Nations system																				■		■	
74 Advancing economic reconciliation		■																					
81 Addressing mental health, suicide and addictions												■											
85 Equality rights of Indigenous persons with disabilities																						■	
86 Access to traditional foods and local food systems					■				■	■												■	■
87 Indigenous food security, sovereignty, and sustainability					■				■	■						■							
90 Addressing gaps and intergovernmental relations consistent with CAP/Daniels decision	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
95 Indigenous-led management of heritage places		■	■	■								■	■	■								■	■
96 Indigenous cultural connections in heritage places			■									■	■	■							■	■	■
97 Indigenous knowledge and data sovereignty in heritage places																					■	■	■
98 Returning Indigenous cultural belongings and ancestral remains																						■	

UNDA Action Plan item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
99 MMIWG and support for Indigenous-led cultural initiatives																							
101 Indigenous cultural heritage and intellectual property																							
109 Participation in processes for implementing international human rights treaties																							
111 British Columbia Action Plan implementation																							
FN6 Waste management solutions for reserve lands																							
IN1 Co-developing approaches to implement Inuit self-determination																							
IN4 ICPC as the primary mechanism to advance priorities																							
IN12 Inuit country or traditional foods framework																							
IN22 Co-developing Nunavut Fishery Regulations																							
ME1 Métis self-determination and self-government																							
MT12 Modern Treaty partner collaboration and FPIC on environmental legislation and policies																							
MT13 Modern Treaty partner collaboration and FPIC on fisheries legislation and policies																							
MT14 Respecting Modern Treaties in land and land use planning legislation, policies, and programs																							

Annex 6: Developing the 2030 Strategy

The federal government undertook a series of engagement activities to ensure that the 2030 Strategy reflects the diversity of Canadian perspectives and all Canadians can take ownership of it and work collectively toward meeting our 2030 targets. Engagement efforts included:

- **National biodiversity symposium** (May 2023) – The symposium served as the official launch to engagement, with over 1,000 participants from across Canada in attendance. Expert panellists provided diverse perspectives on challenges, opportunities, and how to contribute to achieving both national and global biodiversity goals.
- **Online survey and submissions** (May-July 2023; December 2023-February 2024) – Input from a broad cross-section of more than 6,500 Canadian individuals and organizations was received via an online survey and stand-alone written submissions. More than 1,100 additional written submissions were received in response to the Milestone Document published in December 2023.
- **Provincial-territorial discussions** (ongoing) – Discussions were held with a range of ministries, including those responsible for conservation, wildlife, and biodiversity, forestry, agriculture, fisheries and aquaculture, and pest management and pesticides. The federal-provincial-territorial Biodiversity Working Group was engaged on topics of interest identified by provinces and territories, including ecosystem restoration, climate change and biodiversity, biodiversity financing, and species conservation.
- **Bilateral engagement with Indigenous organizations and governments** (ongoing) – A series of bilateral meetings was held with National Indigenous Organizations on topics of most importance to them. A series of meetings with a number of Modern Treaty Partners also took place from October 2023-February 2024. Written submissions were received from several organizations and governments. Indigenous engagement on the implementation of the 2030 Strategy will be ongoing.
- **Nature Advisory Committee** (ongoing) – This group of experts and conservation leaders was engaged at key points in the 2030 Strategy's development for their insights and recommendations, and will continue to be engaged as the 2030 Strategy is implemented.
- **Focused engagement sessions** (May-July 2023) – A series of sessions was held with key groups to explore relevant topics in more depth. This included sessions with the finance and philanthropy sectors, key productive sectors (e.g., agriculture, forestry, minerals, energy, fisheries), NGOs, youth, and municipalities.
- **Expert scientific input** (June 2023; January 2024) – Science considerations for the 2030 Strategy were elicited from a diverse cross-section of national experts via a series of thematic workshops. A comprehensive science paper was developed identifying key science needs, and the findings were discussed among scientists, Knowledge Holders, and federal policymakers at forum in January 2024.

Several main themes emerged from the various engagement activities, which have helped to shape the 2030 Strategy. These included the need for transformative change and ambitious implementation plans; supporting Indigenous Knowledge and leadership; the importance of integrated biodiversity and climate change action; improved coherence across legislation, regulations, and policies; and fostering a whole-of-government, whole-of-society approach. Other cross-cutting ideas that were highlighted included the

importance of public education, communication, and ongoing engagement; accountability measures; new, creative, and long-term funding mechanisms; and improved data collection, access, monitoring, and science. Some notable challenges that were raised included resolving the perceived trade-offs between sustaining biodiversity and economic development, addressing the impacts of climate change on biodiversity, coordination across and between governments, and ensuring adequate resources for implementation (financial, data, capacity, etc.).

On the Milestone Document, in particular, many submissions focused on specific KMGBF targets. For example, for reducing threats to biodiversity (Targets 1-8), suggestions included prioritizing ecosystems with high ecological value, supporting Indigenous Protected and Conserved Areas, strengthening species protection, and responsible use of nutrients and pesticides. On sustainable use and benefit sharing (Targets 9-13), feedback highlighted the importance of urban green and blue spaces, the role of biodiversity in generating benefits for people (e.g., food security, health), and recognizing and incentivizing sustainable practices. Lastly, on tools and solutions (Targets 14-23), comments addressed tools to integrate biodiversity into decision-making, adding nature to the balance sheet, promoting business efforts, and upholding and supporting Indigenous rights, self-determination, leadership, and monitoring.