



Indigenous-led Conservation

Lessons for Conservation Planning for Species at
Risk in S'ólh Téméxw

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Executive Summary

The S'ólh Téméxw Stewardship Alliance (STSA) is supporting conservation activities for Species At Risk (SAR) and culturally significant plants, animals, and places. As part of the agreement between Environment and Climate Change Canada (ECCC) and the STSA, and to honour the Stó:lō principle of “Xyólhmet te mekw' stám ít kwelát / We have to take care of everything that belongs to us,” this report summarizes lessons learned from Indigenous-led conservation projects in the region now known as Canada. This report was written under the mentorship of Stó:lō Research and Resource Management Centre (SRRMC) staff by a University of British Columbia Sustainability Scholar.

While western conservation traditions have a complicated history with Indigenous Peoples, increasingly there is greater representation of Indigenous voices at decision-making tables. This is facilitating opportunities which allow for Indigenous Peoples to maintain and rebuild cultural relations with the plants, animals and places that share their territories. Indigenous-led conservation refers to initiatives that are led by Indigenous communities and Indigenous governments. They may be supported by NGO or government partners, but they begin from specific, local values and ethics.

Learning from other Indigenous-led conservation initiatives, considerations for culturally-situated conservation plans include: the importance of ceremony; allowing local teachings to guide not only the focus of the work (which plants, animals or places to prioritize), but also which methods and actions to employ; including Indigenous Guardians in planning decisions; and presenting management plans and goals in culturally relevant ways (see, for example, the management plan for the Thaidene Néné Indigenous Protected and Conserved Area (IPCA) or the Buffalo Treaty).

Introduction

Conservation initiatives have a complicated history when considering Indigenous rights. The Park model, which sets aside land to preserve nature from human destruction, has historically excluded Indigenous Peoples from accessing traditional spaces and sometimes criminalizes subsistence practices.¹ Also called the “fortress model” of conservation, the assumption is that human practices threaten the livelihood of plants, animals, and ecosystems and therefore humans need to be removed from a specific place.² This is in contrast to many Indigenous traditions, including Stó:lō worldviews, which is that plants, animals, and places are important because of their stories and their relationship to specific people. It is through maintaining relations with plants, animals, and places that ecosystems are able to thrive. Globally, many intact ecological terrestrial ecosystems are on lands managed by Indigenous Peoples.³ These lands also have significant overlaps with terrestrial mammal habitat, including animals considered threatened and vulnerable.⁴

Conservation practices are changing. In Canada, for example, Parks Canada aims to have biodiversity conservation recognize Indigenous rights and contributions to conservation, made explicit in Priority 2.⁵ This includes supporting the recognition of Indigenous Protected and Conserved Areas (IPCAs). At the federal level, National Parks increasingly operate within a co-management structure.⁶ Some co-management structures can contribute to increased inclusion

¹ Theodore (Ted) Binnema and Melanie Niemi, “‘Let the Line Be Drawn Now’: Wilderness, Conservation, and the Exclusion of Aboriginal People from Banff National Park in Canada,” *Environmental History* 11 (October 2006): 724–50.

For example, Banff National Park is the first National Park created in Canada. Indigenous groups with ties to the area include Stoney (Nakoda), Niitsitapiksi and Ktunaxa; Stoney Nakoda were actively relying on the area for sustenance in the late 19th century when Banff National Park was created. Theodore Binnema and Melanie Niemi show how advocates for the Park explicitly aimed to exclude Indigenous Peoples because they believed their reliance on animals and plants was “destructive.”

² Dan Brockington, *Fortress conservation : the preservation of the Mkomazi Game Reserve, Tanzania* (Bloomington: Indiana University Press, 2002).; Paige West, James Igoe, and Dan Brockington, “Parks and peoples: the social impacts of protected areas,” *Annual Review of Anthropology* 35 (2006):251–77. <https://www.jstor.org/stable/25064924>

³ Stephen T. Garnett, *et al.*, “A spatial overview of the global importance of Indigenous lands for conservation,” *Nature Sustainability* 1 (2018):369–374. <https://doi.org/10.1038/s41893-018-0100-6>

⁴ Christopher J. O’Bryan, *et al.*, “The importance of Indigenous Peoples’ lands for the conservation of terrestrial mammals,” *Conservation Biology* 35, no. 3 (2020):1002–1008. <https://doi.org/10.1111/cobi.13620>

⁵ Parks Canada, *One With Nature : a renewed approach to land and freshwater conservation in Canada. A report of Canada's federal, provincial and territorial departments responsible for parks, protected areas, conservation, wildlife and biodiversity* (Gatineau, QC: Parks Canada, 2018). <https://publications.gc.ca/site/fra/9.857393/publication.html>

⁶ Miriam Moore, “Decolonizing Park Management: A Framework for the Co-management of National Parks and Protected Areas” (MA Thesis, Simon Fraser University, 2020).; Jessica Stronghill, Murray B. Rutherford, and Wolfgang

of Indigenous voices and priorities into management and conservation decisions.⁷ Co-management and knowledge integration frameworks have also been critiqued by scholars in the past, because they continue to prioritize Western science. While including some aspects of Indigenous Knowledge (IK) and cultural priorities, integration projects often begin with a Western framework and adopt only the insights and knowledge that can easily correspond and support Western scientific practices.⁸

Xyólhmet te mekw' stám ít kwelát.

We have to take care of everything that belongs to us.

Stó:lō Principle (STSA n.d.)

Project

In the teachings shared by Naxaxalhts'i (Sonny McHalsie), Stó:lō Elder and Cultural Advisor/Historian at the SRRMC, all things have *shxweli* (roughly translated to life force). According to his interpretation, Stó:lō people are connected to the land, to each other, to plants, and animals within S'ólh Téméxw (roughly translated to “our land”, referring to Stó:lō territory) through *shxweli*. Individuals and communities have specific obligations to take care of their connections to place; this includes caring for the 69 plants and animals that the Canadian government classifies as Species At Risk (SAR) – whether of special concern, threatened, or endangered – that also inhabit Stó:lō territory. Many SAR also hold cultural significance because of their role in diet, as material, as medicines and/or spiritual practices. With funding from Environment and Climate Change

Haider, “Conservancies in Coastal British Columbia: A New Approach to Protected Areas in the Traditional Territories of First Nations,” *Conservation & Society* 13, no. 1 (2015):39-50. www.jstor.org/stable/26393183

In 2020, 17 of 48 National Parks and National Park Reserves are co-managed by the Canadian government and Indigenous governments, up from 13 out of 42 in the early 2010s.

⁷ Sybil Diver, “Co-management as a Catalyst: Pathways to Post-colonial Forestry in the Klamath Basin, California,” *Human Ecology* 44, no. 5 (2016):533-546. <https://doi.org/10.1007/s10745-016-9851-8>

⁸ Paul Nadasdy, “The Politics of Tek: Power and the “Integration” of Knowledge,” *Arctic Anthropology* 36 no. 1/2 (1999):1-18. <http://www.jstor.org/stable/40316502>; Paul Nadasdy, *Hunters and Bureaucrats: Power, Knowledge, and Aboriginal-State Relations in the Southwest Yukon* (Vancouver: UBC Press, 2004).; Janna M. Shackeroff, and Lisa M. Campbell, “Traditional ecological knowledge in conservation research: problems and prospects for their constructive engagement,” *Conservation and Society* 5 (2007):343–360. <https://www.jstor.org/stable/26392893>

Canada (ECCC), the S'ólh Téméxw Stewardship Alliance (STSA), through the Research and Special Projects team at the Stó:lō Research and Resource Management Centre (SRRMC), is planning conservation research and activities to support SAR in S'ólh Téméxw. The STSA is “a political body that guides engagement and consultation processes within S'ólh Téméxw.”⁹ The SRRMC offers professional and technical services for projects carried out within S'ólh Téméxw.¹⁰

As part of the work to honour the Stó:lō principle of taking care of everything that belongs to Stó:lō peoples, and to uphold the agreement between the STSA and ECCC, this report highlights some of the lessons learned from other Indigenous-led conservation initiatives across what is now referred to as Canada and the United States. This report was written by a University of British Columbia Sustainability Scholar under mentorship from SRRMC staff. Lessons learned from other Indigenous-led conservation efforts can help to inform future conservation actions and initiatives in S'ólh Téméxw, with the goal of sharing possibilities for future endeavors.

Indigenous-led Conservation Plans

While many conservation initiatives are now actively engaging local Indigenous communities in their plans, including implementing co-management in some areas, there are also many Indigenous-led conservation areas, projects, and activities where Indigenous Peoples take the primary role in decision-making and leadership. These may include partnerships with governments or NGOs and may also include a co-governance structure. However, they differ from government-led or NGO-led co-management because the activities *start* from a specific Indigenous groups' cultural teachings and principles and/or are initiated from an Indigenous government.

Indigenous-led conservation efforts often also include insight and expertise from Western-trained scientists (which can include both Indigenous and non-Indigenous scientists). Indigenous-led conservation efforts are often situated within a knowledge integration framework that prioritize mutual respect. Some examples include: Ethical Space, two-eyed seeing, braiding knowledge, biculturalism,¹¹ or walking on two legs.

Two of the most widely cited frameworks which consider the interface of different knowledge systems and ethical engagement are ethical space and two-eyed seeing. **Ethical Space** refers to the

⁹ Read more about the STSA here: <https://thetsa.ca/>

¹⁰ Read more about the SRRMC's work here: <https://www.srrmcentre.com/>

¹¹ Stoney Nakoda Consultation Team, *Enhancing the Reintroduction of Plains Bison in Banff National Park Through Cultural Monitoring and Traditional Knowledge: Final report and recommendations* (Morley, AB: Stoney Nakoda Tribal Administration, 2022).

Biculturalism is a term that comes from Stoney Nakoda Chief Snow. See the extended discussion on different integration frameworks as described in the Stoney Nakoda cultural monitoring report, pages 1-2, 11-18.

space between two knowledge systems, with the intention of keeping the space neutral and open to possibility.¹² Two-eyed seeing, or *Etuaptmumk*, is a teaching from Mi'kmaw Elder Albert Marshall. It entails learning to see from both eyes at the same time – where one eye represents a specific Indigenous knowledge framework and the other western-trained science.¹³

Braiding knowledge is an Anishnaabe metaphor; Potawatomi scholar Robin Kimmerer uses the concept of braiding to describe a return to her cultural teachings to inform her botanical research.¹⁴ Anishnaabe-Ojibwe scholar Sonya Atalay teaches that there are many ways to braid knowledge, but it refers to moments “in which Indigenous knowledge concepts encounter western ways of knowing, and how Indigenous frameworks, when engaged with appropriate respect and care, can transform academic institutions and improve research and teaching.”¹⁵

Walking on two legs emerges from Secwépemc community and Elders. It refers to walking with “one leg of IK [Indigenous Knowledge] and Indigenous science and the other of western science... [it] is practice and action oriented, with the joint walking—guided by an Indigenous mind—compelling movement forward.”¹⁶

What is included in this report only represents a small portion of what is happening on the ground, representing what has been shared publicly (available on Indigenous government websites, NGO partners’ sites and published journal articles). Much of the existing information regarding Indigenous-led conservation projects is not publicly available. While some of these projects are strongly situated in cultural practices, others may appear to follow traditional conservation models and colonial-government-style-plans. This does not mean that they are not firmly grounded in Indigenous traditions and priorities. Carroll argues that Indigenous peoples across North America are creating “modes of environmental governance that are more in line with Indigenous traditional values and perspectives toward the nonhuman world while upholding the political structures that support and enable this process,” where those political structures sometimes refer to colonial

¹² Willie Ermine, “The Ethical Space of Engagement,” *Indigenous Law Journal* 6 no. 1 (2007):193-201.

¹³ Cheryl Bartlett, Murdena Marshall, and Albert Marshall, “Two-Eyed Seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledges and ways of knowing,” *Journal of Environmental Studies and Sciences* 2 no. 4 (2012):331–340. <https://doi.org/10.1007/s13412-012-0086-8>

¹⁴ Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants* (Minneapolis, MN: Milkweed, 2013).

¹⁵ Sonya Atalay, “Indigenous Science for a World in Crisis,” *Public Archaeology*, 19 no. 1-4 (2020):37-52, <https://doi.org/10.1080/14655187.2020.1781492>

¹⁶ Sarah Dickson-Hoyle, *et al.*, “Walking on two legs: a pathway of Indigenous restoration and reconciliation in fire-adapted landscapes,” *Restoration Ecology* 30 (2022):4, <https://doi.org/10.1111/rec.13566>

government processes.¹⁷ Therefore, what appear to be a traditional conservation model management plan could be a reflection of a (government or NGO) partner's required protocols; the diversity of Indigenous Peoples' perspectives; or local capacity and availability of professionals able to write these plans and reports (and so may follow existing templates, as is the case for BC conservancies).

What follows highlights some of the possibilities for species-specific and place-specific conservation projects. Species-specific projects prioritize a specific plant or animal, often of cultural importance. Actions are focused on recovery and protection of that specific plant or animal. Place-specific conservation projects are those which are focused on a particular location and aim to offer protection for all the plants, animals and spiritual importance of that location. Species-specific projects may include a place-specific component. Place-specific management plans also mention a variety of plants and animals, in addition to the cultural importance, of specific places that are included in a conservation effort. The initiatives included below were chosen because they offer specific lessons for Indigenous-led conservation projects. A full list of reviewed projects, including reviewed sources, is included in Appendix A.



Figure 1 Western painted turtle (*Chrysemys picta bellii*) Image by Courtney Celley/US Fish and Wildlife Service. Used under CC-BY-2.0 license and also considered to be under public domain. Available at: [https://commons.wikimedia.org/wiki/File:Painted_Turtle_\(15144406439\).jpg](https://commons.wikimedia.org/wiki/File:Painted_Turtle_(15144406439).jpg)

Species-Specific

Many species-specific projects focus on iconic and charismatic species (although there are smaller projects for other animals including the Western painted turtle – these have less information available).

¹⁷ Clint Carroll, "Native enclosures: Tribal national parks and the progressive politics of environmental stewardship in Indian Country," *Geoforum* 53 (May 2014):31-40. <https://doi.org/10.1016/j.geoforum.2014.02.003>

The most iconic species-specific Indigenous-led conservation initiative is the **Buffalo Treaty**. The Buffalo Treaty is a binding commitment *with buffalo* (*Bison bison*) and represents a return to traditional relations. Signatories engage in activities which support conservation, restoration, cultural use and cultural knowledge, intergenerational knowledge transmission, and knowledge-gathering. Several Indigenous communities (including First Nations in so-called Canada and Tribal Governments in so-called United States) are the original signatories, now also supported by NGOs and other organizations. The Buffalo Treaty is an example of a comprehensive, holistic initiative that centers around a single species, and many lessons can be drawn from best practices taken in this approach.



Figure 2 Grizzly Bear (*Ursus arctos horribilis*). Image by Jean Beaufort. Used under CCO 1.0 (Public Domain Dedication). Available at <https://www.publicdomainpictures.net/en/view-image.php?image=300112&picture=grizzly-bear>

Stoney Nakoda (a signatory to the Buffalo Treaty) territory is in what is now known as Alberta and includes Banff National Park. The Government of Canada re-introduced bison (also referred to as buffalo) into the park, and Stoney Nakoda carried out a Cultural Monitoring Project. The Nation credits the so far successful reintroduction to their practices of ceremony and cultural monitoring practices. **Cultural monitoring** is defined as "a means of integrating TEK [Traditional Ecological Knowledge] into the identification of priority areas for conservation and/or restoration that recognizes environmental factors and considers local knowledge and perspectives."¹⁸ It involves seven steps: Ceremony, Planning, Elder Interviews, Fieldwork, Elder Reconnection, Report Writing, and Outreach. Stoney Nakoda has also used cultural monitoring for a grizzly bear project. In this project, they follow traditional teachings and stories about grizzly bears in their design (respecting and maintaining grizzly boundaries, for example). Cultural monitoring is a strategy that could be adapted to local contexts.

¹⁸ Stoney Nakoda, "Enhancing," 20.

A British Columbia (BC) example of a species monitoring project grounded in Indigenous cultural values is in **Heiltsuk** (Haítzaqv) territory. Here, the Nation began first and foremost from Heiltsuk principles by following *Gvi'ilas* (customary law). This meant excluding some traditional biological practices (including radio-collaring) because it went against Heiltsuk teachings. Instead, they carried out other non-invasive monitoring techniques on the land (primarily DNA analysis of hair samples collected by barbed wires). They also visited Koeye watershed streams to observe salmon availability. This project led to a multi-First Nation bear management monitoring project in the **Great Bear Rainforest** (Haítzaqv along with Kitasoo/Xai'xais, Nuxalk, and Wuikinuxv First Nations).

In BC, Indigenous-led projects show promise in facilitating the recovery of the **Klinse-Za caribou population**. The Níkanêse Wah tzee Stewardship Society (West Moberly First Nations and Salteau First Nations) began a species-specific project to immediately address the almost-disappeared Klinse-Za sub-population of mountain caribou. The project begins by identifying caribou needs and behaviour by interviewing community Elders. Through extensive wolf culls and maternal penning, the Níkanêse Wah tzee Stewardship Society facilitated caribou survival. They are also working to secure additional place-based land protections of habitat areas to ensure caribou's continued recovery.

Place-specific

Several excellent resources exist for Indigenous Protected and Conserved Areas (IPCAs), defined by the Indigenous Circle of Experts as “initiatives by Indigenous governments and communities to assert their stewardship for their territories and areas” in the Canadian context.¹⁹ Most can be found on the online IPCA Knowledge Basket.²⁰ These overviews include (but are not limited to):

- ⇒ Indigenous Circle of Experts. *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*. 2018.
- ⇒ Ginger Gibson PhD, Kalene Gould, and The Firelight Group. *Indigenous Conservation Agreements in Canada: A Review of Best Practices, Challenges, and Implications for the Future*. 2020.
- ⇒ Philip Akins and Michael Bissonnette. *Co-governance of Marine Protected Areas in British Columbia*. 2020.

¹⁹ Indigenous Circle of Experts, *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 (Gatineau, QC : Parks Canada, March 2018), 34.

²⁰ Create an account and access the IPCA Knowledge Basket here: <https://ipcaknowledgebasket.ca/>

- ⇒ Megan Youdelis. *IPCA Governance Models: A Snapshot of Existing Conservation Governance Arrangements*. 2023.
- ⇒ Victoria Kacer, *et al.* *A Review of Crown Legislation for Protected and Conserved Areas in Canada*. 2023.

Some **IPCAs** are created unilaterally by Indigenous governments (without federal, provincial, or territorial governments); others are established by Indigenous governments and also enshrined through various colonial government designations. The former can provide additional protections for lands which governments claim as Crown Land. The IPCA often includes lands with multiple different recognized tenures. IPCAs can also be part of Marine Protected Areas (e.g., Gitdisdzu Lugyek (Kitasu Bay) Marine Protected Area).



Figure 3 Huckleberry (*Vaccinium parvifolium*). Image by Walter Siegmund. Used under CC BY-SA 3.0 license.

Available at:
https://commons.wikimedia.org/wiki/File:Vaccinium_parvifolium_14911.JPG

This report does not review **BC Conservancies**, which is a provincial designation that recognizes and allows for Indigenous use of protected provincial Crown land.²¹ There are currently 159 Conservancies in BC, covering 3,067,505 hectares.²² BC Parks along with Coastal First Nations developed a management plan template and guidelines for Conservancies, and many of the resulting management plans follow this template.²³ Stronghill and colleagues note that most conservancy management plans have similar goals and objectives to Class A Provincial Parks, and therefore may not differ greatly from how other Canadian-government-managed Parks operate (despite explicitly allowing for Indigenous use of land).²⁴

Park declarations are often about exerting sovereignty over traditional territories. IPCAs created unilaterally in BC include Tla-o-qui-aht Tribal Parks, Wilp Wii Litsxw Meziadin Indigenous Protected Area, and the Dasiqox-Nexwagwez?an Initiative. Others are also in planning stages (including by Ktunaxa Nation to protect grizzly habitat).

In BC, **Tla-o-qui-aht Tribal Parks** began to protect their ancestral gardens (i.e., old-growth forests) against clearcut logging. Tribal Parks are guided by the principles of ?iisaak, Natural Law.

²¹ BC Parks. “Types of Parks and Protected Areas,” (2023) Available at: <https://bcparks.ca/about/types-parks-protected-areas/>

This is an explicit goal of Conservancies, as outlined in point (b): “the preservation and maintenance of social, ceremonial and cultural uses of First Nations.”

²² BC Parks.

²³ Stronghill, Rutherford, and Haider, “Conservancies.”

²⁴ Ibid.

Tla-o-qui-aht sovereignty over some of the land now included in Tribal Parks was recognized through the Supreme Court of Canada. Other Tribal Park areas overlap with fee simple (private) property and existing National Parks. Indigenous Guardians – “trained experts who manage protected areas, restore animals and plants, test water quality and monitor development” – help maintain and restore degraded areas.²⁵ Local businesses and organizations register to collect a 1% Ecosystem Service Fee on behalf of Tla-o-qui-aht Tribal Parks.

Thaidene Nënë is an IPCA created by Łutsël K’édé Dene First Nation under a consensus-based co-management structure (with government representatives). The IPCA includes three different jurisdictional designations: national park reserve (NPR, 14,305 km²)²⁶, territorial protected area (TPA, 8,906 km²), and a wildlife conservation area (WCA, 3,165 km²). It was created with financial support of private equity, matched by a Government of Canada grant; daily operations are funded by investment interest from this fund. It is particularly interesting because their management plan is structured around the culturally significant teaching and practice of tanning moose hide.

Beyond protected areas, Indigenous communities in BC are also securing other rights to manage their traditional lands. For example, the Xáxli’p community, of St’át’imc Nation, hold a Community Forest designation from the BC government which grants them forest tenure for most of their traditional territory. While a Community Forest is for extracting market timber, the **Xáxli’p Community Forest** is guided by a recognition that the forest is a part of Xáxli’p and Xáxli’p is a part of the forest. The Community Forest was created to prevent clearcut logging after an extensive community-based planning process. Xáxli’p created two plans which guide management decisions: *Ntsuwa’lhalha Tl’ákmen*, (“our way of life”) and the *Xaxli’p Ecosystem-based Plan* (EBP). As part of their commitment to maintain and care for their territory, Xáxli’p also engage in restoration initiatives – guided by Elders knowledge – to recover degraded forests and landscapes. The Community Forest designation is one example to show that Indigenous communities can choose to maintain relations with forests beyond a protected area.

²⁵ Indigenous Leadership Initiative, “*Indigenous Guardians*.” (n.d.) Available at: <https://www.ilinationhood.ca/guardians>

There are currently over 120 First Nations Guardians Programs across Canada. Indigenous Guardians are paid employment positions. See also *Land Needs Guardians*. Available at: <https://landneedsguardians.ca/>

²⁶ This portion of Thaidene Nënë is listed as a National Park on Parks Canada website. However, the IPCA extends beyond what is considered a National Park and their management and governance decisions cover the entirety of the IPCA.

Considerations for a Culturally Situated Conservation Plan

1

Should be fully grounded in a community's teachings. This goes beyond which places or plants or animals to focus conservation efforts but should also inform monitoring strategies and which scientific methods to employ. All incorporation of Western science should be done according to a local community's ethics and principles.

2

Importance of ceremony. Ceremony is an important protocol which should be carried out to ensure that the work is done in a good way.

3

Management Plans – it is good practice to have a management plan to facilitate clear communication and goals of an initiative. While management plans sometimes need to include specific kinds of information to meet legal protocols, this can be presented in a culturally situated manner. Thaidene Nënë IPCA management plan is an excellent example.

4

Indigenous Guardians play an important role in conservation efforts. Often Guardians are charged with carrying out restoration projects and fieldwork for monitoring projects. They should be included in conservation planning decisions.

5

Funding models. Often partnerships are required to carry out monitoring projects and long-term management plans. Thaidene Nënë IPCA is an example of one funding model – where an NGO raised private equity, and this was matched a Government of Canada grant. This allows them to have an ongoing operating budget coming from investment interest. Another funding model is Tla-o-qui-aht Tribal Parks, which currently collects payment from local businesses. Participating local businesses charge an additional fee to customers which is passed on to Tla-o-qui-aht. This is potentially successful because of the large number of small businesses in Tla-o-qui-aht territory, and their willingness to support Tribal Parks.

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Appendix

Full List of Reviewed Indigenous-Led Conservation Initiatives

Species-Specific Projects	Websites and other Information Sources
Buffalo Treaty	https://buffalorelations.land/ https://www.buffalotreaty.com/ National Park Service Blog Post: https://www.nps.gov/articles/bison-bellows-1-21-16.htm#:~:text=This%20treaty%20established%20an%20intertribal,Blood%20Tribe
Bison Cultural Project ("Enhancing the Reintroduction of Plains Bison in Banff National Park Through Cultural Monitoring and Traditional Knowledge")	Final report and recommendations (2022) available here: https://www.canadianmountainnetwork.ca/research/current/enhancing-the-reintroduction-of-plains-bison-in-banff-national-park
Stoney Nakoda Grizzly Bear Cultural Monitoring	Report (2016) available here: https://www.canadianmountainnetwork.ca/blog/enhancing-grizzly-bear-management-with-traditional-knowledge
Chinook Salmon in Central Yukon (Beaver River Watershed)	https://storymaps.arcgis.com/stories/8eba6b85803b4b56b6389abcc74708a8
Species at Risk Act (SARA) Consultation, Cooperation and Accommodation Project	https://yourcier.org/sara/
ki?lawna? Grizzly Bear Recovery	https://www.syilx.org/projects/ki%C9%82lawna%C9%82-grizzly-bear-recovery/
yi?wya?wutxan Badger Project	https://www.syilx.org/projects/yi%ef%a1%87wy%d3%99%ef%a1%87wutx%d3%99n-badger-project/
?arsikw (Turtle) Passage Restoration	https://www.syilx.org/projects/wetland-restoration-works-working-together-to-restore-%c9%82arsikw/
Box Lake Western Painted Turtle Basking Log Habitat	https://www.syilx.org/projects/box-lake-western-painted-turtle-basking-log-habitat/
Klinse-Za mountain caribou	Journal Articles: Lamb et al. 2022. "Indigenous-led conservation: Pathways to recovery for the nearly extirpated Kinse-Za mountain caribou," <i>Ecological Applications</i> 32:e2581. https://doi.org/10.1002/eap.2581 (see also McNay et al 2022 for technical paper on project: https://doi.org/10.1002/eap.2580)

	<p>Overview: https://wildlifeinfometrics.com/project/klinse-za-caribou-maternity-pen/</p> <p>Action plan: https://docs2.cer-rec.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90550/554112/915551/1060220/2452372/2478467/2478615/C36-3-2_Action_Plan_for_the_Klinse-Za_Herd_of_Woodland_Caribou_%28Rangifer_tarandus_caribou%29_in_Canada_-_Public_Consultation_-_A3X4D3.pdf?nodeid=2477621&vernum=-2</p> <p>Partner Agreement with BC gov: https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/wildlife-wildlife-habitat/caribou/overview_of_draft_partner_agreement.pdf</p>
Heiltsuk Grizzly Monitoring	<p>https://coastalfirstnations.ca/our-land/protecting-bears/ https://www.raincoast.org/2014/05/rcf-heiltsuk-bear-research/</p> <p>Journal Articles:</p> <p>Artelle, Kyle, <i>et al.</i> 2021. “Decolonial model of environmental management and conservation: Insights from Indigenous-led grizzly bear stewardship in the Great Bear Rainforest,” <i>Ethics, Policy & Environment</i> 24(3):283-323. https://doi.org/10.1080/21550085.2021.2002624</p> <p>Housty, W. G., A. Noson, G. W. Scoville, J. Boulanger, R. M. Jeo, C. T. Darimont, and C. E. Filardi. 2014. “Grizzly bear monitoring by the Heiltsuk people as a crucible for First Nation conservation practice,” <i>Ecology and Society</i> 19(2): 70. http://dx.doi.org/10.5751/ES-06668-190270</p>

Place-specific projects	Websites and other Information Sources
Xáxli’p Community Forest	<p>https://www.xaxlipcommunityforest.ca/</p> <p>Journal Article: Diver, S. 2017. Negotiating Indigenous knowledge at the science-policy interface: Insights from the Xáxli’p Community Forest. <i>Environmental Science and Policy</i>. http://dx.doi.org/10.1016/j.envsci.2017.03.001</p>
Gitdisdzu Lugeyks (Kitasu Bay) Marine Protected Area	<p>https://klemtu.com/stewardship/protected-areas/gitdisdzu-lugeyks-kitasu-bay-marine-protected-area/</p>
Thaidene Nënë IPCA	<p>https://www.landoftheancestors.ca/ https://www.natureunited.ca/about-us/where-we-work/northwest-territories/thaidene-nene/</p>

Seal River Watershed IPCA	https://www.sealriverwatershed.ca/
Tla-o-qui-aht Tribal Parks 4 parks: 1. Wah-nuh-jus – Hilt-hoo-is (Meares Island) 2. Tranquil Tribal Park 3. Ha`uukmin (Kennedy Lake Watershed) 4. Esowista Tribal Park	https://tribalpark.com/ Journal Articles: Murray, G. and Burrows, D. 2017. Understanding Power in Indigenous Protected Areas: The Case of the Tla-o-qui-aht Tribal Parks. <i>Human Ecology</i> . 45, 763–772. https://doi.org/10.1007/s10745-017-9948-8 Murray, G. and King, L. 2012. First Nations Values in Protected Area Governance: Tlao-qui-aht Tribal Parks and Pacific Rim National Park Reserve. <i>Human Ecology</i> 40, 385–395. https://doi.org/10.1007/s10745-012-9495-2 Clint, Caroll. 2014. “Native enclosures: Tribal national parks and the progressive politics of environmental stewardship in Indian Country,” <i>GeoForum</i> . 53 (2014): 31-40. http://dx.doi.org/10.1016/j.geoforum.2014.02.003
Dasiqox-Nexwagwez?an	http://dasiqox.org/wp-content/uploads/2018/04/DTP_VisionSummary-April-2018-web.pdf www.dasiqox.org/
Meziadin Indigenous Protected Area	Management Plan: https://www.indigenousguardianstoolkit.ca/sites/default/files/2022-07/meziadin_ipa_management_plan_june_2022.pdf News article: https://thenarwhal.ca/gitanyow-ipca-bc-government/
Dene K’eh Kusan	https://denakayeh.com/ https://www.ducks.ca/stories/boreal/bc-indigenous-led-conservation/ Conservation analysis: https://denakayeh.com/wp-content/uploads/2020/11/DKI-KDC2019Kaska-Dena-Conservation-Analysis-September2019-Final.pdf

Forums	Websites and Information Sources
BC-First Nations Wildlife and Habitat Conservation Forum	www.firstnationsbcwildlifeforum.ca
First Nations Culturally Significant Species Dialogues	https://iisaakolam.ca/sar-dialogues/