



US – Canada Transboundary and Indigenous-led Conservation of Nature and Culture

Priority Recommendations



“We [Indigenous Peoples] have these traditional rules and ways of gathering, which unfortunately we call subsistence today, which doesn’t even come close to explain the wholeness behind what we’re doing and what we’ve learned from our ancestors.” — Karlin Itchoak, from the *Fourth Transboundary Dialogue*, September 2, 2021

SUMMARY

As the longest international land border in the world, the terrestrial boundary between the US and Canada represents a tremendous opportunity for increasing landscape and cultural connectivity, improving the efficacy of existing conservation efforts, and helping both Canada and the US reach ambitious national conservation targets. To that end, in 2021 representatives from conservation organizations, Indigenous communities, government agencies, and civil society working near or across this boundary came together in a series of virtual events to explore common opportunities, challenges, success stories, and the future needs around transboundary conservation.

The four virtual, interactive Dialogues were open to all and included several hundred attendees from non-governmental organizations (NGOs), regional and federal agency staff, Indigenous Peoples and organizations, and other interested individuals. Each Dialogue focused on different geography and/or themes relevant to transboundary conservation across the US–Canada border (see Figure 1, p. 8). A small task force hosted the Dialogues and worked together to distill the learnings of them here. These included representatives from Canadian Parks and Wilderness Society (CPAWS), Center for Large Landscape Conservation, Isaak Olam Foundation, Nature Canada, Northern Latitudes Partnerships/ Northwest Boreal Partnership, Salazar Center for North American Conservation, Staying Connected Initiative/The Nature Conservancy, and Yellowstone to Yukon Conservation Initiative.

The Dialogues also included opportunities for speakers and participants to propose ideas, solutions, needs, priorities, and recommendations regarding how to enhance and sustain transboundary conservation. To do so requires a breadth of collaboration at many scales across the two countries, including many entities from governments (federal, state, provincial, Indigenous) to local communities, private landowners, NGOs, and businesses. To effectively sustain this collaboration requires a framework for maintaining respectful interactions across cultural differences. In Canada, this framework is known as **Ethical Space**. Ethical Space was a central tenet in the Dialogues and is woven throughout the recommendations for moving forward. Additionally, the foundational role of healing, including healing relationships among Indigenous and non-Indigenous peoples and entities, as well as relationships to the land, was emphasized as a critical centerpiece needed for effective and respectful transboundary conservation.

This document represents a summary of three core recommendations for consideration by federal agencies in both countries:

- 1 COMMIT** Jointly commit through a formal agreement to transboundary conservation within an Ethical Space and healing framework (including strong support for Indigenous-led conservation).
- 2 EMPOWER ADVISORY ENTITY** Empower a high-level standing advisory entity (commission, round-table, committee), under existing or new bi-national governance structure(s) to guide equitable and durable transboundary implementation of conservation commitments.
- 3 FUND** Commit joint funding for transboundary conservation initiatives, Indigenous-led conservation (including Indigenous Protected and Conserved Areas, and Indigenous Guardian programs), and other effective measures for transboundary conservation.

COVER Towering mountains transect the US–Canada boundary in the Mt. Baker Wilderness, WA (USA) © AUSTIN SCHUVER



The Black River Valley in New York is a critical linkage connecting the Northern Appalachians' western anchor—the Tug Hill Plateau—to the Adirondack Mountains. Connectivity across these more fragmented linkage areas, which are often a mix of farms, forests and communities, is critical for the long term resiliency of the entire bi-national Northern Appalachians region and a high priority of the Staying Connected Initiative.

© CARL HEILMAN II

INTRODUCTION

“Nature and culture know no border. True peace along the US–Canada boundary comes when our common landscapes and seascapes and Indigenous nations are undividedly loved.”

— Gary Tabor, *Center for Large Landscape Conservation*

The diversity of life on Earth is rapidly disappearing, and the very survival of humanity also may be imperiled. The combined impact of unprecedented change of the surface of Earth by humans, together with human-caused climate change, means that up to one million species are at imminent risk of extinction (IPBES 2019).

In recognition of this human-created biodiversity crisis, exacerbated by climate change, many countries are making new, more ambitious conservation commitments. For example, in 2019 the Government of Canada committed to protecting 25% of Canada’s land and ocean by 2025 and at least 30% by 2030, to supporting Indigenous-led conservation, and to championing a global target of at least 30% protection of land and ocean by 2030. Since then, more than 80 countries have formed the High Ambition Coalition for Nature and People to champion this 30x30 target, which has now been included in the draft Global Biodiversity Framework, currently being negotiated under the United Nations Convention on Biological Diversity. More recently, G7 leaders, including the US and Canada, agreed to a historic 2030 Nature Compact to halt and reverse nature loss, including support for the target to protect or conserve

at least 30% of land and sea areas globally; to improve the quality, effectiveness, and connectivity of protected areas and other conservation measures; and to recognize Indigenous Peoples as full partners in implementation. G7 leaders also committed to implementing the 30x30 target at the national level. The US and Canada have both embedded this target in their respective national climate change strategies, recognizing the important linkages between climate change and biodiversity loss.

The 8,891-km (5,525-mi) United States–Canada border is the longest international land border in the world. Although the US and Canada regularly cooperate on a variety of political, economic, and social issues along the whole border, there is a significant opportunity to improve the level and effectiveness of cooperation around conservation action across the border, including ecological and cultural priorities. Development and natural resource extractive activities such as mining often have transboundary impacts that affect both nature and people but we currently lack adequate mechanisms for transboundary considerations and consultation. In recent years, there has been a growing effort among governmental agencies, non-profits, community organizations, and Indigenous Peoples on both sides of the border to improve ecological and cultural connectivity across the border to achieve more durable biodiversity outcomes. To explore what positive transboundary conservation efforts could be advanced in support of 30x30, four transboundary Dialogues were held in 2021. These Dialogues were open to any interested party and included conservation non-profits, regional and federal agency staff, Indigenous Peoples, non-governmental organizations (NGOs), and other interested individuals. The purpose of the meetings was to explore priorities and opportunities for advancing collaborative transboundary conservation with Indigenous leadership and specifically to assess what kind of federal support we would recommend from both the US and Canadian governments to help advance such efforts.

Boundary Mountain Preserve in Maine: This new preserve of The Nature Conservancy in Maine secures 9,608 acres (3,888 ha) along the US–Canada border, providing a key link in a large swath of continuous forest located adjacent to over 22,000 acres (8,903 ha) of public lands in Quebec. The preserve extends a corridor of permanently conserved lands northward to a total of over 260,000 acres (105,218 ha), representing a key link in a major pathway of ecological connection from New Hampshire through western Maine and Quebec—part of the 2,000-mile-long (3,219-km-long) natural corridor of the Appalachian mountains.

© MARK BERRY /

THE NATURE CONSERVANCY



The Dialogues offered a variety of insights. Perhaps most important is that across many parts of the US–Canada border, a diversity of collaborative transboundary conservation efforts already exist. In some cases, Indigenous Peoples are leading these transboundary efforts that represent all or parts of Traditional Territories and seek to keep Indigenous Peoples that are now split by country boundaries connected. In other efforts, non-profits, governments, or other entities are leading work that includes strong Indigenous engagement and alignment around a shared vision for land/water conservation (see Box 1). This spectrum of place-based work is in a variety of stages, and in many cases could be helped to advance through further binational governmental and funding support of such efforts.

Box 1. What Do We Mean by Conservation?

“Conservation” has conventionally been defined as the protection, care, management, and maintenance of ecosystems, habitats, species, and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence (IUCN, undated). Achieving durable conservation outcomes that sustain ecosystems and local communities of people will require a broad vision of conservation across public and private lands: one that recognizes and celebrates the leadership and right of sovereign Indigenous Peoples in caring for lands, waters, and wildlife (from *America the Beautiful* 2021).

The groups engaging in these Dialogues sought “to promote and encourage transboundary conservation of nature with associated ecosystem services and cultural values while promoting peace and co-operation among nations, through enhancing knowledge and capacity for effective planning and management of transboundary conservation areas (IUCN WCPA 2022).”

In addition, groups agreed that it is critical to place the priorities and recommendations brought forward through these Dialogues within a framework of “Ethical Space” and also of healing (see Box 2). Ethical Space is a framework for guiding respectful cross-cultural interaction in a way that upholds the fundamental integrity of all knowledge systems entering that space. The additional framework around healing within a conservation context is fundamental to support Indigenous Peoples to practice their culture and connection with their lands. This requires healing from historical traumas that Indigenous Peoples have faced through dispossession of lands, assimilation, and termination of rights, and to collectively move forward with trust and goodwill.

Box 2. What Do We Mean by Ethical Space?

Ethical Space is a model that creates a space of mutual trust, respect, equality, and collaboration (IISAAC OLAM Foundation 2019). In the context of collaborative conservation among Indigenous Peoples and non-Indigenous people (including governments, agencies, organizations, and individuals), operating in Ethical Space means holding Indigenous and western scientific knowledge systems on equal footing, and respecting diverse cultural procedural protocols and approaches. This means honouring and validating both oral and written methods and contributions. Committing to working in Ethical Space will ensure Indigenous leadership in transboundary conservation is recognized and supported, and that actions to solve the biodiversity and climate crisis are implemented in full partnership with, and with leadership from, Indigenous Peoples. While Ethical Space emerged in the context of engagement between Indigenous Peoples and non-Indigenous people, it is broad enough in scope to provide space for cross-cultural engagement among any peoples or communities seeking a safe space to advance shared goals. This includes underrepresented and underserved communities and groups living and working in rural and urban settings.

A framework for healing in the context of conservation is critical to address historical traumas Indigenous Peoples have faced through land and cultural assimilation, and termination of rights (including stewardship of lands). This is a process that creates healing for all, including healing relationships among Indigenous and non-Indigenous peoples and entities, as well as healing our relationship with the land.

Recognizing that healing is a core function of equitable conservation is imperative to create a safe space based on Indigenous wellness strategies. The overarching framework is grounded in Indigenous

Facilitation Methodologies and based on traditional health practices that include but are not limited to Listening Circle protocols, healing dialogues out in nature and on the land, and Indigenous ceremony and protocols, such as smudging, making offerings, prayers, utilizing talking sticks, and more (DeWitt 2016).

Within this context, below we outline a number of thematic recommendations that have emerged from these Dialogues around prioritizing support for (a) US–Canada transboundary conservation, and (b) Indigenous-led conservation (including Indigenous Protected and Conserved Areas and Indigenous Guardians; see Box 3).

Box 3. What are Indigenous Protected and Conserved Areas (IPCAs) and Indigenous Guardians?

IPCAs are lands and waters where Indigenous Governments have the primary role in protecting and conserving ecosystems through Indigenous Laws, Governance and Knowledge systems. Culture and language are the heart and soul of an IPCA.

IPCAs can vary in their governance and management objectives, but generally share three essential elements:

- They are Indigenous-led;
- They represent a long-term commitment to conservation; and
- They elevate Indigenous rights and responsibilities.

They also generally share the following commonalities:

- Promote respect for Indigenous Knowledge systems;
- Respect protocols and ceremony;
- Support the revitalization of Indigenous languages;
- Seed conservation economies if possible;
- Conserve cultural keystone species and protect food security; and
- Adopt integrated, holistic approaches to governance and planning.

(From *We Rise Together: Report and Recommendations of the Indigenous Circle of Experts*, 2019)

Indigenous Guardians are a critical component of Indigenous-led conservation:

“Indigenous Guardians help Indigenous Nations honour the cultural responsibility to care for lands and waters. They serve as the ‘eyes and ears’ on traditional territories. Guardians are trained experts who manage protected areas, restore animals and plants, test water quality and monitor development. They play a vital role in creating land-use and marine-use plans. And they connect youth with Elders and provide training that prepare young people to become the next generation of educators, ministers and leaders.” (*Indigenous Leadership Initiative*, accessed 2022)

DETAILS OF THE THREE RECOMMENDATIONS

The Dialogues surfaced a general agreement on what is collectively desired to advance transboundary conservation, including:

- Prioritizing support for grassroots and regionally/locally-based transboundary conservation partnerships and initiatives that collaborate across the US-Canada border.
- Grounding transboundary conservation efforts in an Ethical Space and healing framework to support the rights and leadership of Indigenous communities over their lands and natural resources.
- Ensuring a collaborative and inclusive approach to transboundary conservation. In addition to governments at all levels (federal, state, provincial/territorial, and Indigenous), private land-owners, industry, outdoor groups (recreational, hunting, fishing entities), local communities, and conservation groups are critical to engage. This work can only be successful with enhanced coordination among stakeholders to identify and work towards mutually agreed upon goals across boundaries.
- Supporting and amplifying existing climate goals. This should include promoting and implementing nature-based solutions and ensuring that consistent, rigorous common standards and practices are in place for improving, measuring, and accounting for land-based carbon benefits. This would

help ensure transboundary conservation efforts also contribute to existing climate commitments such as, but not limited to, the US–Canada High-Level Ministerial Dialogue on Climate Ambition.

- Ensuring that all entities working in the transboundary region (conservation-focused and otherwise), consider transboundary impacts, such as but not limited to mining and other natural resource extraction, transportation projects, ecological connectivity, and cultural connectivity. Additionally, these entities should be required to engage collaboratively across the border where projects could have transboundary implications.

In order to achieve the above, both governments need to make a clear commitment to transboundary conservation, form a transboundary advisory entity, and jointly fund collaborative work that advances commitments to 30x30 and climate commitments on both sides of the border. These three recommendations are expanded below.

COMMIT

Jointly commit to transboundary conservation within an Ethical Space and healing framework (including strong support for Indigenous-led conservation) through a formal agreement

The Dialogues highlighted various existing efforts, including transboundary partnerships and collaboration, that aim to protect and restore biodiversity and ecological and cultural connectivity in transboundary regions near the US–Canada border. Federal and sub-national government agencies have played important roles in many of these efforts. Participants in the Dialogues agreed that more formal and sustained support from the Canadian and United States federal governments would significantly improve the efficacy, sustainability, and positive impacts of transboundary efforts. Beyond conserving biodiverse and carbon-rich ecosystems, such efforts promote **positive peace** between the two countries. Identifying one or more lead agencies from each government to engage in, facilitate, and fund work is essential. Such a commitment would focus across the international boundary on: (a) ecological connectivity conservation in terrestrial, freshwater, and marine ecological corridors; (b) protecting and



The Crown of the Continent ecosystem is a critical part of the Blackfeet Nation.

© TONY BYNUM

“Conservation is being called to evolve and improve the way that it is done. By working with Indigenous knowledge keepers and Tribes as equal partners and the original stewards of these lands, we can transform conservation into its highest and best manifestation.” — *Meda DeWitt on the Imago Initiative*

conserving important habitat areas taking into account the needs of species and ecosystems during this time of a changing climate; (c) maintaining, cultivating, and restoring the relationship between people and nature, particularly within a framework of healing; (d) maintaining connectivity of peoples, particularly those with territories bifurcated by the border. To be successful, federal agencies should establish agency mandates and provide dedicated staff and resources to support habitat connectivity and transboundary conservation.

1. This joint commitment should prioritize support for ongoing and new grassroots and regionally based transboundary conservation partnerships and initiatives that collaborate across the US-Canada border (see Figure 1 and the examples in the Appendix). Many partnerships are already creating the foundation for increasing biodiversity protection and can contribute to both countries’ 30x30 commitments as well as climate goals.
2. During the Dialogues, participants identified many ways that Indigenous-led conservation can play a positive role in conservation outcomes in general and, in particular, has a necessary role in transboundary conservation outcomes. In the context of transboundary conservation, Canadian and US federal agencies should learn from, share, and continue to build upon, existing and developing models and tools for sharing knowledge and leadership. For example, but not limited to:
 - Prioritize inclusive initiatives and approaches that recognize and respect Indigenous rights (e.g., <https://www.conservation2020canada.ca/ice>).

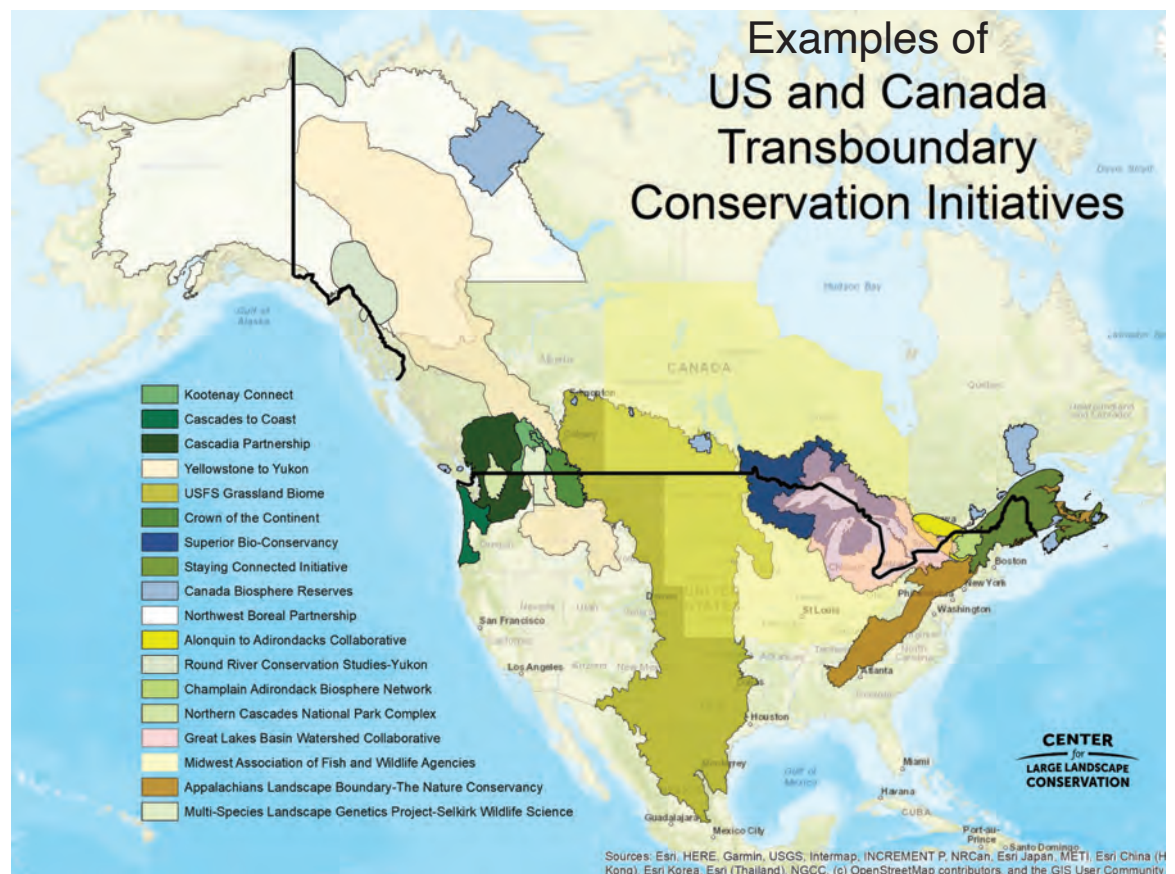


Figure 1. This map depicts just a sample of the transboundary landscape efforts whose representatives have participated in a series of informal dialogues from February to September 2021. The efforts represent government, community and non-governmental initiatives.

- The Imago Initiative is an on-the-ground investment in inclusivity and equity, that aims to change how protected areas are designed, how conservation is accomplished, and who benefits. The initiative is focused on the Arctic National Wildlife Refuge and Coastal Plain that borders the Yukon Territory and is being led by Indigenous leaders and conservation organizations alike, with an approach centered on place-based dialogues and healing.
- Conservation through Reconciliation Partnership (CRP) is about the intersection between dispute resolution, social injustice, and conservation of nature as well as climate action ([https:// conservation-reconciliation.ca/](https://conservation-reconciliation.ca/)).
- Indigenous Protected and Conserved Area (IPCA) Innovation Centres (<https://ipcainnovation.ca/>) advancing in Canada now and hopefully in the US soon. Regional examples include the Pacific IPCA Innovation Centre (<https://www.canadianmountainnetwork.ca/pacific-indigenous-protected-and-conserved-area-ipca-innovation-centre>). Creating a network of IPCA Innovation Centres in Canada, United States and South America can improve the relationship between the Indigenous-led conservation initiatives in the Americas.
- Indigenous Guardian programs (e.g., <https://www.canada.ca/en/environment-climate-change/services/environmental-funding/indigenous-guardians-pilot.html>), are a template for promoting and integrating shared knowledge and leadership.
- Recognizing Tribal Rights and responsibilities in land management such as when the US Department of the Interior transferred National Bison Range Lands in trust for the Confederated Salish and Kootenai Tribes (<https://www.doi.gov/pressreleases/interior-transfers-national-bison-range-lands-trust-confederated-salish-and-kootenai>).
- Returning land to tribes through various mechanisms, such as the South Unit of Badlands National Park (<https://www.nps.gov/badl/associated-tribes.htm>).
- Creating online spaces such as The IPCA Knowledge Basket where Indigenous and non-Indigenous Knowledge systems have equal space and value. The **IPCA Knowledge Basket** is a legacy project of the CRP and will be launched in the Summer of 2022.



Highway 10 in southern Quebec is a major fragmenting feature of the northern Green Mountains, which extend through Vermont and connect this region to the full Appalachian landscape. Appalachian Corridor is actively working to restore and conserve ecological connectivity in this region. This photo shows Highway 10 adjacent to Mont Orford, which is largely protected by the province of Quebec as part of a large park, as well as Lake Orford, a jewel of the region and renowned for its excellent water quality.

© YVES TREMBLAY

- Supporting technological tools for advancing the Indigenous knowledge in the ethical space such as SIKU, an indigenous Knowledge Social Network (<https://siku.org/>). SIKU is a mobile app and web platform by and for Inuit which provides tools and services for sharing hunting stories, ice safety, weather, and language preservation programs.
 - Other reports such as the Canadian Council on Ecological Areas (CCEA) report on connectivity in conservation (<https://ceea-ccae.org/new-report-implementing-connectivity-conservation-in-canada/>).
 - An example of an entity working on the intersection of Indigenous rights and conservation with a variety of resources is IISAAK OLAM Foundation (<https://www.iisaakolam.ca/>).
 - Indigenous Leadership Initiative (<https://www.ilinationhood.ca/>).
 - Reports from two panels appointed by the Canadian federal government to advise on implementing conservation targets: Indigenous Circle of Experts and National Advisory Panel (available at <https://www.conservation2020canada/resources>).
 - Indigenous Guardians Toolkit (<https://www.indigenousguardianstoolkit.ca/>) and the Indigenous Guardians Technical Support Team. Both initiatives are supported by Nature United (<https://www.natureunited.ca/>), the Canadian affiliate of The Nature Conservancy.
3. Finally, this joint commitment should prioritize the connectivity of natural and cultural heritage across the border: species, ecosystems, and people.

The US and Canada can use and strengthen existing commitments and tools as models for achieving shared commitments. During the Dialogues, several examples were raised that could serve as templates for future commitments including:

- Governors/premiers resolutions: Western Governors Association (includes western Canada premiers) Wildlife Corridor Initiative (resolution 07-01) and climate change (resolution 09-03), the New England Governors and Eastern Canadian Premiers resolution 40-3 on Ecological Connectivity, Adaptation to Climate Change, and Biodiversity Conservation.
- Commission for Environmental Cooperation operational and strategic plans (<http://www.cec.org/>).



Bull moose in the Cypress Hills region, Canada
RICHARD LEE

“According to our Traditional Elders we have to bring together our Traditional Ecological Knowledge and worldview and the best of what western systems have to offer, to work together and move forward in a good way. That’s what this is really about, helping all of us to become real humans again.”

— Meda DeWitt, from the Fourth Transboundary Dialogue, September 2, 2021

- Global tools, such as Man and the Biosphere Program (<https://en.unesco.org/mab>) and International Peace Parks (<https://www.cbd.int/peace/about/peace-parks/>).
- Department of State and other tools: such as multilateral Treaties, Conventions, and Initiative (e.g., <https://www.state.gov/policy-issues/climate-and-environment/>).
- Other agency programs: Sister Parks program (<https://www.nps.gov/subjects/internationalcooperation/sister-park-model.htm>).
- The International Joint Commission (<https://ijc.org/en>).

EMPOWER ADVISORY ENTITY

Empower a high-level standing advisory entity (commission, panel, committee), under existing or new bi-national governance structure(s) to guide equitable and durable implementation of the aforementioned agreement

Many entities operate within the transboundary jurisdiction such that a single transboundary entity with representation from both countries is vital to play a coordination and leadership role. Within each country, interagency coordination and cross-border collaborations are needed to guide equitable and durable transboundary conservation commitments. Agencies whose mandates primarily address or affect natural resources (agriculture, forestry, fisheries, infrastructure, wildlife etc.) need better cross-agency mechanisms for collaborating on transboundary conservation and need to coordinate with regulatory agencies such as those approving and overseeing natural resource extraction activities such as mining. Furthermore, coordination with other agencies that have significant impacts on natural resources (transportation, infrastructure, military) should be incorporating transboundary conservation into their decision-making processes.

The advisory entity should be populated with balanced and co-equal representation of Indigenous governments and NGOs, non-Indigenous national and sub-national government agencies, individual conservation leaders, and others who have a clear mandate and direction to pursue their work within a framework of Ethical Space and healing. An international entity should guide equitable and durable transboundary conservation outcomes.

Tasks of the entity should include:

- Identifying high-level enabling policies and legislation needed in each country to ensure durable and effective conservation outcomes in the transboundary context, including support for Indigenous-led conservation, and locally/regionally-based grassroots initiatives and organizations;
- Working with agencies, NGOs, and Indigenous Peoples to recommend and support the creation of such policies;
- Coordinating across agencies in both countries to develop transboundary guidelines and/or standards;
- Creating the most equitable and effective mechanisms to fund sustained capacity for coordinated transboundary conservation, including IPCAs, and;
- Identifying, engaging with, and coordinating government agencies, Indigenous Nations, local communities, conservation organizations, and other entities needed to advance this work.

Other example opportunities highlighted during the Dialogues that could be taken up by this entity included:

- Developing suggestions for regulatory mandates that consider transboundary impacts such as a transboundary environmental impact assessment process for developments where lands, wildlife, and peoples on both sides of the border are potentially impacted. For example:

“If we’re to be true conservationists, we’re going to have to have a paradigm shift. One example of a paradigm shift: the caterpillar that transforms into a butterfly. What a beautiful shift, a whole new world, and a new way of looking at things. From crawling to flying. A very different way of seeing the world after that shift takes place.”

— *Leroy Little Bear, from the Fourth Transboundary Dialogue, September 2, 2021*

- When expanding highways could affect the flow of wildlife between countries and lead to the endangerment of some species in the other country, both countries should have input on such projects. A consideration would be exploring a terrestrial agreement akin to the Migratory Species agreement.
- When considering new natural resource extraction such as extensive logging or a mine that could lead to pollutants from the operation flowing across the border. Both countries should have input on such projects and potentially impacted peoples on the other side of the border should have formal means of consultation.
- Consulting with Indigenous Peoples whose Territories cross boundaries on development projects, regardless of what side of the border on which they reside should be mandatory.
- Establishing shared transboundary datasets and development of key transboundary data and science upon which to support transboundary conservation. Non-continuous datasets impair transboundary progress on connectivity and conservation.
- Jointly developing a comprehensive set of best management practices for infrastructure development and maintenance that could be consistently employed in both the US and Canada border regions.

FUND

Commit joint funding for transboundary conservation initiatives, Indigenous-led conservation (including Indigenous Protected and Conserved Areas and Indigenous Guardian programs), and other effective measures for transboundary conservation of lands and waters to support the agreement

Jointly committing to the funding of transboundary conservation initiatives, Indigenous-led conservation (including Indigenous Protected and Conserved Areas, and Indigenous Guardians), and other effective measures for transboundary conservation is essential to achieving effective outcomes. Based on recommendations of the advisory entity described above, establish a well-endowed, long-term joint-funding mechanism to support and advance transboundary organizations and initiatives, transboundary IPCAs, and other conservation measures. This could include funding to sustain ongoing efforts as well as to seed new visions for transboundary conservation, including Indigenous-led conservation. This should include sustained resources for core organizing and gathering capacity because short-term funding makes longer-term work difficult to envision and achieve.

- The Government of Canada has committed \$2.3 billion over five years to nature conservation. A portion could be dedicated to transboundary collaborative work.
- As the US government has recently launched its 30x30 effort, known as America the Beautiful, now is a key opportunity to consider, and support financially, the role that transboundary collaborative work will play. Transboundary work should also receive dedicated funding from natural resources, infrastructure, and regulatory agencies.
- The governments should carve out dedicated transboundary conservation funds to be managed by the identified supervisory entity outlined in the second recommendation above. Such funding should build in approaches to address equity such as to be accessible by under-resourced groups and provide funds for core capacity, as well as elements that sustain ongoing collaborative processes.
- Funding also needs to be prioritized for Indigenous-led conservation, including supporting approaches that aim to heal historical trauma and harm caused by dispossession of land, assimilation, and termination of Indigenous rights.



Blackfeet environmental staff conduct a water quality assessment as part of the Blackfeet Nation's Beaver Mimicry Project, 2019. CENTER FOR LARGE LANDSCAPE CONSERVATION

- Support initiatives that provide funding sources for Indigenous-led conservation such as the [IPCA Development Fund](#). The IPCA Development Fund is an endowment fund that will support the perpetual financing of new IPCAs and Indigenous self-determination in governing IPCAs.

CLOSING

Enormous opportunity exists to further transboundary conservation. Improved transboundary efforts would enhance biodiversity conservation outcomes on both sides of the border and support robust climate solutions. Working through an Ethical Space and healing framework can ensure that such work honours Indigenous Rights and equitably engages all entities required to advance enduring transboundary conservation. This work serves to reconnect peoples separated by the border, and ultimately promotes positive peace. Reversing biodiversity loss and addressing climate change will require transformational change. Transboundary conservation offers an innovative opportunity to facilitate that change for nations on both sides of the border.

REFERENCES

Borrini-Feyerabend, G., Dudley, N., Jaeger, T., Lassen, B., Broome, N., Phillips, A. and Sandwith, T. 2013. *Governance of Protected Areas: From Understanding to Action*. Best Practice Protected Areas Guideline Series no. 20. Gland, Switzerland: IUCN. <https://portals.iucn.org/library/node/29138>

Borrini-Feyerabend, G., Kothari, A., and Oviedo, G. 2004. *Indigenous and Local Communities and Protected Areas: Towards Equity and Enhanced Conservation Guidance on Policy and Practice for Co-managed Protected Areas and Community Conserved Areas*. WCPA Best Practice Protected Area Guidelines Series no. 11. Gland, Switzerland: IUCN. 139 pp.

CMS [Convention on Migratory Species]. 2020. *Improving Ways of Addressing Connectivity in the Conservation of Migratory Species*, Resolution 12.26 (REV.COP13), Gandhinagar, India (17–22 February 2020). UNEP/CMS/COP13/CRP 26.4.4. https://www.cms.int/sites/default/files/document/cms_cop13_crp26.4.4_addressing-connectivity-in-conservation-of-migratory-species_e_o.docx

DeWitt, M. 2016. “Traditional Health Based Practices.” Course curriculum, Center for Human Development, University of Alaska Anchorage.

Dudley, N. (ed.) 2008. *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland: IUCN. <https://doi.org/10.2305/IUCN.CH.2008.PAPS.2.en>

Bobcat kitten in northern New York. Bobcats are wide-ranging mammals, requiring intact and connected habitats.

© LARRY MASTER



Ermine, W. 2007. The ethical space of engagement. *Indigenous Law Journal* 6: 193–203. <http://indigenoulanguagelearning.ca/wp-content/uploads/2017/11/Ermine-2007.pdf> (accessed February 5, 2022).

Forman, T.T., and Godron, M. 1986. *Landscape Ecology*. New York: John Wiley & Sons.

Hilty, J.A., Keeley, A.T.H., Lidicker Jr., W.Z., and Merenlender, A.M. 2019. *Corridor Ecology: Linking Landscapes for Biodiversity Conservation and Climate Adaptation*. 2nd ed. Washington, DC: Island Press.

IISAAK OLAM Foundation. 2019. *Indigenous Protected and Conserved Areas (IPCAs) and Ethical Space*. <https://static1.squarespace.com/static/5a2f1db1c027d842f876e280/t/5e28abo3c2509c20c65coca7/1579723524248/IPCAs+and+Ethical+Space+-+IISAAK+OLAM+Foundation+++Dec+2019.pdf>

Indigenous Circle of Experts. 2018. *We Rise Together—Achieving Pathway to Canada Target 1 through the Creation of Indigenous Protected and Conserved Areas in the Spirit and Practice of Reconciliation*. Report and Recommendations of the Indigenous Circle of Experts. March 2018. 112 pp.

Indigenous Leadership Initiative. <https://www.ilinationhood.ca/guardians>. Accessed 2022.

IPBES [Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services]. 2019. *Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. Díaz, S., Settele, J., Brondizio E.S., Ngo, H.T., Guèze, M., Agard, J., Arneth, A., Balvanera, P., Brauman, K.A., Butchart, S.H.M., Chan, K.M.A., Garibaldi, L.A., Ichii, K., Liu, J., Subramanian, S.M., Midgley, G.F., Miloslavich, P., Molnár, Z., Obura, D., Pfaff, A., Polasky, S., Purvis, A., Razzaque, J., Reyers, B., Roy Chowdhury, R., Shin, Y.J. Visseren-Hamakers, I.J., Willis, K.J., and Zayas, C.N. (eds.). Bonn: IPBES Secretariat.

IUCN WCPA [International Union for Conservation of Nature World Commission on Protected Areas]. Undated. IUCN Definitions—English. https://www.iucn.org/downloads/en_iucn_glossary_definitions.pdf (accessed: 15 November 2019)

IUCN WCPA. 2019. *Guidelines for Recognising and Reporting Other Effective Area-based Conservation Measures*. Gland, Switzerland: IUCN.

IUCN WCPA. 2022. IUCN World Commission on Protected Areas Transboundary Conservation. <https://www.iucn.org/commissions/world-commission-protected-areas/our-work/transboundary-conservation> (accessed 2022)

Stolton, S., Shadie, P., and Dudley, N. 2013. *Guidelines for Applying Protected Area Management Categories: Including IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types*. Best Practice Protected Area Guidelines Series no. 21. Gland, Switzerland: IUCN. <https://portals.iucn.org/library/node/30018>

U.S. Department of Interior, U.S. Department of Agriculture, U.S. Department of Commerce, Council on Environmental Quality. 2021. *Conserving and Restoring America the Beautiful 2021*. A preliminary report to the National Climate Task Force. 24 pp.

Wu, J. (2008). 'Landscape ecology'. In: S.E. Jorgensen (ed.). *Encyclopedia of Ecology*, pp. 2103–2108. Oxford, UK: Elsevier. <https://doi.org/10.1016/B978-008045405-4.00864-8>



Waterton–Glacier is the world's first international peace park.
NATIONAL PARK SERVICE

APPENDIX: EXAMPLE CASE STUDIES AND OTHER RESOURCES

Some ongoing collaborations referenced in the Dialogues in alphabetical order that might be models/efforts and where to find out more are listed below, and many other initiatives are ongoing that are not listed here (also see Figure 1).

- The Appalachian Landscape Climate Corridor Initiative is a new effort facilitated by the Appalachian Trail Conservancy and its 70-member network known as the Appalachian Trail Landscape Partnership (appalachiantrail.org) to protect the Appalachian Mountain Landscape and the ecosystem services that benefit 190 million people in Eastern North America.
- Buffalo Treaties (<https://www.buffalotreaty.com/>), which support transboundary Indigenous-led conservation and cultural conservation.
- Canada's Pathway to Target 1 (<https://www.canada.ca/en/environment-climate-change/services/nature-legacy/canada-target-one-challenge.html>) including connectivity working group process.
- Conservation of caribou and Gwich'in culture (e.g., <https://arctic.ucalgary.ca/perspectives-episode-6-norma-kassi-part-1>).
- The Canadian Biosphere Reserves Association (en.ccunesco.ca/networks/biosphere-reserves-network) supports 18 Biosphere Reserves in creating vibrant, healthy, and sustainable communities. The sites span an area of 235,000 km² (90,734 mi²) within the Traditional Territories of some 50 Indigenous communities.
- The Cascadia Partner Forum (www.cascadiapartnerforum.org/) is a transboundary landscape collaborative between Washington and British Columbia that is centered around the Cascades Mountains. The forum fosters a network of natural resource practitioners working with partner entities to build the adaptive capacity of the landscape and species living within it.
- The Crown Managers Partnership (<https://www.crownmanagers.org/>) is a transboundary, interagency collaborative effort in the Crown of the Continent Ecosystem. It models an approach for establishing shared data and science and jointly analyzing the impacts of mining on aquatic ecosystems in particular.
- Detroit River International Wildlife Refuge is another example of existing bilateral co-management of transboundary ecosystems.
- The Emerald Edge initiative works to help conserve the Emerald Edge, the largest intact coastal temperate rainforests, spanning Washington, British Columbia, and Alaska, by investing in youth, supporting Indigenous leaders, and building sustainable economies (<https://www.nature.org/en-us/about-us/where-we-work/priority-landscapes/emerald-edge/>).
- The Espoo Environmental Impact Assessment (EIA) convention as a possible framework relating to EIAs for transboundary connectivity issues. This Convention lays down the framework for countries or states to notify and consult each other of major events that are likely to happen that may have significant environmental impacts across boundaries.
- The First Light (<https://firstlightlearningjourney.net>) is a bridge between conservation organizations and Penobscot, Passamaquoddy, Maliseet, and Mi'kmaq communities who seek to expand Wabanaki stewardship of land.
- The Imago Initiative is an on-the-ground investment in inclusivity and equity, that aims to change how protected areas are designed, how conservation is accomplished, and who benefits. The initiative is focused on the Arctic National Wildlife Refuge and Coastal Plain that borders the Yukon Territory, and is being led by Indigenous leaders and conservation organizations alike, with an approach centered on place-based dialogues and healing.
- Iinnii Initiative: In 2009, the Iinnii Initiative was launched by leaders of the four tribes that make up the Blackfoot Confederacy (Blackfoot Nation, Kainai Nation, Piikani Nation, and Siksika Nation) to conserve Traditional Lands, protect Blackfoot culture, and create a home for the buffalo to return to in a region across the US–Canada border (<https://blackfeetnation.com/iinnii-buffalo-spirit-center/>).
- IUCN global standards on ecological networks and connectivity (<https://portals.iucn.org/library/node/49061>).
- The Northern Great Plains initiative (www.worldwildlife.org/pages/restoring-the-northern-great-plains) is a large-scale effort to restore the Northern Great Plains, a living prairie in the heart of North America and one of only four remaining intact temperate grasslands in the world. Effective stewardship by private ranchers and Native American tribes has kept these lands both productive and wild.
- Northern Latitudes Partnership (<https://www.northernlatitudes.org/>) seeks to collaborate across geographic and disciplinary boundaries to help communities be culturally, environmentally, and economically secure in a rapidly changing North. The Partnership strives to meet this common goal by developing strategies, building new tools, and facilitating coordination with all partners to improve resource stewardship and sustainability.
- The Roundtable on the Crown of the Continent Collaborative (www.crownroundtable.net/) is a transboundary collaboration that addresses changing land use and climate in one of the largest intact landscapes in North America. It was created to bring all stakeholders in the ecosystem together—the Tribes, the working land owners, business leaders,

- local officials, conservationists, universities and colleges, and the region's young people.
- Salmon Beyond Borders is a campaign driven by sport and commercial fishermen, community leaders, tourism and recreation business owners and concerned citizens, in collaboration with Tribes and First Nations, united across the Alaska/British Columbia border to defend and sustain transboundary rivers, jobs and way of life (www.salmonbeyondborders.org and www.seitc.org)
 - The Staying Connected Initiative (<http://stayingconnectedinitiative.org/>) is a partnership seeking to restore and sustain landscape connections across the Northern Transboundary Appalachian/Acadian Ecoregion.
 - The Superior Bio-Conservancy (superiorbioconservancy.weebly.com/) is an ambitious plan to protect and restore the biological integrity and hydrology of the Lake Superior watershed and the Laurentian Forest Province.
 - Two Countries, One Forest collaborative: A Canadian–US collaborative of conservation organizations, researchers, foundations, and conservation-minded individuals focused on the protection, conservation, and restoration of forests and natural heritage from New York to Nova Scotia, across the Northern Appalachian/Acadian Ecoregion. <https://2c1forest.org>
 - The US Biosphere Network (www.nps.gov/subjects/connectedconservation/us-biosphere-network.htm) is made up of 28 internationally recognized areas across the continental United States, Puerto Rico, Alaska, and Hawai'i. Their beauty and value stand out in national parks, state parks, national forests, and national marine sanctuaries. Communities and partners within them work together to advance positive relationships between people and nature at large geographic scales.
 - US federal Wildlife Corridors Conservation Act of 2019 (<https://www.congress.gov/bill/116th-congress/senate-bill/1499/text>) is, in part, designed to facilitate coordinated landscape- and seascape-scale connectivity planning and management across jurisdictions.
 - Yellowstone to Yukon Conservation Initiative (www.y2y.net) and vision of an interconnected system of wild lands and waters stretching from Y2Y, harmonizing the needs of people with those of nature. More than 450 entities have engaged on this effort across the border.

GLOSSARY

We offer the following glossary to help ensure that readers are working from a common understanding of terms and definitions.

Conservation The protection, care, management and maintenance of ecosystems, habitats, species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence (IUCN, undated).

Ecological connectivity The unimpeded movement of species and the flow of natural processes that sustain life on Earth (CMS 2020).

Ecological corridor A clearly defined geographical space that is governed and managed over the long term to conserve or restore effective ecological connectivity with associated ecosystem services and cultural and spiritual values as well as compatible human activities (Hilty et al. 2019). The following synonyms are often used to be equivalent to “ecological corridors”: “linkages,” “safe passages,” “ecological connectivity areas,” “ecological connectivity zones,” and “permeability areas.”

Ecological network (for conservation) A system of core habitats (protected areas, OECMs, and other intact natural areas), connected by ecological corridors, which is established, restored as needed, and maintained to conserve biological diversity in systems that have been fragmented (Hilty et al. 2019).

Ethical Space framework A framework for guiding respectful cross-cultural interaction in a way that upholds the fundamental integrity of all knowledge systems entering that space. It is a model that creates a space of mutual trust, respect, equality, and collaboration (IISAAK OLAM Foundation 2019). According to Cree scholar Willie Ermine, “ethical space is formed when two societies, with disparate world views, are poised to engage each other. It is the thought about diverse societies and the space in between them that contributes to the development of a framework for dialogue between human communities” (Ermine 2007).

Framework for healing. A framework for healing in the context of conservation is a critical tenant in order to address historical traumas of Indigenous Peoples of land, cultural assimilation, and termination of rights (including stewardship of lands). This is a process that creates healing for all, including healing relationships among Indigenous and non-Indigenous peoples and entities, as well as healing our relationship with the land.

Recognizing that healing is a core function of equitable conservation is imperative to create a safe space based on Indigenous wellness strategies. The overarching framework, grounded in Indigenous Facilitation Methodologies and based on traditional health practices that include but are not limited to Listening Circle protocols, healing dialogues out in nature and on the land, and Indigenous ceremony and protocols, such as smudging, making offerings, prayers, utilizing talking sticks, and more (DeWitt 2016).

Landscape A heterogeneous space comprising a cluster of interacting ecosystems, geological features, and ecological processes, and often including human influences (Forman & Godron 1986; Wu 2008). Interaction of landscape spatial elements can result in emergent effects not inherent to each element separately (e.g., viability of populations, microclimates, runoff regulation, aesthetic quality, etc.).

Local communities A human group sharing a territory and involved in different but related aspects of livelihoods such as managing natural resources, producing knowledge and culture, and developing productive technologies and practices. Since this definition can apply to a range of community sizes, it can be further specified that the members of a “local community” are those who are likely to have face-to-face encounters and/or direct mutual influences in their daily lives. In this sense, a rural village, a clan or the inhabitants of an urban neighborhood can be considered a “local community,” but not all the inhabitants of a district, a city quarter or even a rural town. A “local community” could be permanently settled or mobile (Borrini-Feyerabend et al. 2004).

Indigenous Guardians As defined by the Indigenous Leadership Initiative that led a nationwide effort to support and grow Indigenous Guardians programs, including major, long-term investments from governments in Canada: “Indigenous Guardians help Indigenous Nations honour the cultural responsibility to care for lands and waters. They serve as the ‘eyes and ears’ on traditional territories. Guardians are trained experts who manage protected areas, restore animals and plants, test water quality and monitor development. They play a vital role in creating land-use and marine-use plans. And they connect youth with Elders and provide training that prepare young people to become the next generation of educators, ministers and leaders” (Indigenous Leadership Initiative accessed 2022).

Indigenous Peoples Peoples whose social, cultural, and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations. The term also includes peoples in independent countries who are regarded as Indigenous on account of their descent from the populations that inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions (Borrini-Feyerabend et al. 2004, following the International Union for Conservation of Nature’s use of the International Labour Organization’s ILO Convention 169 on Indigenous and Tribal Peoples). Preferred terminology varies around the world, and terms such as “Aboriginal” or “Traditional Peoples” are sometimes used instead.

Indigenous Protected and Conserved Areas (IPCAs) Lands and waters where Indigenous Governments have the primary role in protecting and conserving ecosystems through Indigenous Laws, Governance, and Knowledge systems. Culture and language are the heart and soul of an IPCA. IPCAs vary in terms of their governance and management objectives. However, they generally share three essential elements: (1) they are Indigenous-led, (2) they represent a long-term commitment to conservation, and (3) they elevate Indigenous Rights and responsibilities. IPCAs prioritize the connection between a healthy environment and strong culture. In addition to setting out conservation objectives, IPCAs will emphasize the primary role of Indigenous Governments and respect for Indigenous Laws, Governance, and Knowledge systems, support the revitalization of Indigenous language, create opportunities for sustainable conservation economies, apply holistic approaches to governance and planning, and respect Protocols and ceremony (Indigenous Circle of Experts 2018).

OECM (Other Effective Area-Based Conservation Measure) A geographically defined area, other than a protected area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity with associated ecosystem functions and services and, where applicable, cultural, spiritual, socio-economic and other locally relevant values are also conserved (IUCN WCPA 2019).

Positive Peace A more lasting peace that is built on sustainable investments in economic development and institutions as well as societal attitudes that foster peace. It can be used to gauge the resilience of a society, or its ability to absorb shocks without falling or relapsing into conflict. Positive Peace opposes what is known as the ‘structures and cultures of violence’. These structures and cultures can cause people to behave violently, or impose violence on others (Positive Peace, accessed 2022).

Protected area A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values (Dudley 2008; Stolton et al. 2013).

Rights holders, stakeholders In the context of protected areas and conservation, the term “rights holders” refers to people (such as but not limited to landowners) socially endowed with legal or customary rights with respect to land, water, and natural resources. By contrast, “stakeholders” possess direct or indirect interests and concerns about these resources but do not necessarily enjoy a legally or socially recognized entitlement to them (Borrini-Feyerabend et al. 2013).

Transboundary conservation The World Commission on Protected Areas promotes three types and one special designation of Transboundary Conservation Areas (IUCN WCPA Transboundary Conservation accessed 2022):

- Type 1: Transboundary Protected Area: a clearly defined geographical space that consists of protected areas that are ecologically connected across one or more international boundaries and involves some form of cooperation.
- Type 2: Transboundary Conservation Landscape and/or Seascape: an ecologically connected area that sustains ecological processes and crosses one or more international boundaries, and which includes both protected areas and multiple resource use areas, and involves some form of cooperation.
- Type 3: Transboundary Migration Conservation Areas: wildlife habitats in two or more countries that are necessary to sustain populations of migratory species and involve some form of cooperation.



Mt. St. Elias marks the US–Canada border between Alaska and Yukon.

BRYAN PETRYL /
US NATIONAL PARK SERVICE