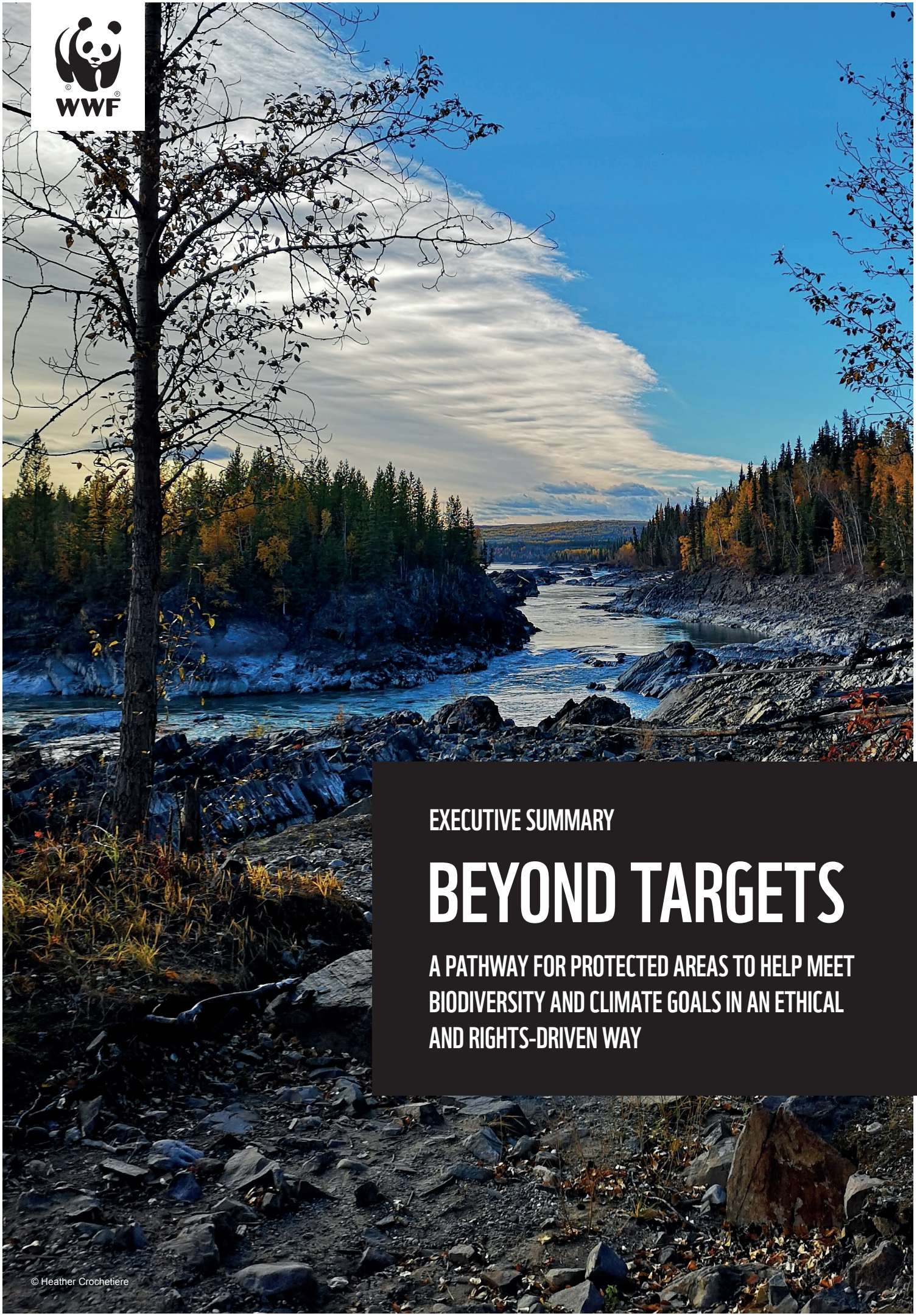


EXECUTIVE SUMMARY

BEYOND TARGETS

A PATHWAY FOR PROTECTED AREAS TO HELP MEET BIODIVERSITY AND CLIMATE GOALS IN AN ETHICAL AND RIGHTS-DRIVEN WAY

A message from
MEGAN LESLIE

Wildlife and nature are at risk in Canada. Habitat loss and climate change have driven the decline of populations of at-risk vertebrate species by an average of 59 per cent since 1970. Even those protected under Canada's Species at Risk Act are failing to recover. This is because wildlife can't survive without healthy, intact and connected landscapes where they can find food, migrate, mate and raise their young.

And while Canada has set an ambitious goal to protect 30 per cent of its land and freshwater by 2030 to match international efforts, it's no longer just about setting aside places on a map. We have to protect the right places. Equally important is that these places are protected for the right reasons, and in the right way.

These areas are vital, resilient habitats that allow wildlife to thrive; they're carbon-rich ecosystems that are keeping billions of tonnes of carbon stored in plants and soils. Our *Beyond Targets* assessment brings us a step closer to determining priority places for protected and conserved area establishment by identifying areas that would provide maximum benefit to both biodiversity loss and climate change. But it's one piece of a much bigger puzzle. The value of protected and conserved areas cannot be measured by this alone.

We know that some of the most effective stewardship of nature in Canada has been led by Indigenous communities, and our *Beyond Targets* assessment shows that a high number of intact, high-value landscapes sit within Indigenous territories. Historically, the model for protected area establishment rarely considered Indigenous knowledge systems, and at worst, ignored the impact on the livelihood and disruption of Indigenous peoples. For conservation to be equitable and just, we need redefine the approach to respect the rights and priorities of Indigenous communities.

In this report, the findings of our *Beyond Targets* assessment are presented alongside interviews with four Indigenous conservation leaders who shared their expertise working to protect important places across the country.

These perspectives are paramount as Canada works toward its commitment to halt and reverse nature loss by 2030, and build a nature positive and climate resilient future for all.

Megan Leslie
President and CEO
WWF-Canada

STEVEN NITAH
on Indigenous Protected and Conserved Areas

Indigenous people know how to have a healthy relationship with nature and biodiversity. What's lacking now in many conservation efforts is the fact that the relationship between nature and people overwhelmingly doesn't exist. It doesn't represent the spirit of the animals, the spirit of the plants and all the interconnectedness that's celebrated by Indigenous people and their relationships with place.

Indigenous Protected and Conserved Areas (IPCAs) are the only hope we have. If Canada wants to achieve its commitment to protect biodiversity, by conserving 30 per cent of land and inland waters and marine and coastal areas by 2030, it needs Indigenous involvement. If Canada wants to achieve reconciliation — whether that's land reconciliation, financial reconciliation, cultural reconciliation or knowledge reconciliation — and some semblance of land back, Indigenous people need to be involved.

IPCAs represent a continuation of the longstanding relationship between Indigenous people and nature. Continually we have proven to be the best caretakers of nature. Canada and other governments need to invest in what works. Give the financial resources to Indigenous people and give them the authority to utilize their ways of knowing and doing to manage people in these spaces.

Steven Nitah
Łutsël K'é Dene First Nation

A PROTECTED AREAS NETWORK IN CANADA

Analysis: Identifying priority areas through the lens of biodiversity and climate

As part of an international commitment — the High Ambition Coalition for Nature and People — Canada has set an ambitious goal to protect 30 per cent of its land and freshwater, as well as its oceans, by 2030. WWF-Canada's *Beyond Targets* report focuses on terrestrial and freshwater ecosystems, of which only 13.5 per cent have received formal protection to date. But reaching 30 x 30 is about more than simply doubling the current amount of protected areas in Canada. To ensure they're created ethically, respecting the rights of Indigenous communities, priority must be given to Indigenous Protected and Conserved Areas. And because climate change is an increasingly high threat to wildlife, these areas need to deliver benefits to both biodiversity and climate.

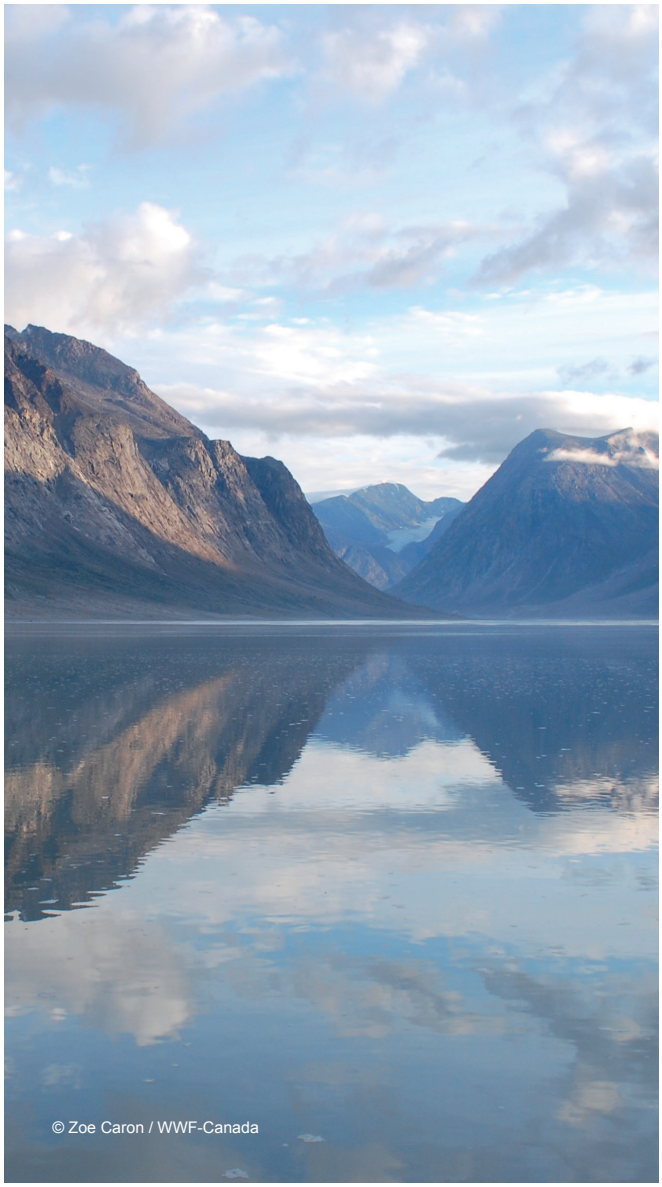
This means making sure that a protected areas network first and foremost advances Indigenous rights and title. It also means using protected areas as nature-based climate solutions — strategies that harness the power of nature to boost natural ecosystems, provide habitat for wildlife, sequester carbon from the atmosphere and keep it stored in soils and plants. A protected areas network in Canada must allow for wildlife to move freely and provides areas of climate refuge in the face of global warming, so that wildlife have the best chance of adapting to a changing climate. It also means keeping large carbon stocks locked in nature to help mitigate climate change while we decarbonize (i.e., reduce greenhouse gas emissions) from human activities.

How do we create a protected areas network for biodiversity and climate?

A highly effective protected areas network takes five factors into account: Indigenous rights and title holders[1] support; where species at risk are located; the location of large carbon stocks that help mitigate climate change; ecological connectivity, which allows wildlife the ability to move between natural habitats; and climate resiliency, which provides a buffer for climate adaptation. If established with these factors in mind, protected areas can help to address biodiversity loss and climate change and advance reconciliation at the same time. They will work to safeguard vital habitats, mitigate climate change by keeping large carbon stores intact, and help us adapt to climate change by ensuring a diversity of habitats and corridors that allow wildlife to move freely.

WWF-Canada's assessment looked at four of these five factors, but any region identified as a priority must still have Indigenous consent and support, recognizing the rights and title of the lands on which the actions are taken, especially since many of the most important areas identified for protection are located on Indigenous territories.

Implementing protected areas without the engagement and support of Indigenous communities, some of whom are already more vulnerable to the impacts of climate change, can lead to disruption of cultural and economic well-being, and other negative impacts.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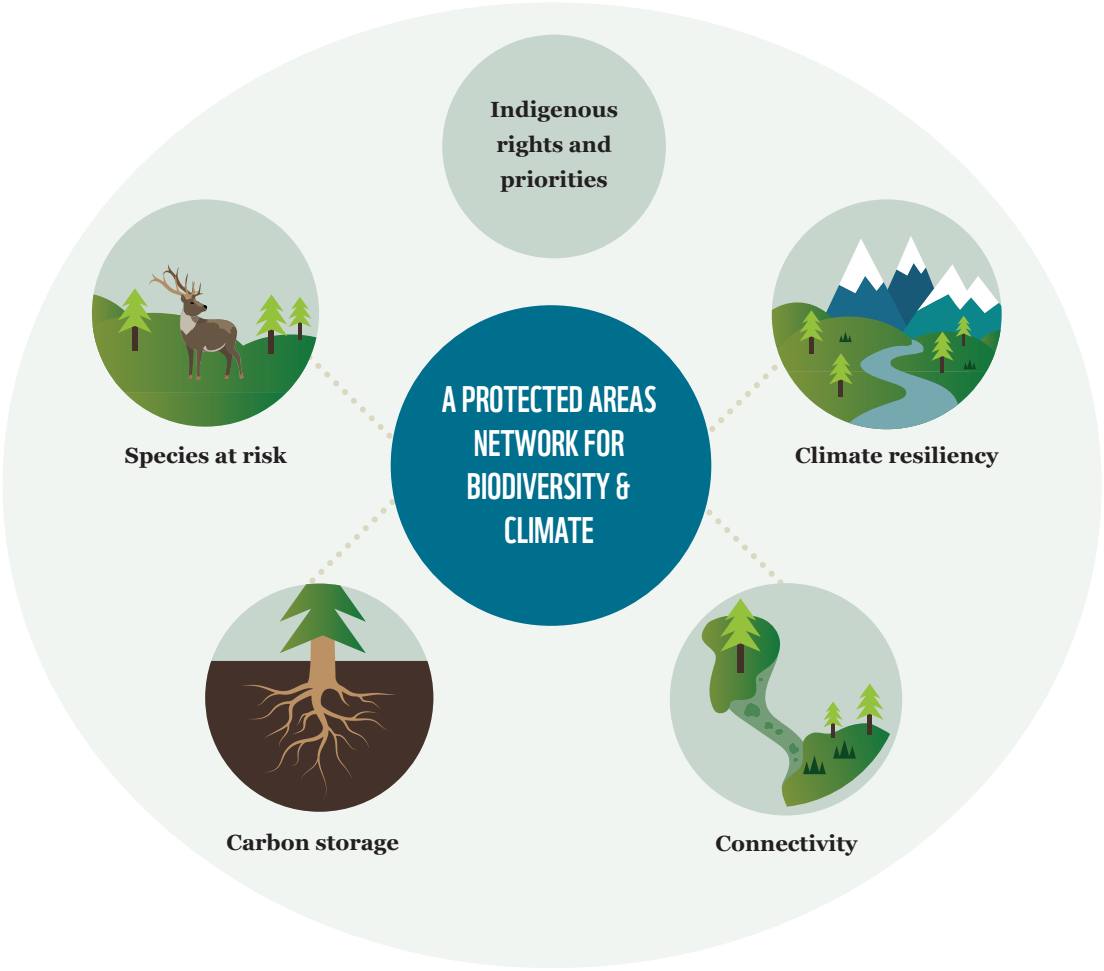
AN ETHICAL AND RIGHTS-DRIVEN PROTECTED AREAS NETWORK FOR BIODIVERSITY AND CLIMATE



Indigenous rights and priorities

First and foremost, protected areas must be co-developed and implemented with Indigenous consent, recognizing the rights and title of the lands on which such actions are taken. Indigenous knowledge systems, leadership and stewardship must be respected and elevated in the creation of new areas, recognizing that self-determination and self-governance are critical aspects of reconciliation through conservation.

Species at risk

Protected areas are particularly important for species at risk of extinction because they protect the habitat they rely on from degradation, conversion to human-dominated landscapes and fragmentation. New protected areas should provide habitat for these species and prioritize species diversity (i.e., a large number of species within the given habitat). In Canada, species at risk often overlap with areas of high human footprint in the southern part of the country because this is where threats are highest.

Carbon storage

Terrestrial ecosystems store billions of tonnes of carbon in plants and soils, and on average, carbon density in Canada is highest in soils — particularly peatlands, many of which are found on territories of Indigenous communities that have been stewarded over millennia. Habitats with large carbon stocks should be prioritized for protection to ensure that carbon remains locked in nature, rather than risking release to the atmosphere.

Climate resiliency

Climate change is already impacting ecosystems and wildlife in Canada. In order for Canada's protected areas network to remain resilient — essentially, to better withstand future climatic changes — we must ensure that climate corridors (connections between current climatic conditions and where those conditions are predicted under future scenarios) and refuges (areas with unique climate conditions that are anticipated to remain relatively stable despite future climate change) are protected.

Connectivity

Habitat loss, including the fragmentation of intact habitats, is a major driver of species loss. As a result, protected areas must be connected to facilitate wildlife movement, particularly as climate change worsens, so that species are able to migrate and disperse to new areas.

Key findings

For this analysis, WWF-Canada used the latest data on existing protected and conserved areas (established as of 2020) around the country to conduct a gap analysis, identifying holes in the ecological representation of our existing protected areas network — a key component of the United Nations Convention on Biological Diversity targets. This analysis took into account whether existing protected areas were large, had good coverage (e.g., many protected areas concentrated in one region) and were connected to one another, in addition to investigating important elements of the quality of those areas, such as if they are intact and represent diverse elevations and shorelines. This is important because a well-designed protected areas network should contain a diversity of ecosystem types, with protected areas having sufficient coverage so that wildlife can thrive.

This process identified gaps in our existing protected areas network. From there, we also determined the relative priority for protected area establishment by considering four factors: where species at risk are located, how much carbon is stored in a given area, climate resiliency, and ecological connectivity. The result is a map that gets us one step closer to identifying areas that can help us reach 30 percent protection by 2030 while also meeting carbon and biodiversity goals.

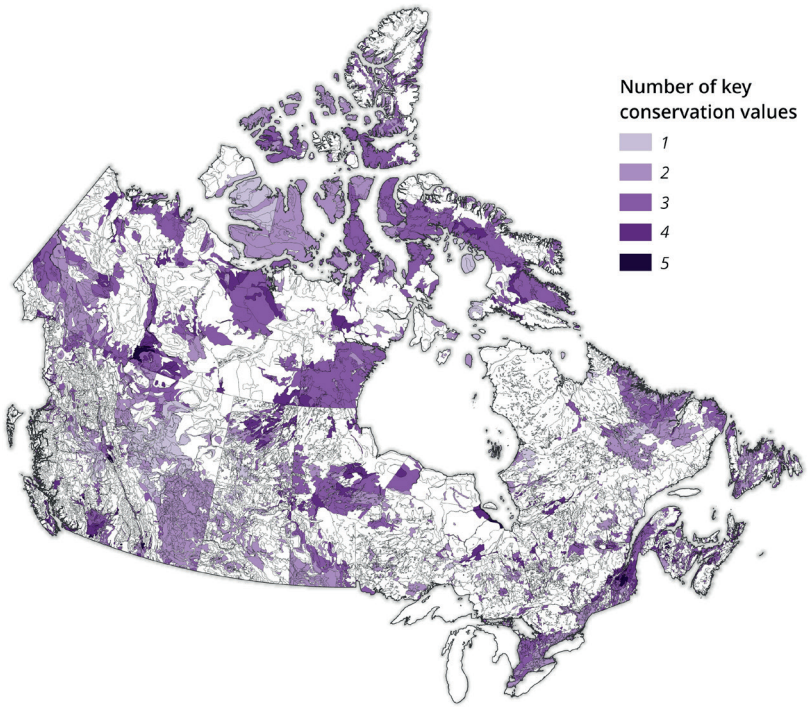


Figure 4. All coloured areas have been identified as gaps in Canada's protected areas network, and are therefore considered near-term priorities, with the colour gradient depicting the relative priority, dependent upon the number of overlapping key conservation values. Importantly, any IPCA should be given priority for protected status.

The map also revealed a stark contrast between the provinces — which in this study was considered as the southern portion of the country — and the north. The south, where human footprint is higher, is dotted with small islands of remaining biodiversity that could be under high threat. Our analysis suggests that some regions will require protection alongside substantial ecological restoration of degraded or converted habitat, to increase healthy habitats and make adequate protection possible.

By contrast, the north of the country — the territories for the purpose of this study — contains large swaths of intact lands that have been stewarded by Indigenous communities for millennia and will be extremely important areas for climate resiliency into the future. These areas face a disproportionate need for protection to ensure that they can provide a critical haven for wildlife in the era of climate change. However, implicit in the geographic location of intact areas is the inequity of northern Indigenous Peoples in shouldering the burden of responsibility to achieving a protected areas network for both biodiversity and climate.

Working with northern communities to safeguard these regions, where and when requested, and investing in the long-term stewardship of these important places, is critical for protecting large carbon stocks and maintaining the climate resiliency of Canada's protected areas network. Governments must provide resources and capacity to help advance IPCAs where they have also been identified as priorities by Indigenous communities.

While this report provides recommendations for action based on metrics associated with wildlife and climate, conservation can't be entirely metric driven. To be successful, protected and conserved areas must be co-developed and implemented with Indigenous consent, recognizing and supporting the rights and title of the lands on which such actions are taken.

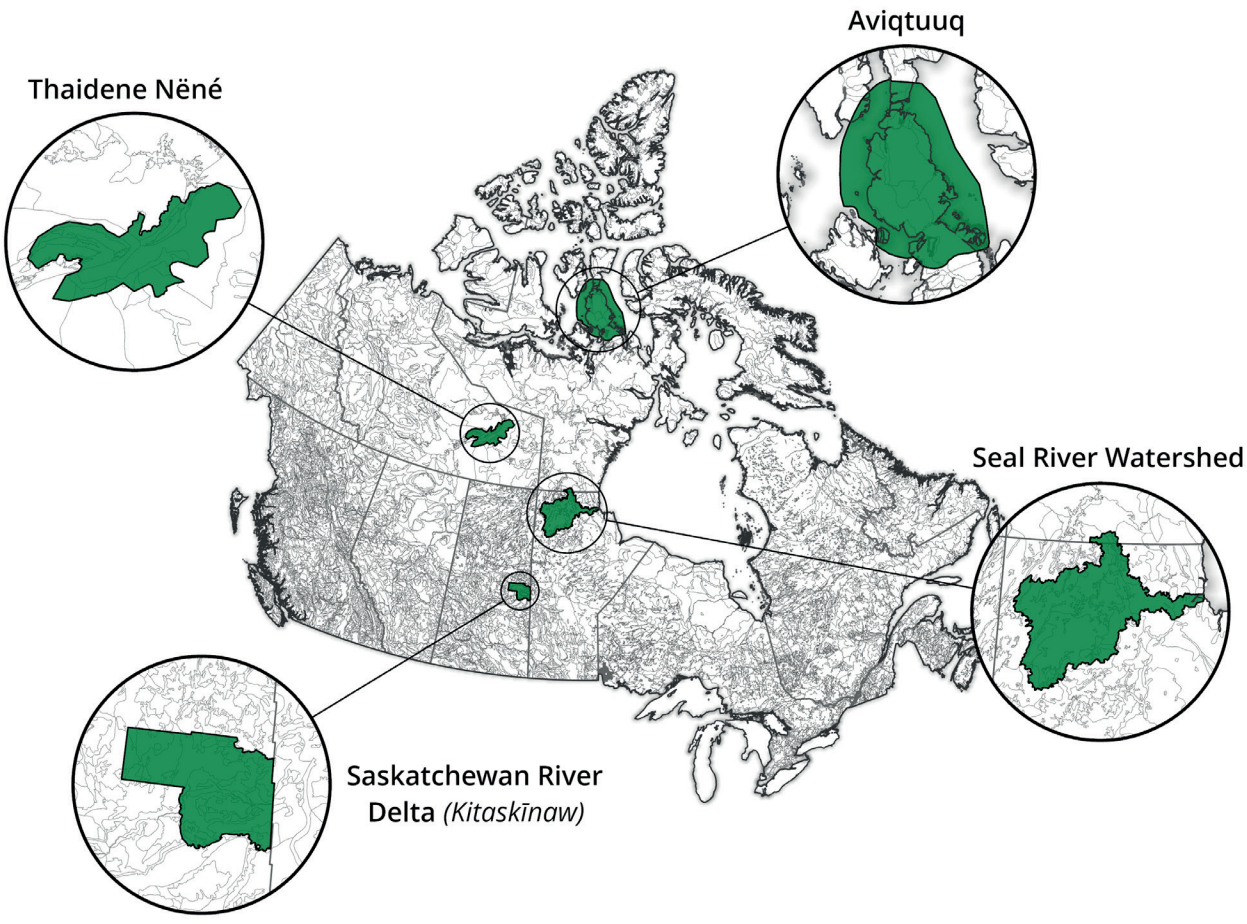
INDIGENOUS PROTECTED AND CONSERVED AREAS

Indigenous Protected and Conserved Areas are protected lands and waters where Indigenous Peoples have chosen to have the primary role in protecting and conserving ecosystems through Indigenous laws, governance and knowledge systems. They're created and managed by Indigenous governments, varying by regional priorities, and help to enable local conservation economies.

The effective establishment of a protected areas network for Canada requires a holistic, two-eyed seeing approach that includes benefits for biodiversity, climate, Indigenous Peoples and local communities.

Two-Eyed Seeing

Indigenous Peoples have been managing lands and waters on their territories for thousands of years — they have a wealth of knowledge to continue to steward these lands in healthy and resilient ways. The practice of two-eyed seeing means learning to see and embrace the strengths of Indigenous knowledge from one eye, and the strengths of "Western" scientific knowledge from the other. For this reason, we are presenting the findings of our analysis alongside perspectives of four Indigenous leaders across the country, who share their expertise as caretakers of the land, and detail how IPCAs can be a pathway to reconciliation. This "two-eyed seeing" approach is paramount to protected area establishment in the future, as Canada works toward its commitment to halt and reverse nature loss by 2030 and build a resilient nature for all.



Spotlight on

SEAL RIVER WATERSHED

The Seal River Watershed, west of Churchill, Manitoba, is one of the world's last remaining intact spaces. It's a rare region devoid of roads, development or mines, where wildlife such as caribou and polar bears move freely throughout the vast 50,000km² landscape. As the only community in the region, the Sayisi Dene First Nation calls the Seal River Watershed home and they are working toward the creation of an IPCA with the goal of protecting the watershed. While being led by the Sayisi Dene First Nation, the initiative is supported through partnerships with their Cree and Dene neighbors. The Seal River Watershed has large carbon stocks and is particularly important for climate resiliency and ecological connectivity on a national scale.

Stephanie Thorassie, Executive Director,
Seal River Watershed Alliance, Sayisi Dene First Nation

The Seal River Watershed is my home and this area that we're talking about protecting as an Indigenous Protected and Conserved Area is a very large space — the same size as Nova Scotia. It is traditional territory that's shared with four communities, including our neighbors to the west, south, and even a little bit to the north of us. It's 50,000 square kilometres, and 99.97 per cent of it is pristine land. The eskers, the lakes, the trees, the water, the caribou — the Dene people are people of the caribou — every aspect of this watershed is essentially the same as it was when my great, great, great great-grandparents were here. We want to ensure that we keep a connection to the land and our traditional territory and give our future generations a strong place to stand on their two feet.

There's also 2 billion tons of carbon in the watershed right now and if we release that into the air, it would cost billions of dollars to repair the damage. The Seal River Watershed is doing a service for Mother Earth — it's a set of lungs that we all need to breathe.

The Sayisi Dene First Nation isn't working alone. We work with four different Chiefs, four sets of Elders, four sets of community members and staff. We recognize that traditional use of the area has happened for all four communities and we're really trying to honour that and bring all those voices to the table to make sure that we all have a say.

There is an incredible energy that comes from being connected to the land, but also to community members in the Seal River Watershed. When we continue to encourage these connections, amazing, incredible things can happen. There's no real words to describe how incredible it is to be part of that.

Spotlight on

SASKATCHEWAN RIVER DELTA (KITASKĪNAW)

The Saskatchewan River Delta is a 9,706km² inland water delta — the largest in North America — that contains wetlands, lakes, river channels and forests, and provides vital habitat for wildlife such as muskrat and moose, while sequestering carbon from the atmosphere. The Delta has supported Indigenous peoples for over 7,000 years. But continued habitat degradation and biodiversity loss has affected the community's way of life. In June 2021, the Cumberland House Cree Nation declared formal protection for the Kitaskīnaw under Indigenous law. The Saskatchewan River Delta stores over 949Mt of carbon in its plant biomass and soils up to one metre in depth.

Nadina Gardiner,
Cumberland House Cree Nation

I am a member of the Cumberland House Cree Nation and advocate for the Saskatchewan River Delta. The Saskatchewan River Delta is the largest inland delta in North America at 10,000 square kilometres. In June of 2021, Cumberland House declared the Delta to be under the protection of Indigenous law and under our jurisdiction as a Cree Nation.

Right now, our Delta is dying. There's been such a change in flow as the Saskatchewan River has been dammed upstream. When you reverse or completely change the flow of a river, you're not just changing the flow of that river, you're changing the flow of all the animals and all the species and everything in there.

We have been sounding the alarm about the Delta for years, since long before my time. There's people and Elders before me who have tried to get the word out. Do you know what the Florida Everglades are? I do. Everybody knows that from all corners of the world, and there's protection for them. But nobody knows about the Saskatchewan River Delta. We need to realize what we have right here. This is such a significant area for nesting and migration for waterfowl, some of which travel all the way to South America. This doesn't just affect us, it affects everybody in this country and beyond. Even if you just consider the amount of carbon that these wetlands capture, you would see why it was so important to keep it healthy and to maintain, restore and rejuvenate it, so it becomes an area of carbon capture instead of emissions. This goes beyond just our community — we need everyone to see this important ecosystem.

Spotlight on
THAIDENE NËNÉ


© Steven Nitah

Thaidene Nëné — "Land of the Ancestors" in Dënesųłiné Yati — is an IPCA spanning more than 26,000 km² in the Northwest Territories at the transition between the boreal forest and the tundra. It's home to a variety of wildlife including bears, wolves and moose. It was designated as an IPCA in 2019 by the Łutsël K'é Dene First Nation under Dene Law. Through establishment agreements with Parks Canada and the Government of the Northwest Territories, the IPCA comprises a national park reserve (14,305km²), a territorial protected area (8,906km²) and a wildlife conservation area (3,165km²) — each with its own set of laws. The IPCA is co-managed by Indigenous and crown governments to conserve the natural and cultural heritage of the region.

Steven Nitah,
Łutsël K'é Dene First Nation

I, and my community, have always had a deep relationship with the environment, nature and territory that makes up Thaidene Nëné. It's a relationship that's interconnected, reciprocal and one that defines who we are as people and the knowledge systems we use.

Thaidene Nëné is in the heart of the Łutsël K'é Dene homeland and protected under our law. But that protection isn't what you might think. The land will do what it wants and it's our job not to over manage it. Where management on the ground is required, we utilize traditional Indigenous ecological knowledge and place-based knowledge combined with science of today.

IPCAs represent a new relationship between Indigenous governments and the Crown. The mandate that was given was to implement the spirit of intent with which we entered the treaty — to share the land, the benefits of it and the responsibility for its management. Thaidene Nëné is a place we know we have to defend and fight to protect on a continuous basis. Protecting it is consistent with our way of life and will continue to provide us the opportunity to be Dene. But in thinking about the future of the territory, there are things that are out of our control.

We're always thinking of ways we can mitigate the impacts of climate change. We know that if left unmanaged, the impacts of climate change, the fires, they'll be detrimental — but presently, we don't have the financial resources to manage that.

We need the financial resources to create opportunities for economic reconciliation, land reconciliation and cultural reconciliation so we can use our worldviews and knowledge systems to manage territories across this nation.

Spotlight on
AVIQTUUQ

Taloyoak — the most northly community on the mainland in Canada — is working to establish an Inuit Protected and Conserved Area in their traditional lands of Aviqtuuq. The proposed area would cover almost 90,000km² of marine, terrestrial and freshwater ecosystems in Nunavut, helping safeguard caribou, polar bear, muskox and Arctic whales. The region is under threat from international shipping and mining, which also threaten the community's food security and economic prosperity.

Taloyoak residents have proposed an Arctic Inspiration Prize-winning plan (Niqihaqut; meaning "our food") to form the management of Aviqtuuq. Through development of a conservation and food-based economy, the proposed Inuit Protected and Conserved Area can help to conserve nature's bounty and support sustainable access to food and other resources for northern communities. In addition to all of these values, there are over 554Mt of carbon stored within the terrestrial and freshwater ecosystems of Aviqtuuq, and the area is nationally important for ecological connectivity and climate resiliency.

Jimmy Ullikatalik,
Manager of Spence Bay HTA in Taloyoak, NU

Taloyoak is the most northerly community on the mainland in Canada, and the friendliest in Nunavut. From here, on the southwestern coast of Aviqtuuq, there are only islands, so all wildlife has to pass through, by water or land, during their migration. So as soon as it starts to warm up, we go out fishing and hunting.

In the past 50 years, we've gone from using dog teams to using iPhones. It's a big change. But the environment is changing, too, and it is affecting our food security because food from the land is under threat from climate change and from mining exploration. Climate change is also thinning the sea ice cover in the nearby Northwest Passage, which will soon bring new international shipping routes to our marine wildlife habitats, and the dangers of oil spills.

Since my grandfather's era, when there was talk of building a pipeline across Aviqtuuq, we've fought to keep it safe. So, we're working to create the Aviqtuuq Inuit Protected and Conserved Area (IPCA), which would cover 40,730 square kilometres of ocean, 4,413 square kilometres of freshwater, 20,532 kilometres of rivers and 45,039 square kilometres of land.

An IPCA is not like a regular protected area because it puts Indigenous people in charge, ensuring our food security with a sustainable harvest as well as economic development like small-scale fisheries, outfitting camps and tourism.

Aviqtuuq is our home, our traditional lands. It has provided us with what we have needed to survive and thrive here for generations. We want to see the lands and resources here protected from industrial development because the area is sacred to us, and has everything we need to prosper. A mine might create jobs for 20 years. But the first-ever Inuit Protected and Conserved Area in Canada, would generate jobs forever, from generation to generation, and still protect the land.

THE PATH TOWARD A NEW MODEL FOR PROTECTED AREAS IN CANADA

Protected area establishment in Canada cannot continue under a "business-as-usual" approach. The dual crises of biodiversity loss and climate change demand that new protected areas deal with both at the same, and our responsibility to advance reconciliation demands the prioritization of Indigenous rights and title. This is why we need a new model.

The new model should:

- Consider connectivity, ecological representation, climate refuges, carbon storage and Indigenous rights and title, all while incorporating strategies for long-term management and stewardship.
- Prioritize Indigenous Protected and Conserved Areas (IPCAs). Non-IPCAs should be co-developed and implemented with Indigenous consent, recognition of territorial rights and title, and incorporation of Indigenous knowledge systems, leadership and stewardship.
- Establish and define emissions reduction targets for protected areas, and include them in the Government of Canada's Naturally Determined Contributions (NDCs).
- Create new financial tools that account for the establishment, management and long-term stewardship of protected areas so that they can provide prolonged benefits for biodiversity and climate in the centuries to come.
- Develop new legislative tools to advance IPCAs where current protected areas establishment tools are limited -- as identified by the Indigenous Circle of Experts during the Pathway to Target 1 process. Crown governments must also recognize and support IPCAs when unilaterally declared by Indigenous Nations in acknowledgment of self-determination and self-governance.

A Canada with abundant wildlife, where nature and people thrive.

wwf.ca

WWF-Canada. 2022. Beyond targets: A pathway for protected areas to help meet biodiversity and climate goals in an ethical and rights-driven way. Currie J, Liang C, Merritt W, and Snider J. WWF-Canada. Toronto, Ontario.

WWF-Canada is a federally registered charity (No. 11930 4954 RR0001), and an official national organization of World Wildlife Fund for Nature, headquartered in Gland, Switzerland. WWF is known as World Wildlife Fund in Canada and the U.S.

For more information, contact: science@wwfcanada.org