

CULTIVATING CAPACITY: A SCAN OF NEEDS AND RESOURCES FOR INDIGENOUS-LED NATURE-BASED SOLUTIONS

Restore, Assert and Defend (RAD) Network
APRIL 2024

RESTORE ASSERT DEFEND



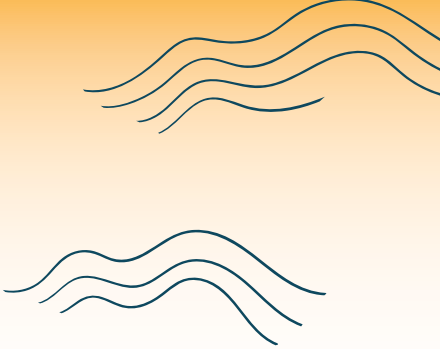
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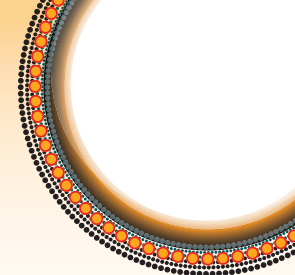
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TABLE OF CONTENTS



- List of Acronyms 1**
- Introduction 2**
 - Box 1. What do we mean by "nature-based solutions"?..... 2
- Capacity Cultivating Tools & Offerings..... 3**
 - Carbon Toolkits - Knowledge & Awareness..... 3
 - Emerging Communities of Practice - Data & Collaboration 5
 - Carbon Financing & IPCAs - Funding & Vision Alignment..... 6
 - Other Capacity Cultivating Tools & Programs 7
- What We're Hearing..... 8**
 - Knowledge & Awareness 9
 - Funding & Resources 10
 - Box 2. "Self-Determined Conservation Action" & Distinctions-Based Funding 11
 - People & Skill-building 12
 - Box 3. Wahkohtowin Development: Cultivating Capacity with Youth Guardians 13
 - Data & Measurement 13
 - Collaboration & Alliances 14
 - Holistic Objectives & Vision Alignment 15
 - Box 4. Presenting a Spectrum of Pathways to Advance Nations' Visions 16
 - Overarching Considerations: Rights, Self-determination & Policy 16
- Recommendations & Next Steps 18**
- References 20**
- Acknowledgments 21**





LIST OF ACRONYMS

NbS	Nature-based solutions
NCS	Natural climate solutions
B.C.	British Columbia
BCAFN	British Columbia Assembly of First Nations
CoP	Community of practice
ECCC	Environment and Climate Change Canada
ENGO	Environmental non-government organization
FPIC	Free, Prior and Informed Consent
FSC	Forest Stewardship Council - Canada
GIS	Geographic information system
IPCA	Indigenous Protected and Conserved Area
MNC	Métis National Council
NAI	Natural Assets Initiative
OCAP	First Nations Principles of Ownership, Control, Access and Possession
RFP	Request for proposals
UINR	Unama'ki Institute of Natural Resources
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
WISP	West Coast IPCA Support Program
WWF	World Wildlife Fund

INTRODUCTION

A growing number of Indigenous Nations and Communities are pursuing “nature-based solutions” (NbS) to catalyze their land relationship visions. NbS can channel much-needed financing to Indigenous-led conservation and, with Indigenous rights and self-determination at the center, can unlock broader benefits for regenerative Indigenous economies. Yet, capacity gaps can make it difficult for Nations to move forward with NbS projects.

BOX 1. WHAT DO WE MEAN BY “NATURE-BASED SOLUTIONS”?

Nature-based solutions (NbS) are strategies that work with nature to address a broad range of social-environmental challenges. Natural climate solutions (NCS) are a subset of nature-based solutions that focus on the protection, conservation and improved management of carbon-storing ecosystems like forests, wetlands, grasslands, peatlands and coastal ecosystems. NbS also include natural asset management, i.e., the holistic valuation of natural assets they provide (e.g., water purification, flood protection, climate resilience).

While these concepts are relatively novel to colonial-capitalist systems, in **practice, Indigenous Peoples have been ‘doing’ nature-based solutions for millennia.** We see an opportunity both to channel resources from NbS to Nations’ self-determined land relationship visions and to re-think the concept of NbS itself to centre regenerative, reciprocal human-nature relationships [1].

Earlier visioning by the RAD Network revealed the importance of capacity-building tools for Indigenous-led NbS. Plenty of tools and resources already exist and the RAD Network is well positioned to connect across silos and strengthen existing field-building efforts to reduce duplication, and shed light on outstanding gaps and Community needs. With this in mind, we conducted a research scan to:

1. Assess the landscape and compile an accessible overview of Indigenous-focused NbS capacity-cultivating resources, tools and programs.
2. Generate a listening space to hear from Communities and build understanding of capacity-related gaps, needs and priority areas.
3. Develop recommendations for new funding and tools to respond to the needs identified.

Following a desktop scan, we conducted interviews with representatives of five ENGOs and consulting groups and five individuals working on behalf of Indigenous Nations. Our analysis is also informed by, and reinforcing of, prior engagements with the RAD Network. While limited in scope, this initial scan will provide a jumping-off point for further work, including ongoing ‘ecosystem mapping’ and follow-up network engagement to ground-truth findings. The results will inform the co-creation of capacity-building tools grounded in Community needs. This summary report is made up of four parts including this introduction. The next section provides snapshots of six tools and offerings that aim to build capacity for Indigenous-led NbS. The third section summarizes key findings from our desktop scan and interviews with ‘capacity-cultivators’ and Communities. The final section offers recommendations and next steps to respond to the gaps identified.

CAPACITY CULTIVATING TOOLS & OFFERINGS

In what follows, we provide snapshot summaries of six capacity-cultivating tools and programs for Indigenous Nations and Communities pursuing NbS projects. This list is not comprehensive and readers are encouraged to let us know about other relevant resources. These tools and programs are designed for regional or multi-regional audiences. Of course, Nations are also developing place-based tools and building capacity internally (some examples are shared later).

The tools and programs that we summarize cover a range of aims and approaches. First, we summarize two 'toolkits' that aim to build knowledge and awareness for Nations interested in developing nature-based carbon offsets. Next, we look at two emergent communities of practice, one focusing on terrestrial carbon and the other on natural asset management. Finally, we present two capacity-cultivating initiatives that link Indigenous-led carbon projects to financing while supporting strategic visioning and holistic objectives, including IPCA alignment.

CARBON TOOLKITS - KNOWLEDGE & AWARENESS

Below we summarize two toolkits, the Greenhouse Gas Offset Toolkit created by Environment and Climate Change Canada (ECCC) and the First Nations Forest Carbon Toolkit developed by B.C. Assembly of First Nations (BCAFN) and Ecotrust Canada. Both provide introductory information on nature-based offsets, while the second toolkit takes a deeper dive in terms of Indigenous perspectives, with examples from the B.C. context.

GREENHOUSE GAS OFFSET TOOLKIT

Environment and Climate Change Canada ([link](#))

Purpose: Provide information and resources on carbon markets, offset systems and considerations for developing projects (including but not limited to nature-based offsets).

Audience: "Primarily intended for Indigenous audiences" in Canada.

NCS Focus: Nature-based greenhouse gas offsets

Format/Approach: Four downloadable PDF documents:

1. Carbon markets 101 – basics of greenhouse gasses, greenhouse gas emissions reductions and removals, compliance and voluntary carbon markets, and greenhouse gas offset systems, projects and protocols;
2. Greenhouse gas offset projects – introduces different kinds of offset projects, offset requirements and project scoping;
3. Benefits of greenhouse gas offset projects – introduces potential economic, environmental and social benefits of greenhouse gas offset projects;
4. Implementing a greenhouse gas offset project – covers key steps involved in implementing an offset project.

This project does not centre Indigenous rights and Nationhood, and instead asserts the Crown's rights to carbon, when this is a disputed legal matter, with some Nations asserting their jurisdiction.

FIRST NATIONS FOREST CARBON TOOLKIT

BCAFN & Ecotrust Canada | [\(link\)](#)

Purpose: To provide information to First Nations interested in learning more about and evaluating potential forest carbon offset projects – including creating their own project or saying “no” to a project proposed by a third-party company that does not align with their interests and values.

Audience: First Nations governments at various stages of project ideation/development. Region: B.C. legal and policy context, but intended to be useful to a broader audience.

NCS Focus: Forest carbon offsets – particularly protection of intact forests and restoration of forests degraded by logging.

Format/Approach: Five online learning modules on the fundamentals of a forest carbon offset project:

1. Climate Change & Natural Climate Solutions
2. Carbon Markets & Carbon Offsets
3. Implementing & Upholding Indigenous Carbon Rights, Ownership and Entitlement
4. Opportunities, Barriers & Case Studies
5. Planning Your Carbon Project

Links are included for additional resources, examples, and videos featuring insights from First Nations Knowledge Carriers and Community leaders from First Nations in B.C. A complementary tool is also provided for Communities ready to get started with early-stage project feasibility: the Project Idea Note Builder. In-person delivery of the toolkit and virtual training are also offered.

This project is rooted in BCAFN’s assertion of First Nations’ right to manage carbon. BCAFN states that, “the rights of First Nations in BC are land-based Inherent rights, which refer to the rights of First Nations to own, use, and control the lands, territories and resources that they have traditionally occupied or used. Therefore, First Nations in BC have the right to the carbon stored and absorbed in their territories and the potential revenues related to such carbon”.

EMERGING COMMUNITIES OF PRACTICE - DATA & COLLABORATION

In addition to 'toolkits', different groups are seeing and responding to a need for collaboration. Below is a sneak peak of two emergent NbS communities of practice (CoPs), upcoming in 2024-25. The first is being initiated by WWF-Canada (with intention to engage more partners) to encourage collaboration on terrestrial carbon monitoring, alongside an upcoming data platform. The second CoP, led by Natural Assets Initiative, focuses on natural asset management.

TERRESTRIAL CARBON MONITORING COMMUNITY OF PRACTICE (COP) & DATA PLATFORM

WWF-Canada & Partners ([link](#)) *Note: Conceptual Phase, anticipated launch 2024-2025.*

Purpose: WWF-Canada and partners are developing a Community of Practice and a data platform as part of WWF-Canada's National Carbon Monitoring Program, which aims to connect communities with science and technical capacity to measure, map and monitor ecosystem carbon to evaluate and implement NCS that maximize benefits.

A. Carbon Monitoring CoP: Purpose and approach are still emergent. The overarching aim is to advance collective understanding of wise practices, monitoring approaches, up-and-coming research, and innovative technologies for terrestrial carbon measurement and monitoring through knowledge exchange and mobilization.

B. Data Platform: The data platform encompasses two aims: (i) to provide spatial information and quick analysis to advance protection, restoration and sustainable management of landscapes across Canada, and (ii) to bridge the gap between in-field measurements and carbon values by providing tools to process field data uploaded by practitioners and communities, and permitting encrypted data repositories to advance data sovereignty.

Audience: The CoP will target individuals from a variety of backgrounds, institutions and organizations, from across Canada, striving for a balance of representation between Indigenous and non-Indigenous members. The data platform will also be open to a variety of users, with Indigenous Nations and Communities as the main target audience.

NCS Focus: Terrestrial carbon measurement and management

Format/Approach: The CoP format is still emergent, but may involve online dialogues, webinars, working groups and common infrastructure (e.g., training, equipment, knowledge sharing). The CoP will be designed to help bridge the gap between the (often siloed) academic and technical areas of NCS and on-the-ground community-led implementation. The data platform will be an online platform with a login feature, allowing users to keep their data private or to share it with others. Animated videos and navigational tools will be included to make sure it is user friendly.

POTENTIAL NATURAL ASSET MANAGEMENT COMMUNITY OF PRACTICE

Natural Assets Initiative (NAI) Note: *Conceptual Phase only; anticipated launch 2025+.*

Purpose: To be determined through scoping exercise but focus could include fostering collaboration and knowledge sharing on natural asset management in Canada, toward the broader goal of holistic valuation and inclusion of all of nature's benefits in decision-making.

Audience: May include public sector, e.g., local governments, engineers, foresters, agrologists, and various others. Specifics TBD, anticipating topic-focused rather than audience-focused approach. Potential for a separate Indigenous-led CoP or one fully integrated CoP, depending on priorities and wishes of Indigenous Peoples, representatives of whom NAI and Climate Risk Institute would seek to interview during the scoping.

NCS Focus: Natural asset management

Format/Approach: NAI and Climate Risk Institute plan to conduct a scoping exercise between May-October 2024 to determine the aim, scope and format of the potential CoP. The approach will draw on strengths observed from other CoPs, including being highly responsive to the priorities and direction of its members and with solid facilitation.

CARBON FINANCING & IPCAS - FUNDING & VISION ALIGNMENT

Here we provide two examples of capacity building for carbon finance within a holistic approach to NbS: Nature For Justice (N4J) and Nature Focus's IPCA & NbS Advisory Services and the Westcoast IPCA Support Program's work on the Big Coast Forest Climate Initiative. Both support mediation with project developers and strategic visioning around holistic objectives, particularly at the intersection of carbon and IPCAs.

IPCA AND NBS ADVISORY SERVICES

Nature For Justice and Nature Focus ([link](#))

Purpose: Help Nations assess their IPCA's potential for NbS and carbon finance, structure and assess NbS and carbon projects, and create just partnerships for catalytic, sustainable finance for IPCAs.

Audience: Indigenous Nations and Communities in Canada interested in exploring the role of NbS and carbon to finance long-term management or expansion of IPCAs (early ideation stage).

NCS Focus: Nature-based solutions, carbon, and IPCAs.

Format/Approach: Key service offerings include:

1. Convening diverse technical partners to assess holistic values—carbon, biodiversity, cultural, and socioecological—within an IPCA. The resulting data and analysis can be used by Indigenous governments to advocate for their IPCA with provincial and federal governments;
2. Assessing NbS and carbon project potential;
3. Supporting co-creation and feasibility assessments for NbS and carbon projects;
4. Matching IPCA NbS and carbon projects to appropriate financing channels and funding partners.

WESTCOAST IPCA SUPPORT PROGRAM (WISP) & THE BIG COAST FOREST CLIMATE INITIATIVE

Pacific IPCA Innovation Centre - CICICA, IISAAK OLAM Foundation, T'Sou-ke First Nation ([link](#)).

Purpose: Through the Big Coast Forest Climate Initiative, Mosaic Forest Management Corporation will generate carbon credits from the voluntary deferral of 40,000 hectares of private forest land on Vancouver Island, Haida Gwaii and Coastal B.C. WISP is working with Mosaic to engage 35 First Nations along the West Coast to see if they have interest in working towards an IPCA on some of the lands that overlap with the logging tenure. A portion of carbon project proceeds will also flow to the IPCA Innovation Centre to support research.

More broadly, WISP's purpose is *"to galvanize a thriving Indigenous-led regional economy that generates social, ecological, and economic value through culturally-informed approaches to stewardship and development"*.

Audience: First Nations on Vancouver Island, Haida Gwaii and Coastal B.C. with potential interest in IPCAs and/or carbon financing.

NCS Focus: Forest carbon offsets + IPCAs

Format/Approach: The WISP team is engaging 35 First Nations to discuss options, gauge interest in the Big Coast project and support strategic visioning. WISP seeks to amplify the impact of parallel, interconnected projects including the Westcoast IPCA Ambassador Program (building leadership capacity of young adults) and the Indigenous-led West Coast Stewardship Corridor (fostering collaboration, strategic vision and alliance-building).

OTHER CAPACITY CULTIVATING TOOLS & PROGRAMS

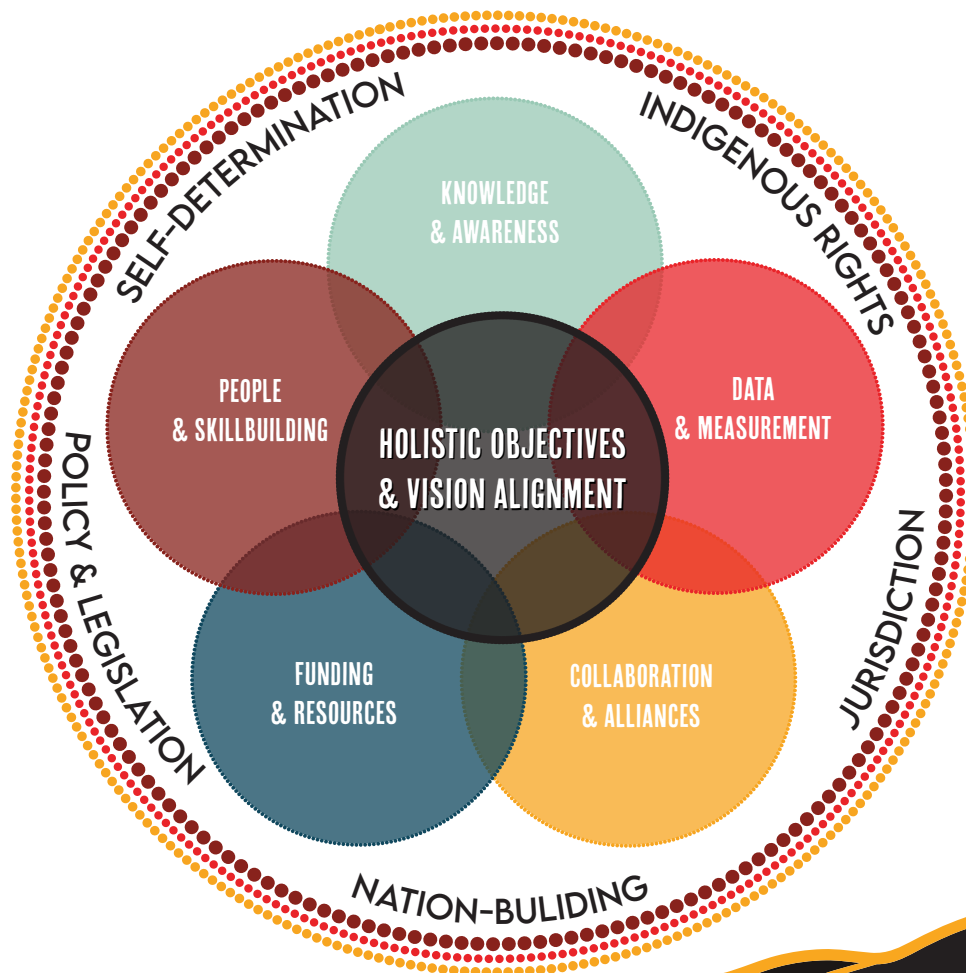
While we've provided summaries of a few key tools and initiatives for cultivating capacity for Indigenous-led NbS, many more exist. We welcome readers to contact radpartnership@gmail.com with any others that would be relevant to share with the network. Additional tools and initiatives are listed [here](#).

WHAT WE'RE HEARING

In this section, we summarize key capacity needs identified by Community partners and outstanding gaps in tools and supports. Key capacity needs relate to knowledge and awareness, funding and resources, people and skillbuilding, data and measurement, collaboration and support for holistic objectives. These categories are intersecting and gaps typically cannot be addressed in isolation. Moreover, tools to grow capacity can only be effective if rights, jurisdiction and enabling policy are also centred. Indigenous Nation's interests in NbS are not separate from governance and self-determination aspirations. Further, capacity gaps exist in Indigenous Nations and equally they exist among ENGO partners and other collaborators, too, who can struggle to adopt a decolonized lens in their collaborations. As this emerging "field" of related policies, marketplace vehicles, regulatory instruments, technical practices and various institutional actors grows, efforts to understand and fill these gaps must happen at the field or systems level as well within and by individual Communities, rightsholders, or organizations.

Central capacity gaps and needs we heard about are illustrated in Figure 1, below. A more detailed version of this graphic is available as an interactive tool at this [weblink](#).

FIGURE 1. INTERSECTING CAPACITY NEEDS FOR INDIGENOUS-LED NBS



KNOWLEDGE & AWARENESS


We're hearing a need for resources tailored to multiple different audiences and priorities. For instance, Indigenous Land Managers may require in-depth, technical tools, as well as more concise and targeted explanatory resources to engage Community leadership in initial exploratory discussions. Other tools are needed for general Community audiences, Guardians, and youth. Representatives of Ecotrust Canada and BCAFN spoke about the challenge of creating knowledge tools that respond to this range of needs. The First Nations Carbon Toolkit was designed to be accessible to First Nations with limited-to-no background on the subject (e.g., providing an introduction to climate change), but with sufficient technical detail to remain useful to First Nations advancing on-the-ground carbon projects.

We also heard of a need for unbiased information, in some cases to combat misinformation that is propagated by some industry representatives. Knowledge tools that present options in an unbiased way can help in navigating differences in opinion, and inform Community members about possibilities they may not have been attuned to. Government, industry and ENGOs have certain agendas and objectives; however, Community awareness-raising tools and programs must be designed to support Nations to make informed decisions aligned with their own vision. Specifically this includes a need to situate learning within the current context of UNDRIP, inherent rights, and aspirations for Nationhood and economic sovereignty, and how they can connect to additional legal, economic, social and land stewardship priorities, so that project considerations happen in a context relevant to Nations.

Our analysis also revealed a gap in carbon-focused knowledge tools that centre an Indigenous lens. Tools and efforts that are not regionally specific are especially challenged to interweave diverse knowledge systems and values while avoiding pan-Indigenity. There's an opportunity for tools and resources to advance knowledge valuation and co-production through a bridging of knowledge systems [2]. At a broader level, Indigenous scholars highlight how Indigenous knowledge can support transformative outcomes from NbS. Beyond 'Indigenizing' mainstream initiatives, there's a need to actively decolonize climate change responses; as articulated by Deranger et al. (2022), "no longer can we afford to simply 'tweak the system' by slotting into mainstream processes those elements of Indigenous world view that seem to 'fit' most comfortably" [3]. This applies to the concept of NbS, which requires reframing to be rooted in regenerative rather than dichotomous human-nature relationships [1].

"The problem I think goes beyond the toolkit, but it's connected to the toolkit of course, which is how we can bring these First Nations values and ways of knowing and doing into the carbon space?"

– Patricia Rojas - Policy Analyst and Regional Climate Change Coordinator, BCAFN



The First Nations Carbon Toolkit interweaves voices from First Nations Knowledge Carriers; however, Patricia Rojas (BCAFN) noted that more extensive Community engagement is needed to really ground the Western concept of carbon markets in traditional ways of knowing. Another interviewee suggested creating spaces specifically for Indigenous Knowledge Carriers, without the presence of Indigenous Land Managers, technicians or others, to really hear them without other influences; at the same time, capacity-cultivating efforts must be careful not to overburden Indigenous Knowledge Carriers and should consider that, though they may not usually be turned to, many folks in Community carry important knowledge. There's a need for neutral or bridging spaces that overcome potential internal divides between political versus grassroots voices.

We're also seeing opportunities for strengthening collaboration, awareness and capacity-building within and across a range of ecoregions. Early findings suggest an opportunity for more capacity-building tools and initiatives targeting Indigenous-led NbS in native grasslands; however, further research is needed to map-out players and initiatives to clarify where gaps may exist. Nature United is one group cultivating capacity for prairies cropland management, working with First Nations and Métis governments interested in adopting regenerative agriculture, avoided conversion of native grasslands, buffalo restoration and ranching. Prescribed or cultural burning practices can also enhance carbon storage and represent another important opportunity for connectivity, awareness- and capacity-building. Network actors, like the RAD Network, could deepen and expand their impact by engaging across a range of regions, ecosystem types and NbS approaches aligned with diverse land relationship visions.

Finally, there is an opportunity for knowledge exchange networks and hubs to compile and connect Nations to resources, including databases with National, Provincial and regional/Treaty/Traditional Territory categories, and broken down by audience groupings. Related data collection and storage would need to be aligned with principles of ownership, control, access, and possession ([OCAP](#)).

FUNDING & RESOURCES

When asked what grant-based and government funding would look like in an ideal world, respondents spoke of stability and flexibility. Funders, like ECCC, could create five-year funding pots removed from government interests and associated vulnerability to funding cuts. We also heard a need for greater flexibility to fund intangible but critical aspects of work like relational labour (i.e., relationship-building with Community and the land). A need for more cross-cutting funding was also raised by several interviewees, to reduce administrative strain and better reflect and account for the intersectionality of IPCAs, Guardians, NbS, Species at Risk initiatives, and more.

While we heard varying perspectives on distinctions-based or differentiated funding for First Nations, Métis and Inuit, an overarching sentiment was the importance of recognizing and working together toward shared interests, commitments and values, while avoiding a pan-Indigenous approach.

BOX 2. “SELF-DETERMINED CONSERVATION ACTION” & DISTINCTIONS-BASED FUNDING

Speaking on behalf of the Métis National Council (MNC), Kelsey Scarfone emphasized the importance of a distinctions-based approach as opposed to pan-Indigenous open funding calls, to avoid creating conditions of competition between First Nations, Métis and Inuit. MNC encourages funders to create a Métis Nation set-aside to be allocated to governing members via MNC’s internal governance structure and funding model. In addition, advisory councils for funding programs should be adequately representative and transparent.

In an ideal world, Kelsey envisioned cross-cutting funding based on “self-determined conservation action”, as opposed to the status quo which sees MNC and governing members piecing together programs via multiple grants with separate reporting and administrative requirements (despite interconnected activities and aims). Ideally, MNC governing members would put forward their full-costed conservation vision and Canada would respond under one agreement, allowing them to deliver on citizens’ priorities in a more comprehensive way.

“Ideally we would reverse the onus and have Canada respond to the vision of the Métis Nation.”

– Kelsey Scarfone - Conservation Policy Advisor, Métis National Council

When it comes to private sector financing, Nations pursuing carbon offset projects can face barriers in connecting to markets. ENGO partners provide technical capacity support for nature-based solutions but, with a few exceptions, tend to step back when it comes to market-based pathways. The IPCA and NbS Advisory Services Program from N4J and Nature Focus is one example that works with Nations to assess appropriate NbS and carbon financing channels and then connects Indigenous-led projects to avenues and partners for sustainable finance. This work takes a holistic lens, considering carbon, biodiversity, cultural, and socioecological values.

There is also an awareness gap when it comes to understanding the range of viable conservation finance pathways, as well as an opportunity to illuminate and connect Nations with a broader range of nature valuation approaches beyond carbon-focused projects. Sharing wise practices and lessons learned via case studies is one way to build awareness of a broader spectrum of pathways. For instance, the Natural Assets Initiative (NAI), a Canadian NGO, is advancing natural asset management as a practice that brings considerations of nature’s benefits and services, or gifts, into core organizational decision-making. It is an inherently scalable approach based on asset management systems that all Canadian public sector entities must adopt. There is early evidence to suggest that the approach can support First Nations’ capacity and objectives, for instance to advance watershed-scale agreements with provinces and negotiations with the Crown. NAI states that it wants to ensure that natural asset management evolves to demonstrably uphold Indigenous rights. This approach to valuing natural assets goes far beyond carbon-only valuations, and has the potential to be more values-aligned with holistic Indigenous conceptions of the multiple values and roles of ecosystems.

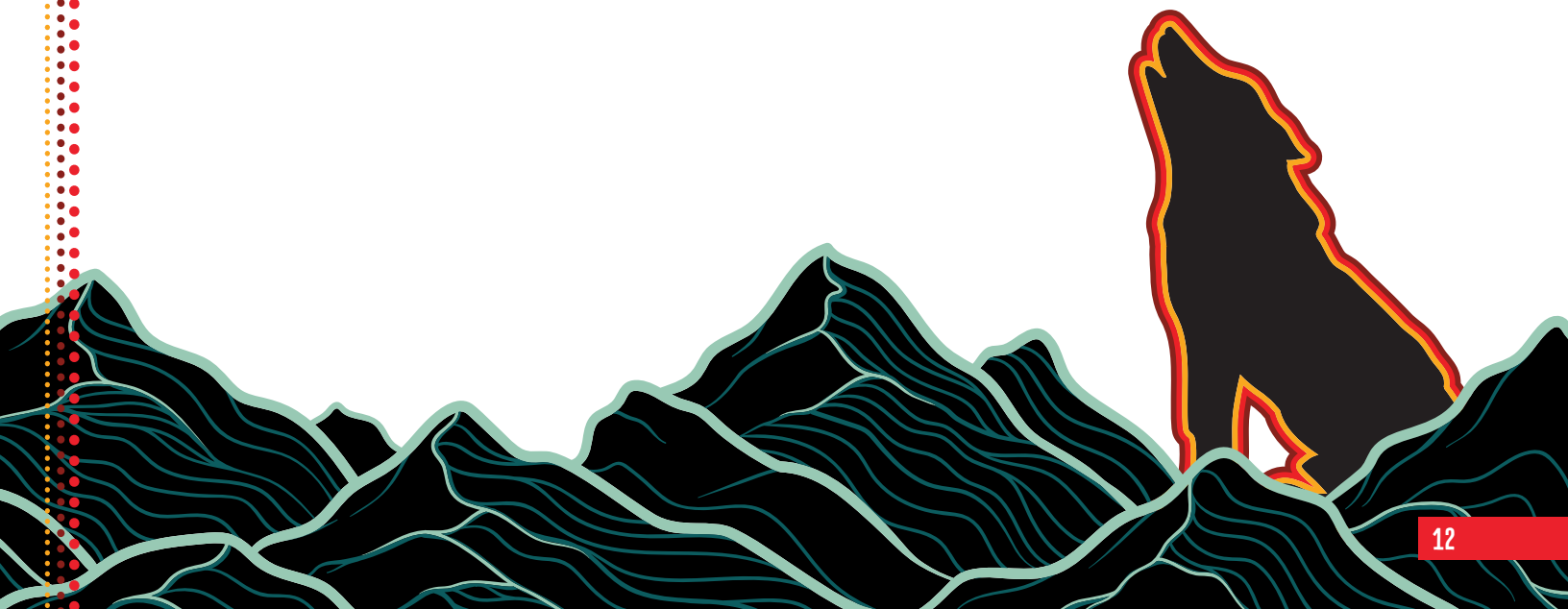


PEOPLE & SKILL-BUILDING

With limited financial resources, Nations often lack funds dedicated specifically to environmental stewardship. Where they exist, Lands and Resources Departments tend to be over-stretched. Wearing many hats, staff often cannot give their focused attention to initiating NbS projects and lack capacity to manage technical and business components. Nations that do not have the resources or prefer not to hire external consultants may benefit from skill-building for feasibility assessments, connecting to markets, and negotiation. Professional development courses and peer-to-peer mentorship were two suggestions for building capacity and developing the field of Indigenous-led NbS.

Representatives of Caldwell First Nation shared about their struggle to recruit staff who are members of the Nation. They are providing training opportunities to build skills and interest within the Community to potentially lead into full-time roles. In particular, they are targeting youth through microcredit and credential programs and pursuing partnerships with universities. Convening youth can be a challenge for peri-urban Nations and those with limited reserve lands. Yet, youth engagement was identified as critical to cultivating long-term capacity and for broader nation-building goals.

On the Atlantic coast, Mi'kmaq Communities in Unama'ki/Cape Breton have similarly identified youth engagement as a priority for NbS capacity building. Unama'ki Institute of Natural Resources (UINR) is developing communication tools to increase Community awareness and is convening Mi'kmaq leaders, youth, and other Knowledge Carriers to inform the long-term vision for their NbS projects and to co-create an evaluation framework. Other approaches may involve youth panels and policy recommendations, like the [Yukon Youth Panel on Climate Change](#). In Treaty 9 territory, Wahkohtowin Development is taking another approach to engage youth in NbS (See Box 3). To showcase such examples and share wise practices, we are hearing interest in territory/regional and inter-regional peer-to-peer mentorship and youth convenings.



BOX 3. WAHKOHTOWIN DEVELOPMENT: CULTIVATING CAPACITY WITH YOUTH GUARDIANS

“Our youth are our next leaders”

Gap: While there are a diversity of land-based programs engaging Indigenous youth from coast to coast to coast, few seem to specifically address NCS. In addition, there is a gap when it comes to engaging Guardians in carbon-focused capacity building.

Opportunity: Wahkohtowin Development saw an opportunity to bridge their youth-focused Guardian Program with their forest management and climate initiatives. Made up of Chapleau Cree First Nation, Missanabie Cree First Nation and Brunswick House First Nation, Wahkohtowin works at the intersection of sustainable resource management, cultural revitalization and economic development. In 2022, they launched the [Guardian Climate Champion](#) program to engage youth in guided discussions and learning, to help in defining their role within land stewardship, climate action, and participation in forest management.

The recruitment of Champions is also a unique way to recruit the upcoming season’s Guardians. Not all Climate Change Champions are available or eligible to be Guardians, however annually there are a few applicants. In 2022, one participant took on a subsequent role supporting field-based monitoring for an NbS pilot project that leverages mycorrhizal fungi-tree relationships. The Guardians also support biodiversity baselines, monitoring and interviewing for NbS projects. In-turn NbS funding can provide diversified, sustainable resourcing for Guardians. Wahkohtowin also continues to explore NbS opportunities such as qualifying for the [Verra](#) RFP for participants in developing international NbS protocols.

DATA & MEASUREMENT

Our research scan revealed capacity needs relating to ecosystem (terrestrial and blue) carbon measurement and monitoring, as well as data access, management and control. Technical capacity is required to measure, map and monitor ecosystem carbon. Some Communities seek out external support (e.g., through consultants or partnerships) to provide quick viability assessments and estimate carbon stocks with GIS and remote sensing, while others want to build internal capacity in these areas.

Capacity building opportunities also exist around field-based data collection. Several ENGOs and other groups are providing field-based training for carbon measurement and monitoring. On the horizon, groups like WWF-Canada see a ‘training the trainer’ approach as a model to work towards. Further, through WWF-Canada’s upcoming data platform, discussed in the previous section, the organization intends to address a capacity gap around data processing and management, making it easier for Nations to take the data they’ve gathered and put it into a useful form.

In some cases, industry and government already have the spatial data that a Nation needs for pursuing NbS, but are unwilling to share. Patricia Rojas (BCAFN) emphasized that First Nations should be the owners of data from their traditional territories and Indigenous rights must be upheld in data collection and control. UNDRIP and Indigenous data sovereignty must also be respected in emergent NbS data platforms and hubs, including Principles of Ownership, Control, Access and Possession (OCAP). Again, it is clear that political advocacy and assertion of rights cannot be separated from conversations of technical capacity.

We also observed that organizations focused on carbon measurement and monitoring are often not the same ones focused on carbon offset project development. Stronger lines of sight and collaboration between these capacity-cultivating offerings could help Nations connect the dots more easily to measure carbon stocks, 'package' an offset project, and tap into carbon markets, should this be of interest to them. The emergent Carbon Monitoring Community of Practice offers one promising opportunity for collaboration.

Finally, there's an opportunity to prioritize Indigenous rights, leadership and capacity development in the creation of standards, protocols and norms for NbS. For natural asset management, carbon credits and other NbS, standards are required to ensure transparency, scientific rigour, equity and impact, and can support Nations in assessing proposed projects and partners.

COLLABORATION & ALLIANCES

The 'scan' highlighted promising efforts to build partnerships and break down silos, such as new communities of practice and interest among different collaborators to work together. Yet, outside of these efforts, we continue to hear of 'gatekeeping' dynamics and 'turfiness' among some environmental and academic groups, despite aligned overarching goals. Such dynamics hinder Nations' participation and access to resources, and can further drain their capacity by overburdening Communities with multiple disconnected engagement requests.

Further, capacity-building projects are often opaque, lacking publicly available documentation. With appropriate permission and data sharing agreements with Communities, capacity building offerings can be made more visible to encourage collaboration and accessibility, while reducing potential redundancies. Relatedly, there is a need for wider online information which targets potential Community partners (as opposed to funders).

Ethical Spaces are needed for conservation collaborations to unlock the benefits of Indigenous NbS [1]. Networks can help break down silos, strengthen existing field-building efforts, and foster collaboration as new capacity-building efforts are launched and scaled-up across the country. Ethical Spaces are also needed to bring Community together to have these conversations to learn from each other and identify common experiences and opportunities.



“Often the political and grassroots do not see eye to eye and opportunities to have safe, constructive conversations are needed that are supported through outside agencies to ensure fair and ethical space is actually being provided and all perspectives heard and brought forward.”

– Kerry-Ann Charles, Environment Partnership Coordinator, Cambium Indigenous Professional Services

Knowledge exchange and collaboration between Indigenous Nations can also bolster capacity. Nations in early stages of project development can learn from those who are further along. Regional, Treaty and territory-level collaboration can also be beneficial to identify and advance shared goals, reduce competition and cultivate dialogue and solutions rooted in place. The West Coast IPCA Support Program (WISP) led by IISAAK Olam Foundation, offers a unique alliance-building approach with its Indigenous-led West Coast Stewardship Corridor, responding to an opportunity to foster collaboration among neighbouring First Nations on Vancouver Island, based on shared responsibilities, to more effectively protect wildlife corridors for species at risk and advance alternative economies. The two emerging communities of practice described above offer other positive developments. There is also interest in collaboration across borders, for co-learning with Indigenous kin to the South (e.g., Australia, Central and South America).

HOLISTIC OBJECTIVES & VISION ALIGNMENT

Nations need unbiased and relevant information to effectively assess whether a potential project aligns with their vision and values. If there is uncertainty regarding such alignment, technical toolkits will be of little use. We are hearing interest in tools to support Nations in evaluating potential carbon projects and third party proposals—to assess vision alignment, risks and opportunities.

WISP is one example of a program that supports Nations with strategic visioning and assessing different pathways, positioning NbS within a suite of economic alternatives to support holistic aims. Other examples include the IPCA and NbS Advisory Services from N4J and Nature Focus (see above), as well as work by Nature United to support Nations on assessing tradeoffs associated with different management scenarios. The Nature United team underscored that their capacity-building efforts are specific and responsive to the priorities of a given Community partner. As we also heard from Community contacts, the onus should not be on Nations to fit into programmatic boxes of ENGOs or the Crown; rather, supporting Indigenous self-determination will generate climate and conservation benefits [2, 4].

“I strongly believe it’s up to the Indigenous Nation to define how they’re going to move forward...when it comes to nature-based solutions, we need to support the Indigenous leadership on their views.”

– Terry Dorward - Conservation Director, Westcoast IPCA Support Program (WISP)

BOX 4. PRESENTING A SPECTRUM OF PATHWAYS TO ADVANCE NATIONS' VISIONS

Not all Nations are interested in carbon markets. Some distrust their climate mitigation potential and the risks they can pose for Indigenous rights, or see them as a commodification of nature that does not align with their values [5,6]. Others see singular focus on carbon as “essentializing”, but may be interested in broader approaches to natural asset management and ecosystem valuation.

Regardless, interviewees emphasized that capacity building offerings from external partners should be unbiased and supportive of informed decision making to help advance Nations’ self-determined land relationship visions.

Finally, there are limited capacity-building efforts targeting the intersections between NbS – particularly carbon financing– and Guardians and IPCAs, despite apparent complementarity, suggesting a need for more integrative resources supportive of Nations’ holistic objectives that include Community and economic development priorities, expressions of laws and governance, culture and language revitalization, and much more. Similarly, Indigenous-led NCS dovetail with biodiversity protection, wildfire management and revitalizing cultural burning practices, food sovereignty, health and medicines, youth engagement, and many other areas that can be advanced with flexible, integrative funding and approaches rooted in holistic Indigenous Knowledge systems [5, 6].

OVERARCHING CONSIDERATIONS: RIGHTS, SELF-DETERMINATION & POLICY

Overarchingly, lack of recognition and clarity around rights and jurisdiction remain the most salient barriers to Indigenous-led NbS. Technical know-how, awareness and funding can only go so far without enabling policy that supports Indigenous self-determination.

“It’s a small piece of the puzzle in this system...the toolkit won’t be useful if there are no other tools around and, of course, policy and legislation that can enable those projects”

– Patricia Rojas – Policy Analyst and Regional Climate Change Coordinator, BCAFN

In Canada, NbS proponents are obligated to uphold Aboriginal and Treaty rights of First Nations, Inuit and Métis people within their traditional lands and territories as per Section 35 of the Constitution Act, 1982. Projects should also embed respect for human rights and Indigenous self-determination into project design and implementation, including (as a minimum standard) the Free, Prior and Informed Consent (FPIC) of Indigenous Peoples, consistent with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) [9]. With country, Treaty and community-specific contexts taken into account, Indigenous leadership or deep collaboration in decision-making is needed for NbS to be equitable and supportive of Indigenous self-determination [9].



Despite increased recognition of Indigenous governance in NbS policy contexts, there remains a gap when it comes to recognizing Indigenous jurisdiction, legal systems and self-determination [10]. Yet, Nations are asserting their jurisdiction and self-determination in various ways. While uncooperative provincial governments can pose barriers, some Nations are bypassing the province to negotiate directly with the Federal government, or are self-declaring IPCAs. Some Nations have had success with an “agree to disagree” approach to avoid jurisdictional disputes impeding progress toward shared goals.

Indeed, Canada cannot afford to impede Indigenous NbS given Provincial, Federal and international commitments to climate action and conservation. Alongside domestic enabling policy and marketplace mechanisms, policies are needed to ensure IPCA designations are readily understood and qualified for international investment through carbon and ecosystem finance.

“Getting to 30% [protection of lands and waters by 2030] is going to be huge and Canada doesn’t have the tax base. We can only get there by connecting to the global marketplace and creating good policies...Add in the fact that the majority of the 30% is going to be IPCAs and this could be part of reconciliation policy.”

– Steven Nitah, Managing Director for Canada, Nature For Justice.

RECOMMENDATIONS & NEXT STEPS

In this report, we summarized six capacity-cultivating tools and programs targeting Indigenous-led NbS. These included knowledge ‘toolkits’ like the First Nations Forest Carbon Toolkit, developed by BCAFN and Ecotrust Canada, which provides both introductory and more technical information to First Nations interested in forest carbon offset projects with examples and perspectives from First Nations in B.C. Alongside knowledge-focused tools, we summarized two emerging communities of practice, both of which intend to include further Indigenous engagement to scope Community-responsive approaches. The potential natural asset management CoP that NAI plans to scope highlights opportunities beyond carbon-only nature valuation. Finally, we summarized two examples of capacity-building at the intersection of carbon finance and IPCA advancement. For instance, WISP supports First Nations with strategic visioning and assessing alignment of NbS opportunities with their cultural, stewardship and economic priorities.

The six examples we provided are designed to respond to a range of capacity-related needs and shed light on varying approaches to capacity-building. Alongside these regional and multi-regional tools and programs, Nations are developing their own place-based approaches to building internal capacity, some of which were spotlighted in this report. We also spoke with Community contacts and identified gaps, barriers and needs for Indigenous-led NbS. Based on the gaps identified, we suggest the following recommendations for funders, collaborators and ‘capacity-cultivators’:

- 1. Knowledge & Awareness:** Develop accessible, unbiased and relevant knowledge tools tailored to different audiences (e.g., leadership, Guardians, youth, practitioners) and varying purposes (e.g., decision-making supports and visioning tools in addition to ‘NbS 101’).
- 2. Funding & Resources:** Provide long-term, flexible public and philanthropic funding that responds to Nations’ self-determined visions and holistic interests, applying a distinctions-based approach (i.e., not pan-Indigenous, avoiding conditions of competition between First Nations, Métis and Inuit). Advance capacity-building and enabling policy for conservation finance –including natural asset valuation and carbon financing– that protects Indigenous rights and advances Indigenous-led solutions (including IPCAs and Guardians).
- 3. People & Skill-building:** Build long-term Community capacity through youth engagement, training-the-trainer approaches, credential programs and specialized skill-building for NbS project development. Broadly, avoid duplicating efforts and overburdening Nations with engagement requests. Ensure that a decolonized lens is held for collaborators with a clear commitment to undertake their own internal work to transform organizational approaches rooted in colonial thinking and increase their capacity to adopt participatory action framing.
- 4. Data & Measurement:** Ensure accessibility, avoid gate-keeping and siloed efforts, and go beyond measurement to build capacity for processing, assessing and utilizing carbon and ecosystem data. Prioritize and advocate for Indigenous data sovereignty.

5. **Collaboration & Alliances:** Bolster capacity by supporting Nations to build networks of allies (e.g., with municipalities and universities) and foster alliance-building among Nations (e.g., regional alliances and overlapping territories) where there is interest and aligned visions. Invest in knowledge sharing/co-creation, network-weaving, and decolonized relationship building via hubs, communities of practice, other peer-to-peer learning opportunities, and networks.
6. **Holistic Objectives & Vision Alignment:** Develop integrative capacity-building efforts grounded in holistic Indigenous ways of knowing and Nations' self-identified visions.
7. **Rights and Responsibilities at the Centre:** Create capacity-cultivating tools and offerings with attention to Indigenous rights, responsibilities and self-determination, and linked to enabling policy/advocacy.

Capacity gaps and opportunities are intersectional and cannot be addressed in isolation.

To advance Indigenous-led NbS, rights and jurisdiction must be addressed and enabling policy must be developed in tandem with increasing capacity. Crown governments need to prioritize rapid implementation of commitments to UNDRIP, changed practices implied by decades of court cases, and advancement of enabling policy innovations in this critical area of Nature based Solutions, which represents a convergence of intersecting areas of climate, biodiversity and reconciliation action. Other partners, such as ENGOs, have a range of mandates and approaches to political advocacy, but all have an opportunity to support Nations in advocating for their own rights. Finally, the business community has an opportunity to advance market opportunities and project terms based in more active recognition and advancement of Indigenous rights and responsibilities, not the lowest common denominator of current practice. This means co-creating terms where Nations have significant long-term ownership stakes and co-governance roles, that investment terms are advancing the best Indigenous, Environmental, Social and Governance (I-ESG) practices, and the emerging marketplace surrounding NbS as a field is understood to have Indigenous rights at the centre.

Further outreach is needed to develop a more comprehensive assessment of common capacity gaps and needs for Indigenous-led NbS, including engagement with Inuit populations and broader regional representation. Nonetheless, this scan offers initial findings for capacity-building gaps which we will continue to build on and ground-truth with the RAD Network. Our findings revealed promising efforts to build partnerships and break down silos, such as emerging communities of practice, as well as some long-standing efforts to foster collaboration in certain regions. Yet, we continue to hear of a need for greater connectivity, collaboration and visibility among capacity cultivating efforts. For the most part, ENGOs, Crown governments, industry and other non-Indigenous institutions are not yet working in concert.

As new communities of practice and capacity-cultivating tools are developed, the RAD Network seeks to play a network-weaving role to connect aligned efforts and actors, shed light on existing tools, and co-create knowledge products in Ethical Space grounded in Nations' priorities. Connectivity is also needed to ensure transparency and equity in the flow of resources. We recommend that non-Indigenous institutions work together with Indigenous Nations and networks to take stock of the financial expenditures and human resources involved in Indigenous-led NbS, and re-envision how those resources could be deployed over the long term to directly support Indigenous-led organizations, capacity and authority. Over time, we envision a field where technical, administrative, fundraising and partnership capacity are held by Indigenous-led entities.



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