The Case for a Guardian Network Initiative

A report prepared by:
BC First Nations Energy and Mining Council and
UVic Environmental Law Centre

July 2020
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Dedication

This document is dedicated in the memory of Robert Gaya Kvastuyulkv Hall, who recently started his journey into the spirit world.

Hereditary Chief, fluent Heiltsuk speaker, researcher, historian, knowledge keeper, food harvester, artist, an original land protector and guardian.

Rest in Peace

November 11, 1940 - May 11, 2020

Photos courtesy of Shirley Hall
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Executive Summary

The Governments of Canada and British Columbia face a visionary and powerful Reconciliation opportunity – to establish a fulsome Guardian Network Initiative across British Columbia and Canada.

Indigenous Guardians monitor and protect the lands and waters on their territory. They are the “eyes and ears” of a First Nation on the ground. Guardians monitor the activities of resources users, enforce federal, provincial, and Indigenous laws, gather data on the ecological health and wellbeing of traditional territories, compile data to inform Nation resource decision making, and engage in community outreach and education about conservation of cultural and natural resources. In BC and around the world Guardian programs have built a remarkable record of success.
A Guardian Network Initiative – A Unique Win-Win

Based on a review of over 70 Guardian and Guardian-type programs from around the world, this report calls for law reform and dedicated government funding to support a BC and Canadian Guardian Network Initiative. The extraordinary range of benefits that Guardian programs provide to both Indigenous communities and to society-at-large justifies such action.

For Nations, Guardian programs provide numerous benefits, including local jobs; enhancement of both individual and community capacity; revitalization of self-governance; enhancement of intergenerational transfer of traditional knowledge; and contribution to community health, pride and culture. Multiple studies have quantified such benefits, showing that the return on investment in Guardian programs can range from $2.5 for each dollar spent to $10 to 1.

For society as a whole, Guardian programs can provide additional benefits: better conservation of natural resources; restoration of damaged fisheries, forests and streams; key jobs in rural communities; better education, training and technical capacity in rural communities; dramatic enhancement of the provincial tourism industry; improvements in community nutrition and health; mobilization of Indigenous forest management to better protect communities from wildfires; and enhancement of the Reconciliation relationship that is essential for long-term economic prosperity.

Such compelling win-win impacts convinced the government of Australia to invest more than $650 million in its Guardian programs (Indigenous Rangers) – and to commit an additional $100 million annually for the next seven years. This report makes the case that the BC and federal governments should similarly invest substantial, long-term and dedicated funding to First Nation Guardian groups, to support a comprehensive Guardian Network Initiative.

Moral and Legal Imperatives

Federal and provincial support for Guardian programs is necessary to meet government’s moral and legal obligations to Indigenous peoples arising from the Truth and Reconciliation Commission Calls to Action, recommendations of the Royal Commission on Aboriginal Peoples and the numerous reconciliation commitments of the federal and provincial governments.

Support for Guardian initiatives is also necessary to meet governments’ legal and constitutional obligation to act honourably in their dealings with Indigenous peoples. Among other things, both Canada and BC have acknowledged the UN Declaration on the Rights of Indigenous Peoples Act.
People’s (with BC incorporating it into provincial law). The UN Declaration recognizes that Nations have the right to give or withhold “free, prior and informed consent” to development projects in their territories. But you cannot have informed consent without information. Guardians are essential for Nations to gather the information necessary for a Nation to be in a position to meaningfully consider giving “informed” consent. Without the deep information about the territory’s land, water and wildlife that Guardians can provide, meaningful consent may not be possible.

**The Stewardship Imperative – the Central Role of Traditional Knowledge**

Canada’s conservation efforts will be enhanced by the integration of Traditional Ecological Knowledge into land and water stewardship – and Guardians can mobilize such knowledge. Indigenous societies have monitored their lands and waters for millennia, accumulating and passing on Traditional Knowledge. From a landmark United Nations report to the pages of *Scientific American*, scientists and policy makers increasingly recognize that Indigenous management of natural resources has been extraordinarily sophisticated and effective. Careful monitoring of fish and wildlife populations has maintained species productivity over the ages. Indigenous prescribed forest burning creates more biodiverse, resilient and fire-resistant forests. Herring spawn-on-kelp fisheries are more sustainable than the industrial kill fishery. Clam gardening is an enviable model of productivity and sustainability.

Guardian programs can provide jobs for such stewardship activities – as part of an approach that optimally combines the best of Western science with the best of Traditional Ecological Knowledge. Guardian programs can be key to the renaissance and application of wise traditional management of lands and waters – and can help ensure the systematic transfer of traditional wisdom from elders to youth.

**Education and Training**

Education and training are a key benefit of Guardian programs. An effective Guardian Network Initiative will need to ensure that Guardians receive relevant training and education. Such education and training can ensure that Guardians do their jobs effectively. It can also enhance the long-term capacity of individuals and communities – it can provide key skills transferable to other jobs.
Jobs and Economic Development

Guardian programs create jobs, often in small communities where jobs are scarce and most needed. These jobs offer opportunities consistent with Indigenous conservation ethics and connection with lands and waters. They also offer education and technical/scientific training that is transferable to other jobs. A remarkable aspect of the Australian Indigenous Rangers Program is how the Program enhances tourism and guided experiences skills—and is now seen as an integral player in the national tourism industry.

Jobs for Healing Lands and Waters

Almost two centuries of colonial resource development has done serious damage to the lands and waters of British Columbia. Fisheries and wildlife have been severely depleted, watersheds contaminated, forests and soils mismanaged, and marine waters cluttered with “ghost fishing nets” and “ghost crab traps” that devastate marine life. Who better to fix all these damaged ecosystems than the original owners? Guardians can work to heal lands and waters that have been devastated by decades of colonial resource development.

BC Guardians and other Indigenous stewardship groups are already restoring fisheries, clam beds, streams and mountain caribou and bison habitats. But more needs to be done. Across BC, there are nearly 1,200 old mine sites and more than 10,000 non-operating oil and gas sites that need monitoring and restoration work. The recent law establishing an orphan gas well levy—requiring new developers to pay into a cleanup fund to restore old industry damage—is a positive step. A similar fund should be established to address old mines, and both funds should enable Guardians to restore their territories.

Enforcement Authority

Nations with high capacity should be able to go beyond the current common model, where Guardians “Observe, Record, Report” violations to federal and provincial officials who pursue enforcement. This report documents highly successful examples of Nations that are in full charge of enforcement in their territories—issuing tickets, making arrests, carrying guns and laying charges.
**Enforcement of Indigenous Laws**

The BC government has already agreed that lands and resources must be managed in accordance with both provincial and Indigenous laws, and the Truth and Reconciliation Commission called for revitalization of Indigenous laws. In furtherance of this, Guardians should be empowered to enforce Indigenous laws regarding resource use — as has been done in a number of jurisdictions discussed here.

**Beyond Monitoring to Full Stewardship and Strategic Management**

Guardians gather environmental information that enables Nations to wisely manage resources, create land/marine use plans, and make strategic resource decisions. The ongoing gathering and analysis of this baseline environmental information is essential for Nations developing land/marine use plans and making strategic decisions about the type and intensity of development that the territory can sustainably support. For example, the information gathered by Guardians about water flows, water quality, wildlife, and fish populations is necessary for Indigenous participation in environmental assessments of proposed projects. Such information is an absolute prerequisite for Nations to be able to meaningfully consider whether to give “Free, Prior and Informed Consent” to proposed projects in their territories.

**Traditional Practices**

The report reviews the success of a number of specific traditional land and marine management practices of BC Nations, including traditional burning, cultivation of clam gardens, and live herring roe fisheries. It documents how governments are beginning to acknowledge that First Nation stewardship groups are well-positioned to steward lands and waters with such conservation practices. The report recommends that governments provide Guardians with resources to carry out such traditional practices.
Summary of Recommendations

EDUCATION AND TRAINING

**RECOMMENDATION #1** The Governments of British Columbia and Canada should provide resources to support the design, development and implementation of education, training and certification programs for Guardians.

**RECOMMENDATION #2** Governments should work in partnership with Nations, academic institutions, technical/professional associations, and industry to implement such programs.

12. Caribou along the George River, Quebec (Photo courtesy of the Indigenous Leadership Initiative)
JOBS AND ECONOMIC DEVELOPMENT

RECOMMENDATION #3 Recognizing the broad benefits provided by Guardian programs (including cost savings), the Governments of British Columbia and Canada should provide resources similar in scope to Australia’s Rangers Program to encourage Guardian job creation in First Nation territories.

RECOMMENDATION #4 The Governments of British Columbia and Canada should collaborate with First Nations to establish partnerships with the tourism industry to further Guardian job creation.

RECOMMENDATION #5 Governments must provide predictable, long-term financial and technical support to Nations as they build internal capacity. Governments must also provide support for regional Guardian Network organizations.

JOBS FOR HEALING LANDS AND WATERS

RECOMMENDATION #6 The Governments of British Columbia and Canada should fund Guardians to restore and remediate lands and waters damaged by industrial activity.

RECOMMENDATION #7 Funding for such Guardian restoration work should be contributed by the industries that created the damage, using the new orphaned well levy system as a model.

ENFORCEMENT AUTHORITY

RECOMMENDATION #8 The Governments of British Columbia and Canada should make statutory and regulatory space for Nations and Guardians to take part in law enforcement on their territories.

RECOMMENDATION #9 The Governments of British Columbia and Canada should make statutory and regulatory space for Indigenous enforcement of Indigenous resource laws in their territories.
BEYOND MONITORING TO FULL STEWARDSHIP AND MANAGEMENT

RECOMMENDATION #10  The Governments of British Columbia and Canada should provide resources to enable Guardians to gather the baseline and other information necessary for Nations to: develop land and marine use plans, make strategic resource use decisions, participate in environmental assessments, and make fully informed decisions about proposed developments.

TRADITIONAL PRACTICES

RECOMMENDATION #11  The Governments of British Columbia and Canada should provide resources to Guardians to carry out traditional land management practices, including traditional burning, clam gardens and spawn on kelp fisheries.
Introduction

As First Nations we govern our ancestral traditional territories and safeguard the health of our ecosystems. We are the Guardians and Watchmen of our territories. We are men and women carrying forward the work of our ancestors to manage and respect our lands and waters through our traditional laws to ensure a vibrant future for generations to come. We work with our neighbouring Nations to create a united and collective presence within our territories. From the Central Coast to the North Coast and Haida Gwaii, we are working together to monitor, protect and restore the cultural and natural resources in our territories.¹

¹ “Coastal Guardian Watchmen Vision,” online: Coastal First Nations <coastalfirstnations.ca/coastal-guardian-watchmen-vision/>. 
Canada’s indigenous peoples are building new organizations and institutions, gathering and applying traditional ecological knowledge from elders and community members active on the land, training a new generation of stewards, researchers, monitors and technicians, and building resource management strategies and plans that reflect a more holistic and comprehensive set of values.²

Karen Peachey

Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for Indigenous peoples for such conservation and protection, without discrimination.

United Nations Declaration on the Rights of Indigenous Peoples,³ Article 29(1), as incorporated in the BC Declaration on the Rights of Indigenous Peoples Act⁴


⁴ Declaration on the Rights of Indigenous Peoples Act, SBC 2019 c 44, Schedule, Article 29(1) (“DRIPA”).
Recommendation: Aboriginal governments, with the financial and technical support of federal, provincial and territorial governments, undertake to strengthen their capacity to manage and develop lands and resources. This requires in particular:

a) Establishing or strengthening, as appropriate, Aboriginal institutions for the management and development of Aboriginal lands and resources;
b) Identifying the knowledge and skills requirements needed to staff such institutions;
c) Undertaking urgent measures in education, training and work experience to prepare Aboriginal personnel in these areas;
d) Enlisting communities in dedicated efforts to support and sustain their people in acquiring the necessary education, training and work experience; and

e) Seconding personnel from other governments and agencies so that these institutions can exercise their mandates.

– Report of the Royal Commission on Aboriginal Peoples

It is envisioned that this work will achieve a principled and substantive approach to reconciliation that will include ... [i]dentifying and establishing new institutions, processes, and structures to support or facilitate reconciliation efforts...

This renewed and modernized relationship will clarify and include space for the exercise of our respective jurisdictions, governance, laws and responsibilities, including through new processes and institutions, with the aim of benefitting from and integrating, where appropriate, the strengths of Indigenous and Crown systems (inclusive of world views, values, processes, standards, policies, decision-making institutions or structures, and approaches)...

– BC Government – First Nations Leadership Council

Proposed Commitment Document and Joint Agenda...Shared Vision, Guiding Principles, Goals, and Objectives

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he BC First Nations Energy and Mining Council (“First Nations Energy and Mining Council”) calls upon the Governments of British Columbia and Canada to collaborate with Nations to establish a fulsome Guardian Network Initiative across the province.

It is time for British Columbia and Canada to provide dedicated funding and law reform to ensure that all Nations can exercise their jurisdiction to carry out comprehensive environmental monitoring, enforcement, and stewardship activities on their territories. Such programs are necessary for Nations to manage and conserve their homelands and make meaningful land and marine use plans. Further, Guardian programs are essential to track on-the-ground impacts of development – information Nations require in order to be in a position to actually provide the requisite “informed consent” to new and continuing development.

Fulsome Guardian programs can also provide invaluable social benefits, such as jobs and technical training in Indigenous communities; systematic transfer of traditional ecological knowledge from elders to youth; a renaissance and application of wise traditional land management; an opportunity for Indigenous peoples to restore damage from mining, oil and gas and forestry; and the opportunity for Indigenous Guardians to enhance British Columbia’s tourism industry.

There are compelling reasons why Australia is investing $100 million annually in their Guardian (Ranger) programs.8 It is time for Canadian governments to do likewise.

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8 See below for further discussion of the economic, environmental, social, and cultural benefits that the Australian program provides. Australia has committed over $650 million from 2015-2021 to the Indigenous Rangers Program (See Australian Government, National Indigenous Australians Agency (NIAA), “Project funding – Indigenous land and sea management, online: <www.niaa.gov.au/indigenous-affairs/environment/project-funding-indigenous-land-and-sea-management>) and very recently announced more than $700 million in additional funding for the 2021-2028 period (See: Finbar O’Mallon & Rebecca Gredley “Indigenous ranger funds...
Support for a Guardian Network is necessary to advance true Reconciliation. The Guardian project examples discussed below demonstrate that Guardian programs are effective at:

- protecting and restoring natural and cultural resources;
- providing social, economic, health, cultural and educational benefits to Indigenous communities;
- enhancing capacity for Indigenous self-governance;
- providing significant net economic benefits to society as a whole; and
- enhancing understanding and respect between Indigenous people and governments.

Not only do legal precedent, moral obligations, and the experience of existing regional networks call for action on a Guardian Network Initiative. Establishing such an Initiative will be a powerful, visionary, and long-lasting step towards Reconciliation.

What are Guardian Programs?

Indigenous Nations across Canada have been stewards and Guardians of their respective territories since time immemorial. It is a sacred cultural responsibility to care for the land, water and the species that inhabit them. 

Guardians (sometimes called Watchmen, or Rangers) are Indigenous people who monitor and protect the lands and waters on their territory." They are the “eyes and ears” on the ground, “asserting presence and authority, engaging with land and marine users, and observing and monitoring activity and ecosystem changes.” Although each program is unique in terms of its focus and the exact nature of the Guardians’ duties, some examples of the activities that Guardians carry out include:


10 Ecotrust Canada, Aboriginal Guardian and Watchmen Programs in Canada (1 October 2013) at p 2, online (pdf): Indigenous Guardians Toolkit <www.indigenousguardianstoolkit.ca/sites/default/files/Community%20Resource_Ecotrust%20Canada%20and%20North%20East%20Regional%20Chiefs%20Forum_Aboriginal%20Guardian%20and%20Watchmen%20Programs%20in%20Canada.pdf> (“Guardian Programs in Canada”). There are currently approximately 50 Guardians programs in Canada. The Indigenous Guardians Toolkit has a map of guardian program across Canada, showing approximately 50 programs, with approximately 25 of these in BC. “Indigenous Guardians Map,” online: Indigenous Guardians Toolkit <www.indigenousguardianstoolkit.ca/map>.

11 Inventory Project, supra note 2 p 8.

12 Guardian Programs in Canada, supra note 10 at p 2.

13 The following list is taken, in modified form, from Guardian Programs in Canada, ibid note 12 at p 2.
monitoring the activity of resource users (e.g., logging, mining, oil and gas, fishing, hunting, etc.);
compliance and enforcement of federal, provincial and sometimes Indigenous laws;
working with federal and provincial governments through management agreements to ensure coordinated and robust monitoring and enforcement throughout territories;
gathering data on the ecological health and wellbeing of ancestral traditional territories;
compiling and sharing data gathered in order to inform decision making in ancestral territories; and
community outreach and education to resource users, tourists and communities, regarding the protection of cultural and natural resources.

19. During training with the Coast Guard, the Da’naxda’xw Guardians were the first to find a dummy in the water that the coast guard had placed. The Guardians were tasked with trying to find the dummy by doing specific grid patterns in their area, as they would in a real emergency. (Photo contributed by Nanwakolas)
The significant and measurable benefits of Guardian programs have been thoroughly documented. They include:\(^\text{14}\)

- Building capacity for individuals and communities, by offering youth and other members meaningful jobs that allow them to stay in their communities.
- Offering community members educational opportunities and training connected to their own traditional values, worldviews, ways of learning, and ways of knowing.
- Healing through land-based learning and rejuvenating the connection to the land, particularly for youth.
- Strengthening Indigenous self-governance over lands, water, air and resource management.
- Monitoring environmental changes, using Western science and local and traditional knowledge.
- Identifying problems industrial projects have caused or may cause, in order to help prevent or mitigate environmental impacts.
- Facilitating intergenerational connection between Elders and youth, through Indigenous place-based programming.
- Revitalizing traditional governance capacity.
- Collecting information to help communities make informed decisions about developments in territories – and provide evidence to validate such decisions to other governments and interests.

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Establishing a framework for “free, prior and informed consent” within Indigenous territories.

Healing the land, air and water and creating healthier environments for people, animals, plants and other beings.

Advancing shared decision making and revenue/benefit sharing from resource development.

By safeguarding and managing food harvesting activities, guardians can give access to traditional and country foods—which provide healthy dietary choices for community members. These traditional foods can markedly improve community health outcomes, as has been amply documented.¹⁵

In short, Guardian programs “provide a meaningful framework for modern stewardship that builds on … traditional knowledge and [Indigenous peoples’] spiritual connection to the land.”¹⁶

¹⁵ This last enumerated benefit is from Inventory Project, supra note 2 at p 20. For example, note that extensive evidence was presented to the National Energy Board (NEB) hearings on the proposed Northern Gateway pipeline project hearings in Bella Bella regarding the health advantages of foods gathered from the wild. The NEB, summarizing submissions on this point, said “health risks from the loss of this food [i.e. traditional diet foods] … could result in nutrient deficiency … and a potential increased risk of chronic diseases such as diabetes.” Moreover, “[d]uring oral evidence Aboriginal groups expressed concerns about the high rate of diabetes in their communities. They said that rates of diabetes in their communities increased as people began eating more processed foods,” whereas “a diet of country foods, such as seafood, seaweed, fresh berries, herbs, and freshwater fish, has altered the course of the disease and improved their health” (National Energy Board, Considerations – Report of the Joint Panel for the Enbridge Northern Gateway Project, Volume 2 (Calgary: The Publications Office, National Energy Board, 2013) at p 309, online (pdf): <docs2.cer-rec.gc.ca/lit-en/lisapi.dll/fetch/2000/90464/90552/384192/620327/624909/2396699/A56136%2D5_NEB_%2D_Report_%2D_Northern_Gateway_%2D_Volume_2_Considerations_%2D_OH%2D004%2D2011.pdf?nodeid=2396478&vernum=-2>).

¹⁶ Discussion Paper, supra note 14 at p 8.
The benefits of Guardian programs to community wellbeing have been documented. For example, one study of the Coastal Guardian Watchmen concluded:

...Coastal First Nations have been working to improve community wellbeing by strengthening their connections to their cultures and territories, fostering strong identities, and asserting jurisdiction over their lands, resources, and communities. Guardian Watchmen contribute to (community wellbeing) by monitoring and protecting sites and resources that are of importance to community members and by facilitating opportunities for community members to become more connected to their cultural practices, identities, and territories.¹⁷

[Furthermore] ... Guardian Watchmen play a significant role in improving cultural wellbeing in many of these communities. By safeguarding cultural resources (culturally significant sites, traditional food sources, medicinal plants, traditional use areas, etc.), Guardian Watchmen help to ensure that members have access to these resources, and can continue to engage in associated cultural practices. Through their work with youth (e.g., mentorship and junior Guardian programs), Guardian Watchmen transfer Indigenous knowledge to younger generations, while inspiring them to become more interested and engaged in their culture. Guardian Watchmen also often map cultural sites (e.g., petroglyphs, historical village sites, place names), which at times involves bringing Elders out on trips so they can identify these sites. In such cases, Elders are able to reconnect with important sites and resources that they may not have as much access to as they once did, while Guardian Watchmen have opportunities to learn from the Elders and carry their teachings and knowledge forward into the community.¹⁸

Guardians programs create enormous, measurable benefits for the communities in which they are implemented – for example, communities have experienced crime reduction, increased capacity for self-determination, and increased respect from the non-Indigenous community, among a host of other benefits.¹⁹


¹⁸ Ibid note 17 at p 34 (emphasis in original).

The Cost/Benefit Ratio for the Community and Canadians in General

Indigenous Ranger Programs are instrumental in protecting Australia’s environment and heritage assets... The rangers conduct all manner of conservation, fire management and biosecurity roles to support our natural resources being managed in a sustainable way.

— Australian Minister of Indigenous Affairs Ken Wyatt, announcing a $700 million commitment to the Indigenous Rangers Program

Studies have quantified the benefits of guardian programs, and found extraordinarily positive return on investment with respect to money put into these programs. For

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example, with respect to the Indigenous Australian rangers program, “an investment of $35.2m from Government and arrange of third parties has generated social, economic, cultural and environmental outcomes with an adjusted value of $96.5m.”

Similarly, a report on the Lutsel K’e and Decho First Nations’ respective Guardians programs found that “for every $1 invested, approximately $2.5 of social, economic, cultural and environmental value has been created for stakeholders.”

Most impressively, a report by EPI EcoPlan International, Inc that studied the value of Coastal Guardian Watchmen in Canada found, at the low end, “a 10 to 1 return on investment from the Nation’s perspective” per year. On the high end, some Nations experienced “a 20 to 1 return on investment each year.”

The above amounts represent the ratio between financial inflows into a community’s Guardian program, and quantification of the benefits and losses to the community. Specifically, the EPI Report measured Guardian program benefits and losses to a community, under the following six categories (or “value dimensions”):

- Taking Care of Territory
- Governance Authority
- Community Wellbeing
- Cultural Wellbeing
- Community Capacity
- Economic Opportunity

For each category, the benefit or loss to a Nation with a guardian program is measured on a scale of 1-10. For example, under the “Taking Care of Territory” category, a “1” represents “[t]erritory is degraded and declining, Nation is helpless to protect it,” while a “10” represents that “[t]erritory is protected and prospering; resources are plentiful.”

The EPI Report found that the “largest changes were associated with Taking Care of Territory ... [r]epresentatives from several programs described moving from a one or a two to a seven or an eight on the 10-point scale.” Moreover, for both Community Wellbeing and Cultural Wellbeing, the results were again consistent in that all Nations reported experiencing positive changes in these areas as a result of their Guardian Watchmen programs. In fact, all participant Nations reported improvements in all categories.

Beyond the impressive benefits of Guardian programs to their communities, these programs have real value to other levels of government and various stakeholders. As the EPI Report emphasizes, “[t]he value proposition of Guardian Watchmen programs is the lower marginal

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22 SVA Australia Report, ibid note 21 at p 4. Of four programs studied in this report, return on investment varied from 1.5:1 on the low end and 3.4:1 on the high end (p 24).
23 SVA ILI Report, supra note 19 at p 5.
24 EPI Report, supra note 17 at p 51 (emphasis in original).
25 Ibid note 17 (emphasis in original).
26 Ibid note 17.
27 These value dimensions, or Nation values, were identified by the seven participant Nations as areas “across which Coastal First Nations have experienced benefits due to their Guardian Watchmen programs” (Ibid note 17 at p 42).
28 Ibid note 17.
29 Ibid note 17 at p 44 (emphasis in original).
30 Ibid note 17 at p 45 (emphasis in original).
31 Ibid note 17, Figure 17 at p 46.
cost of conducting government activities when they are completed by Guardian Watchmen." 32 Moreover, "[i]n addition to cost savings ... Guardian Watchmen programs bring personnel with extensive local expertise that can help fill gaps in government capacity."33

To the extent that Guardians enforce Indigenous laws and principles, Guardian programs can also save money thanks to increased regulatory compliance. As one Manitoba study noted: "[c]o-management ... arrangements may reduce the costs of enforcing regulations since compliance almost certainly will be greater when those to whom a regulation is directed are involved in making it."34

Guardian programs can be invaluable to general society as well. In Australia, the Indigenous Rangers routinely educate tourists about Aboriginal culture. That Ranger work helped

32 Ibid note 17 at p 58.
33 Ibid note 17 at p 59.
convince government to invest $650 million between 2015-2021 into the Indigenous Ranger Program – and to budget over $100 million dollars annually for the next seven years.  

Note that the Canadian federal government has recognized the value of Guardians. It recently committed $25 million towards an Indigenous Guardians Pilot Program.  

Indeed, the BC government has already recognized the value of guardians. A special government report on Guardians has already concluded:

\[...there is a high degree of support for the various Indigenous monitoring/liaison/guardian programs and initiatives across participating provincial agencies...\] there is a clear need for engagement between the provincial government, Indigenous communities, and other potential partners in the development and design of a collaborative, coordinated, cross-sector approach to an Indigenous monitoring/liaison/guardian program.\]

This new program should provide a formal structure, a clear strategy, a balanced set of objectives, secure funding and an appropriate delivery model focused on accountability.  

In short, as the BC government already acknowledges: “There is significant opportunity for enhancing the province’s engagement with Indigenous communities in the stewardship of natural resources.”

Indigenous groups recognize the value of Guardians. In light of the contributions that Guardian programs can make to the protection and restoration of their resources, governance authority, community well-being, education and training of their people, community capacity and economic opportunities, Indigenous groups broadly support Guardian programs.

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35 See supra note 8.
37 Provincial Report, supra note 9 at p 3.
38 Ibid note 9 at p 4.
39 Ibid note 9 at p 3.
The Assembly of First Nations passed a resolution in 2019 stating:

...that the Chiefs-in-Assembly ... fully support the concept of Indigenous Guardians and the need for a nationally-funded Indigenous Guardian network in Canada ... and direct the AFN to call on Canada, as well as the Provinces and territories, to support a national Guardians network through the creation of mechanisms that ensure First Nations have access and control over their lands.41

Further, the Indigenous Circle of Experts (ICE) has recommended that all governments (Indigenous, provincial, territorial and federal) “work together to support the development of on-the-land programs (e.g. guardian programs or similar community-based initiatives).”42

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The Moral and Legal Imperatives – Guardians Are Essential to Reconciliation

“True reconciliation must include Indigenous leadership in land and sea decision-making processes.”

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**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 (March 2018), recommendation 22 at p 65, online (pdf):** [Changing the Conversation](www.changingtheconversation.ca/sites/all/images/Biodiversity%20Library/WeRiseTogetherReport.pdf) (“We Rise Together”).

The Moral Imperative

With the recent unanimous passage of the *Declaration on the Rights of Indigenous Peoples* Act, British Columbia made history. BC became “the first province in Canada to enshrine the human rights of Indigenous peoples in law.” BC has an opportunity to make history once more, by becoming the first province to support a comprehensive province-wide Indigenous Guardian network – a Guardian Network Initiative.

As discussed elsewhere in this report, the establishment of a Guardian Network Initiative will be an important step towards long-promised Reconciliation.

Twenty-four years ago, the Royal Commission on Aboriginal Peoples released its landmark report. The Commission set out a vision for a renewed relationship between Indigenous and non-Indigenous peoples, based on mutual recognition, mutual respect, sharing and mutual responsibility. One key part of that vision was the Commission recommendation for:

- Establishment and strengthening of Aboriginal institutions for managing Aboriginal lands; and

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45 RCAP Report – Vol 5, supra note 5 at p 130.
• Urgent measures in education, training and work experience to prepare Aboriginal personnel to manage the lands.\textsuperscript{46}

Unfortunately, these and other recommendations made by the 1996 Commission have not been adequately addressed.

The Royal Commission canvassed the deep economic and social disparities between Indigenous and non-Indigenous peoples in Canada, and “demonstrated that the political, social and economic conditions facing Aboriginal people impose a cost of \$7.5 billion per year on them and on all Canadians.”\textsuperscript{47} Disturbingly, the Commission projected “the cost of the status quo” to rise to \$11 billion annually in the ensuing 20 years.\textsuperscript{48}

On the other hand, the Commission predicted that if its recommended fundamental changes in the circumstances of Aboriginal people were brought about, the costs of the status quo would be eliminated.\textsuperscript{49} It concluded that the result would “yield economic benefits that far exceed the amounts governments will spend to implement it.”\textsuperscript{50}

Unfortunately, the issues identified by the Commission in large part persist. Canada’s current Minister of Crown-Indigenous Relations, Carolyn Bennett has recently acknowledged:

\begin{quote}
Twenty years later we’re not even close to being done. There’s been some visible, concrete change, but too slowly.\textsuperscript{51}
\end{quote}

Indigenous people still see higher rates of unemployment,\textsuperscript{52} lower incomes,\textsuperscript{53} worse health,\textsuperscript{54} lower life expectancies,\textsuperscript{55} higher suicide rates (especially among youth and young adults),\textsuperscript{56} and continue to be massively overrepresented in the prison population.\textsuperscript{57}

\textsuperscript{46} Recommendation 2.5.13 in RCAP Report – Vol 5, \textit{ibid} note 5 at pp 186-187.
\textsuperscript{47} RCAP Report – Vol 5, \textit{ibid} note 5 at p 52.
\textsuperscript{48} \textit{Ibid} note 5.
\textsuperscript{49} \textit{Ibid} note 5.
\textsuperscript{50} \textit{Ibid} note 5.
The status quo was unacceptable in 1996, and it remains so today. For the good of all Canadians, and Indigenous people in particular, the government must act to fulfill the vision of the Royal Commission on Aboriginal People. A long-term collaboration between Canadian governments and Indigenous Guardians can be a quintessential embodiment of the Commission’s vision.

As discussed elsewhere in this report, a Guardians Network Initiative will establish and strengthen Indigenous institutions for land management, as the Commission recommended. At the same time, the Initiative will help address unemployment, education and training, income disparity, and poor health. Simultaneously, Guardians can help conserve and heal the lands and waters that are the legacy and lifeblood of Indigenous people.

Equally important, Guardian programs can accomplish those things while at the same time contributing to the wealth and well-being of the province as a whole. By doing this, Guardians can transform the unacceptable status quo decried by the Royal Commission. Guardians can advance the Commission’s envisioned new relationship between peoples – one based on mutual recognition, mutual respect, sharing and mutual responsibility.
The Relevance of the Truth and Reconciliation Commission (TRC)\textsuperscript{58}

British Columbia and Canada have both committed to implementing the 2015 TRC Calls to Action.\textsuperscript{59} In BC “...all provincial ministers have been tasked with finding ways to implement the calls to action.”\textsuperscript{60}

Among the 94 calls to action are those concerned with the educational and employment gaps between Indigenous and non-Indigenous peoples,\textsuperscript{61} and those concerned with the gap in health outcomes between Indigenous and non-Indigenous communities.\textsuperscript{62} As discussed elsewhere in this report, the Guardian Network Initiative is an important way to address these gaps.

\textsuperscript{58} The TRC was established as a result of the 2006 Indian Residential Schools Settlement Agreement (IRSSA) (between Canada, residential school survivors, the Assembly of First Nations and Inuit Representatives, and the Anglican, Presbyterian, United, and Roman Catholic Churches of Canada), with a mandate to acknowledge and promote awareness of Residential School experiences, impacts and consequences, and to produce a report including recommendations to the Government of Canada (see TRC Calls to Action, infra note 59). The TRC’s final report was completed in 2015 – See “Truth and Reconciliation Commission,” online: National Centre for Truth and Reconciliation <nctr.ca/reports2.php>. The governments of both British Columbia and Canada have committed to adopting and implementing the TRC Calls to Action (see “British Columbia: Building relationships with Indigenous peoples,” online: Government of British Columbia <www2.gov.bc.ca/gov/content/governments/indigenous-people/new-relationship> and “Statement by Prime Minister on release of the Final Report of the Truth and Reconciliation Commission” (15 December 2015), online: Justin Trudeau, Prime Minister of Canada <pm.gc.ca/en/news/statements/2015/12/15/statement-prime-minister-release-final-report-truth-and-reconciliation>.

\textsuperscript{59} Truth and Reconciliation Commission of Canada: Calls to Action (Winnipeg: Truth and Reconciliation Commission of Canada, 2015), online (pdf): <nctr.ca/assets/reports/Calls_to_Action_English2.pdf> (“TRC Calls to Action”).


\textsuperscript{61} TRC Calls to Action, supra note 59, nos. 6-12, under the heading “Education” at pp 1-2, and specifically call to action 8.

\textsuperscript{62} TRC Calls to Action, \textit{ibid} note 59, nos. 18-24, under the heading “Health” at pp 2-3, and specifically call to action 19.
The Truth and Reconciliation Commission defines reconciliation as “an ongoing process of establishing and maintaining respectful relationships” – that must include “the revitalization of Indigenous law and legal traditions.”

Guardian programs do exactly this.

As a major study of Guardian-type programs has pointed out, Indigenous communities have been monitoring and managing their lands and waters for millennia. Stewardship programs that focus “on getting people out of the office and into the field – for instance, field-based research, sampling, monitoring, observation, enforcement, outreach, education, training, or community engagement” can play an important role in revitalizing Indigenous law and culture. The study emphasized:

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Many stewardship programs involve conducting interviews with elders, land users, community members, document oral histories, and mapping traditional use and occupancy information. The collection of this information is a powerful affirmation of the important role of culture and local knowledge in shaping stewardship priorities, developing management plans and strategies, and responding to development referrals. Land users are valued for their acquired knowledge and skills, communities benefit from the sharing of information, and carefully documented knowledge becomes a powerful tool for planning, management, and resource negotiations. One interviewee powerfully expressed the link between culture and stewardship this way: “our resilience and cultural survival as people depends on the resilience of our land and resources.” Or in another’s words: “if you bring back the salmon, you bring back the culture.”

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64 Ibid note 63 at pp 11-12.
65 Inventory Project, supra note 2 at pp 1 and 19.
66 Inventory Project, supra note 2 at p 19 (emphasis added).
The Legal Imperative

Beyond the obvious moral imperative for change – and beyond the numerous economic, social and environmental advantages that a Guardian Network Initiative offers both Indigenous and non-Indigenous communities – a Guardian Initiative will help Canadian governments meet a number of legal and Constitutional obligations.

The BC Government’s Draft Principles that Guide the Province of British Columbia’s Relationship with Indigenous Peoples explicitly recognizes relevant legal and constitutional obligations:


Thus, BC has recognized it must act honourably and respect the deep relationship that Indigenous people throughout BC have with their lands and waters. In particular, Premier

29. “A gathering of understanding. Members of the the Truth and Reconciliation Commission (TRC), church leaders and Aboriginal organizations celebrated the opening of the sixth national TRC event in Vancouver.” (Photo by Province of British Columbia, Creative Commons Licence)
Horgan has acknowledged that BC “is unique in Canada because of unceded territory.”68 Most of BC has not been covered by treaty. In this context, it is simply not open to the provincial government to “unilaterally exploit a claimed resource”69 for the vast expanse of the province, which is subject to land claims. BC must act honourably in all its dealings with Indigenous people, and particularly with respect to resources and lands subject to Aboriginal rights and title claims that have yet to be proven in court.

The Supreme Court of Canada has been firm that, “[i]n all its dealings with Aboriginal peoples ... the Crown must act honourably. Nothing less is required if we are to achieve ‘the reconciliation of the pre-existence of aboriginal societies with the sovereignty of the Crown’.”70 Indeed, the honour of the Crown is a constitutional principle, the importance of which has been recognized since at least the Royal Proclamation of 1763.71 This means:

... [t]he Crown, acting honourably, cannot cavalierly run roughshod over Aboriginal interest where claims affecting these interests are being seriously pursued in the process of treaty negotiation and proof. It must respect these potential, but unproven, interests. ... To unilaterally exploit a claimed resource during the process of proving and resolving the Aboriginal claim to that resource, may be to deprive the Aboriginal claimants of some or all of the benefit of the resource. That is not honourable.72

The Draft Principles that Guide the Province of British Columbia’s Relationship with Indigenous Peoples also acknowledge:

Indigenous peoples have a unique connection to and constitutionally protected interest in their lands, including decision making, governance, jurisdiction, legal traditions, and fiscal traditions associated with those lands.73

As demonstrated throughout this report, the Guardian Network Initiative is essential to – and will further – Indigenous “decision-making, governance, jurisdiction, legal traditions ... [in their] lands.”

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69 Haida Nation v British Columbia (Minister of Forests), 2004 SCC 73, [2004] 3 SCR 511 (“Haida”) at para 27
70 Haida, ibid at para 17.
72 Haida, supra note 69 at para 27.
73 Draft Principles, supra note 67, Draft Principle 4 at p 3. The Supreme Court of Canada (SCC) has recognized the special relationship that Indigenous people have with the land. As the Court has stated: “To ignore [Indigenous peoples’] relationship to the land is to adopt the view that prior to the assertion of Crown sovereignty Canada was not occupied” – an approach that is “clearly unacceptable” (R v Marshall; R v Bernard, 2005 SCC 43, [2005] 2 SCR 220 at para 134).
The Guardian Network Initiative offers a remarkable win-win opportunity for government to meet its legal obligations to support and strengthen the relationship between Indigenous peoples and their lands and waters. This will move BC forward on the path to reconciling the Crown’s assertion of sovereignty with Indigenous prior occupation of most of BC.
The Declaration on the Rights of Indigenous Peoples Act supports the necessity of proceeding with Reconciliation measures such as the Guardian Network Initiative. The Act specifically incorporates the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), and one of the Act’s statutory purposes is “to affirm the application of the Declaration to the laws of British Columbia.”

1. It is important to note that Article 29 of UNDRIP specifically states that states shall:

   …establish and implement assistance programmes for indigenous peoples for [the conservation and protection of the environment and the productive capacity of their lands or territories and resources.]

The Guardian Network Initiative is precisely such a program.

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74 Supra note 4.
75 Article 29 – 1 of UNDRIP, as set out in the Schedule to DRIPA, supra note 4 (the exact wording is, “[s]tates shall establish and implement assistance programmes …” (emphasis added)).
2. Article 32 of UNDRIP, as specifically incorporated in the Declaration on the Rights of Indigenous Peoples Act, states:

Indigenous peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and other resources;\(^{76}\)

As discussed elsewhere in this report, one of the key functions of Guardians is to gather and provide the information base that allows Indigenous groups to develop meaningful land use plans and marine use plans (i.e., “strategies”). It is a common experience of Indigenous communities to feel “overwhelmed by the sheer number of pressures, development fronts, and referrals they are being inundated with.”\(^{77}\) Strategic plans will make the referral process more orderly, rational and consistent with long-term Indigenous interests – documenting where development is acceptable and where it should not take place.

3. Article 32 of UNDRIP, as incorporated in the Declaration on the Rights of Indigenous Peoples Act also specifically states:

States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources\(^{78}\)...

States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.\(^{79}\)

The Act obliges the provincial government, “[i]n consultation and cooperation with the Indigenous peoples in British Columbia,” to “take all measures necessary to ensure the laws of British Columbia are consistent with [UNDRIP].”\(^{80}\) Since UNDRIP gives Indigenous peoples the right to free, prior and informed consent (FPIC) with respect to industrial projects proposed on their territories, the government is clearly obligated by the Act to make all BC laws consistent with this right. The government must act to ensure that all Indigenous communities have the capacity to meaningfully give or withhold informed consent.

Guardians are an essential means for Nations to gather the Traditional Ecological Knowledge and scientific information that is an essential prerequisite for them to be

\(^{76}\) Article 32 – 1 of UNDRIP, as set out in the Schedule to DRIPA, ibid note 4.
\(^{77}\) Inventory Project, supra note 2 at p 18.
\(^{78}\) Article 32 – 2 of UNDRIP, as set out in the Schedule to DRIPA, supra note 4.
\(^{79}\) Article 32 – 3 of UNDRIP, as set out in the Schedule to DRIPA, ibid note 4.
\(^{80}\) DRIPA, ibid note 4, s 3.
able to provide truly “informed” consent. A Nation cannot give true consent without adequate information. And in many cases there will simply not be information without a viable Guardian program. For example, current baseline datasets are often incomplete or there is insufficient regional information to do an adequate cumulative effects assessment. Guardian programs can help fill that knowledge gap.

4. The Act affirms the right of Indigenous peoples to participate in decision making that affects their rights. Article 18 of UNDRIP, as incorporated in the Act, states that Indigenous peoples have the right:

...to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions.

Recognition of the right to develop Indigenous decision-making institutions, and to participate in making decisions that affect Indigenous rights is an important first step. The Guardian Network Initiative will enable and empower Nations to meaningfully participate in decision making about their lands and waters. Indeed, the government has already signaled that it understands its obligations in this regard, by acknowledging:

We agree to work with Indigenous peoples to jointly design, construct, and implement principled, pragmatic and organized approaches informed by the Supreme Court of Canada’s Tsilhqot’in decision and other established law, ... UNDRIP ... and the ... TRC Calls to Action.

5. Section 4 of the Declaration on the Rights of Indigenous Peoples Act states:

The government must prepare and implement an action plan to achieve the objectives of the Declaration.

As demonstrated above, and elsewhere in this report, a Guardian Network Initiative must be part of any such action plan.

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81 Both at the time a project is proposed and throughout the life of the project.
82 See s 2(a) of DRIPA, supra note 4: “[t]he purposes of this Act [include] ... to affirm the application of [UNDRIP] to the laws of British Columbia.” Since UNDRIP affirms the right of Indigenous peoples to participate in decision making that affects their rights, DRIPA’s purpose, in part, is to affirm the application of this right to the laws of BC.
83 Article 18 of UNDRIP, as set out in the Schedule to DRIPA, ibid note 4.
84 Draft Principles, supra note 67 at p 1.
It’s about Indigenous rights.

The Declaration on the Rights of Indigenous Peoples Act

B.C. will be Canada’s first province to put the UN Declaration on the Rights of Indigenous Peoples into law.

B.C.’s new law recognizes and respects the rights of Indigenous peoples. It will ensure Indigenous peoples are a part of the decisions that affect them, their families, and their territories.

Indigenous peoples and the B.C. government are building a better future, together — that means good jobs and opportunities that benefit all of us, while protecting the land, air, and water.

We’ll continue to work together to build a more just future for everyone.

DECLARATION.GOV.BC.CA
[It should be pointed out that the points above about obligations under UNDRIP apply to the Government of Canada as well.\textsuperscript{85} Prime Minister Trudeau has announced to the UN General Assembly that Canada is “a full supporter of [UNDRIP], without qualification,” adding that “[w]e know that the world expects Canada to strictly adhere to international human rights standards – including [UNDRIP] – and that is what we expect of ourselves, too.”\textsuperscript{86}

The mandate letters for the Minister of Justice and Attorney General of Canada, and the Minister of Crown-Indigenous Relations, respectively, include instructions to “introduce … legislation to implement [UNDRIP] by the end of 2020.”\textsuperscript{87}

In closing this discussion on legal and moral imperatives, it should be added that the BC Government’s Draft Principles already explicitly recognize the:

\begin{quote}
...importance of strong Indigenous governments in achieving political, social, economic, and cultural development and improved quality of life.\textsuperscript{88}
\end{quote}

As demonstrated throughout this report, the Guardian Network Initiative will provide a remarkable opportunity to “achieve political, social, economic and cultural development and improved quality of life.” As this report demonstrates, Guardian programs help ‘achieve’ each and every one of those desired ends. It would be a dramatic and hopeful sign if governments act decisively to collaborate on a Guardians Network Initiative.

\textsuperscript{85} A leaked memo letter from the Canadian Association of Petroleum Producers (CAPP) urging the federal government to suspend environmental laws and regulations, and also urging a delay on introducing federal legislation to implement UNDRIP in light of the COVID-19 pandemic, reveals the pressure that powerful industry interests are putting on government. CAPP is “Canada’s largest oil and gas lobby;” the federal government, and all governments, must follow through with their commitments and implement UNDRIP without delay. Fortunately, the prime minister agrees: “[j]ust because we’re in one crisis right now doesn’t mean we can forget about the other one – the climate crisis that we are also facing as a world and as a country” (both quotes are from Mike De Souza, “Trudeau offers new money to oil patch, but rejects calls to suspend climate action over COVID-19” (17 April 2020 (updated 18 April)), online: Global News <globalnews.ca/news/6830754/capp-justin-trudeau-laws-coronavirus/>).

\textsuperscript{86} “Prime Minister Justin Trudeau’s Address to the 72th Session of the United Nations General Assembly” (New York: 21 September 2017), online: Justin Trudeau, Prime Minister of Canada <pm.gc.ca/en/news/speeches/2017/09/21/prime-minister-justin-trudeaus-address-72th-session-united-nations-general>.


\textsuperscript{88} Draft Principles, supra note 67 at p 6.
The Stewardship Imperative: The Central Role of Traditional Knowledge

“The knowledge of elders is much like the trails of caribou. Etched into the memory of the earth by the passage of countless preceding generations, they point the way for future generations to follow.

— Selawik Elder Daniel Sipahk Foster 89

As indigenous people, way before the United States, or Canada or European invasions, we had our own knowledge systems. A lot of them were very scientific in terms of how they related to issues of the environment, sustainability, resilience and climate change.

– Professor Kyle Whyte of the Potawatomi Nation

We’re . . . going to be paying a lot of attention to how we can work together and tap into the wisdom and knowledge of tribal communities in managing and conserving land in the face of what is a profound global challenge.

– President Barack Obama

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Indigenous, local and traditional knowledge systems and practices... are a major resource for adapting to climate change... 

— UN Intergovernmental Panel on Climate Change

[Each country shall] respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application... 

— UN Convention on Biological Diversity, Article 8 (j)

In a world enduring both climate change and critical loss of biological diversity, the Traditional Ecological Knowledge used by Indigenous nations to live in harmony with nature is invaluable. Canada’s conservation efforts will be enhanced by the integration of Traditional Knowledge into land and water stewardship. And Guardians can play a key role in mobilizing Traditional Knowledge.


94 The current loss of biodiversity has been described as “Earth’s ongoing sixth mass extinction event.” See Gerardo Ceballos, Paul R Ehrlich, and Rodolfo Dirzo, Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines (25 July 2017) 114:30 PNAS E6089.

95 Revitalization of Traditional Knowledge often involves a fundamental shift in worldview, to an ecological view that recognizes the interconnectedness of all living things and people’s reciprocal relationship with nature. In recognizing the difference between Eurocentric and Indigenous Traditional Knowledge, we must be careful to not over-generalize. It is important to recognize the vast diversity of Indigenous communities, and the concomitant diversity of ways of knowing within each community. Nonetheless, there are significant commonalities among different Indigenous worldviews. For example, “...many indigenous and local communities tend [to] have a reciprocal relationship with nature, rather than viewing nature as existing to serve humans” (Sneed Article, infra note 108). Similarly, the fundamental truths of BC’s Coastal First Nations: “... reflect a common perspective or worldview among members of many First Nations across British Columbia and beyond. In fact, they characterize the worldviews of many peoples the world over who have depended for multiple generations ... directly upon the resources of their own regions to provide them with sustenance” (Staying the Course, infra note 103 at p VII).

A key insight revealed by the Traditional Knowledge of many Indigenous communities is that of the interconnectedness of all living things. As an illustration, the Lakota phrase, Mitakuye Oyasin, which is “one expression of what it means to be a human being” has been translated as “all my relations” (Jeff Lambe, “Indigenous Education, Mainstream Education, and Native Studies” (2003) 27:1/2 American Indian Quarterly 308 at p 309, online: IJSTOR <www.jstor.org/stable/4138868?seq=1#metadata_info_tab_contents>. Lamb describes his understanding of the phrase to mean “the burning desire of a person to come to know the creation or their place in creation”). Thomas King said of this phrase: “It ... reminds us of the ... web of kinship to animals, to the birds, to the fish, to the plants ... More than that, ‘all my relations’ is an encouragement for us to accept the responsibilities we have within the universal family by living our lives in a harmonious and moral manner” (from an excerpt of Thomas King, All My Relations (Toronto: McClelland & Stewart, Inc, 1990), in an excerpt of Nelson
The Government of Canada has long acknowledged the value of Traditional Knowledge:

There is recognition, both in Canada and abroad, that Aboriginal peoples have unique knowledge about the local environment, how it functions, and its characteristic ecological relationships. This Aboriginal traditional knowledge ... is recognized as an important part of project planning, resource management, and environmental assessment.  

The BC Government has formally acknowledged the fundamental importance of Indigenous knowledge and stewardship practices for achieving conservation goals. In 2018, government officially agreed to this Guiding Principle of Reconciliation:

There is a shared interest in environmentally sustainable resource development, informed by science and First Nations traditional knowledge and wisdom. [BC and First Nations] can better steward the land if we commit to better understand and implement the most progressive and successful aspects of our respective perspectives, approaches, and practices.

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As another illustration, Mi’kmaw Elder Albert Marshall, who has developed the concept of Two-Eyed Seeing, has spoken about the Mi’kmaq understanding of Netukulimk (“sustaining ourselves”), which: “...takes you into a place where you are very conscious of how the human two-leggeds are interdependent and interconnective with the natural world ...” (Marshall, Marshall & Bartlett, infra note 112 at p 30).

To put a similar idea another way: “[o]ur health as a people and our society is intricately tied to the health of the land and waters” (Staying the Course, infra note 103 at p VII).


The current federal Impact Assessment Act, SC 2019 c 28 s 1, has as one of its purposes, “to ensure that an impact assessment takes into account scientific information, Indigenous knowledge and community knowledge” (s 6(1)(j)), and contains a number of provisions requiring impact assessments to take into account Indigenous knowledge; in particular, s 221(1)(g) requires impact assessments to take into account “Indigenous knowledge provided with respect to the designated project.” The federal Ocean’s Act, SC 1996, c 31, also recognizes “traditional ecological knowledge” at s 42(j), as does the Canada National Marine Conservation Areas Act, SC 2002, c 18, most notably in the preamble, which says that “Parliament wishes to affirm the need to ... consider traditional ecological knowledge in the planning and management of marine conservation areas.”

British Columbia followed up with a new *Environmental Assessment Act* provision that stipulates that officials:

> ...use the best available science, Indigenous knowledge and local knowledge in decision making under the Act.\(^98\)

As discussed below, Guardians know their territories intimately, which makes them effective monitors of local resource uses. Just as important, Guardians can play a key role in ensuring that traditional knowledge is brought to bear in a broad spectrum of land and resource decision making. The mobilization of traditional knowledge will benefit Indigenous communities – but will also benefit all of society.\(^99\)

The fact is that “adaptive environmental management” is essential to conservation – and researchers have found that “Indigenous ecological knowledge is an essential component of adaptive environmental management.”\(^100\) Indigenous societies have monitored and managed their lands and waters for millennia, acting as Guardians, accumulating, applying, and passing on Traditional Knowledge.\(^101\)
Indeed, as Dr. Thom Alcoze has said:

...the habitats or the environments of North America was a managed landscape at the time of Columbus ... even though the Europeans didn’t recognize it as a landscape that was managed, they assumed this was just Eden.102

Athalis, Frank Brown and Kaxkina, Y. Kathy Brown of the Heiltsuk First Nation have explained the importance of Traditional Knowledge to Coastal First Nations as follows:

[Coastal Firsts Nations'] fundamental truths ... are what we know to be true about the forces and cycles of nature. These truths have guided and sustained us as Heiltsuk, Kwakw̓aq̓wakw and Haida people in our coastal homelands since time immemorial.103

Around the world, western scientists increasingly appreciate the wisdom of Indigenous Traditional Knowledge and stewardship – a profound wisdom that has accrued over centuries of relationship with local lands and waters, plants and animals. For example, scientists cite the Papua New Guinea Indigenous sentinels who have long monitored and protected key species: “[The sentinels]...know when a resource or species [becomes] scarce or degraded, and ... they typically take action by not collecting that resource or species until it recovered.”104 Similarly, scientists cite the success of Indigenous communities in Fiji who dramatically restored depleted clam fisheries by simply reviving “a rich tradition of village management of ocean resources...[of] long practiced traditional methods of preserving their valuable food sources, such as imposing seasonal bans and temporary no-take areas.”105

Indeed, a study comparing Canada, Brazil and Australia concluded that: “Curtailing Indigenous management involving fire, forestry, fishing, or hunting practices can cause declines in species diversity and ecosystem productivity.”106

Indeed, the landmark 2019 UN Global Assessment Report on Biodiversity has concluded that the “unique knowledge” that Indigenous peoples possess helps explain why:

[n]ature is generally declining less rapidly in indigenous peoples’ land than in other lands.\(^{107}\)

\(^{107}\) Sandra Diaz et al, Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (Bonn, Germany: IPBES secretariat, 2019) at p 14, online (pdf): Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) <ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf> (“2019 IPBES Assessment”). Note that the IPBES is an independent intergovernmental body comprising over 130 member Governments. Established by Governments in 2012, IPBES provides policymakers with objective scientific assessments about the state of knowledge regarding the planet’s biodiversity, ecosystems and the contributions they make to people, as well as options and actions to protect and sustainably use these vital natural assets. See also “Media Release: Nature’s Dangerous Decline ‘Unprecedented’; Species Extinction Rates ‘Accelerating’,” online: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Service <ipbes.net/news/Media-Release-Global-Assessment>. It is important to note that Indigenous people manage or have tenure rights over about 40% of the world’s terrestrial protected areas and remaining intact systems, or over a quarter of the earth’s land surface: Stephen T Garnett et al, “A spatial overview of the global importance of Indigenous lands for conservation” (16 July 2018) 1 Nature Sustainability 369-374, online: Nature <doi.org/10.1038/s41893-018-0100-6>.

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35. Ni Hat Ni Dene Rangers monitoring caribou. (Photo courtesy of Junior Monitors Denecho Catholique and Chase Lockhart, and Senior Monitors Jason Michel and Joseph Catholique)
Scientific American hailed the UN Assessment Report for documenting the crucial importance of Indigenous traditional knowledge and stewardship:

Its authors and other conservation experts say the world should not only draw lessons from [Indigenous peoples’]... environmental stewardship but that scientists and policy makers need to support and partner with them in order to stem the tide of biodiversity loss... Indigenous and local communities tend to succeed at conservation for a number of reasons, say experts ... These communities have long histories with their land, which have provided sustenance in a very direct and intimate way.\(^\text{108}\)

One of the lead authors of the UN assessment, Rutgers University Professor Pamela McElwee, elaborated:

On average, [Indigenous peoples] are doing a better job of managing natural resources and environmental hazards like species decline and pollution...This is a watershed moment in acknowledging that indigenous and local communities play really important roles in maintaining and managing biodiversity and landscapes that the rest of us can learn from.\(^\text{109}\)

As discussed more fully in “Traditional Practices” below, BC Nations have long used traditional knowledge and practices to conserve resources – for example, through careful monitoring and management of fish and wildlife populations, sophisticated traditional burning regimes, cultivation of clam gardens, careful management of herring spawn on kelp fisheries, and other stewardship practices. The wisdom of those practices is now widely acknowledged. The Government of British Columbia is now encouraging traditional forest burning to encourage forest resilience and prevent wildfires; traditional clam gardens are creating bumper crops for numerous communities; and many western fisheries experts acknowledge the superior wisdom of the traditional spawn on kelp fishery.\(^\text{110}\)

Guardians programs provide an opportunity for Indigenous communities to continue the work they have done for generations.\(^\text{111}\) Guardians can monitor and manage their own lands...


\(^\text{109}\) As quoted in Sneed Article, ibid note 108.

\(^\text{110}\) See “Traditional Practices” below.

\(^\text{111}\) Indigenous monitoring and management is longstanding. The Columbia River Inter-Tribal Fish Commission (CRITFC) describes it well: “[s]ince time immemorial, the tribes of the Columbia Basin have enjoyed and exercised the right to harvest fish in their homelands. They managed this resource, along with the other natural resources upon which they depended, using traditional wisdom and knowledge passed down for generations” (“The Founding of CRITFC,” online: CRITFC <www.critfc.org/about-us/critfc-founding/>).
and waters, using Traditional Knowledge and practice — and now integrate that knowledge with the best of Western scientific techniques, in order to keep their territories healthy.112

As discussed below, this has the potential to dramatically enhance the conservation efforts of Canada and British Columbia.

It is significant to note that the Government of Canada’s Sixth National Report to the Convention on Biological Diversity specifically highlighted Indigenous Guardian Programs when reporting on Canada’s progress towards meeting its National Biodiversity Targets — including the target of ensuring that Traditional Knowledge informs biodiversity conservation and management decisions.114

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112 The idea of using the best of both Traditional and Western knowledge to maximize the benefits of both is called Two-Eyed Seeing; see Albert Marshall with Murdena Marshall and Cheryl Bartlett, Ta’nteio’lit’k – Mi’kmaq Knowledge + Two-Eyed Seeing (Presentation at the Time and a Place Conference: Environmental Histories, Environmental Futures, and Prince Edward Island: 13-18 June 2010), online (ppt): Institute for Integrative Science & Health <www.integrativescience.ca/uploads/files/2010June-Marshall-Bartlett-Integrative-Science-Two-Eyed-Seeing-environment-Mi’kmaq.pdf> (“Marshall, Marshall & Bartlett”). As set out in that document, the idea of Two-Eyed Seeing is “to see from one eye with the best in our Indigenous ways of knowing, and from the other eye with the best in the Western (or mainstream) ways of knowing ... and learn to use both these eyes together, for the benefit of all” (p 35, ellipses in original). Virtually all Guardians programs feature some combination of Traditional and Western knowledge. Coastal First Nations for instance, “are bringing together ancient wisdom with the very best in modern science to plan for a healthy ocean future” (“Traditional Knowledge,” online: Coastal First Nations – Great Bear Initiative <coastalfirstnations.ca/our-sea/marine-planning-a-first-nations-approach/traditional-knowledge/>).


114 Sixth National Report, ibid note 113. The two targets have to do with traditional practices and traditional knowledge, and are target 12 (“by 2020, customary use by Aboriginal peoples of biological resources is maintained, compatible with their conservation and sustainable use”) and target 15 (“by 2020, Aboriginal traditional knowledge is respected and promoted and, where made available by Aboriginal peoples, regularly, meaningfully and effectively informing biodiversity conservation and management decision-making”). Note that the Aichi Biodiversity Targets, adopted by a conference of the parties to the CBD in 2010, further highlight the importance of Traditional Knowledge as it relates to biodiversity. (See United Nations Environment Programme (UNEP) Conference of the Parties (COP) to the UN Convention on Biological Diversity (CBD), Decision Adopted by the Conference of the Parties to the Convention on Biological Diversity at its Tenth Meeting (2010), online (doc): Convention on Biological Diversity <www.cbd.int/doc/decisions/cop-10/cop-10-dec-02-en.doc>. For a user-friendly summary of the targets see “Aichi Biodiversity Targets,” online: Convention on Biological Diversity <www.cbd.int/sp/targets/>. (“Aichi Targets”)). In particular, Target 18 says: “[b]y 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected ... and fully integrated and reflected in the implementation of the [CBD] with the full and effective participation of indigenous and local communities...” Target 14 is also relevant: “[b]y 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.”)
But Guardian programs can not only help facilitate Traditional Knowledge to meet conservation objectives. Just as important, Guardians programs are an important way to revitalize Indigenous cultures themselves – to ensure that the vital knowledge carried by elders endures. The UN Global Assessment Report on Biodiversity has warned that “[Indigenous and local] knowledge of how to manage [nature]” is “declining.”115 One of the key roles that Guardians can play is to enhance the intergenerational transfer of knowledge.

For example,116 the Dehcho K’éhodi (“Taking Care of the Dehcho”) program of the Dehcho First Nations, which includes a Guardians program, has as one of its three principles:

115 2019 IPBES Assessment, supra note 107 at p 14.
116 The examples in the body of this paper are but a few of many. Another striking example, albeit not from a Guardians program per se, comes from the Unama’ki Institute of Natural Resources (UINR), which represents “Cape Breton’s Mi’kmaq voice on natural resources and environmental concerns” and does work with Aboriginal Fisheries Strategy (AFS) Guardians in the five Unama’ki Mi’kmaq communities. UINR “develops projects blending Mi’kmaq knowledge with scientific knowledge, bringing the information back to the community. For instance, UINR’s first stewardship report on lobster was rewritten in accessible language and illustrated to engage the community in the findings and recommendations. UINR’s eel study resulted not only in new knowledge being shared and generated, but a children’s book to share with young people in the community. UINR’s moose management project has since published another children’s book and traditional knowledge booklet” (Inventory Project, supra note 2 at pp 95-96).
...to enable youth-elder mentorships, so future generations of Dene can learn their culture and how to be on the land.117

Similarly, one of the key purposes of the Metlakatla Guardian Watchmen program is to:

...[d]evelop mentorship relationships between elders and young people.118

A study of Guardian programs in Canada’s North concluded that Guardians who “transfer knowledge onto the younger generations [feel] pride ... from helping others connect with their culture and keep the land and water healthy.” This feeling “is linked to the development of [Guardians’] cultural identity, which help[s] them better understand themselves, their culture, and their place in the world.”119

As discussed under “Benefits of Guardian Programs” above, such inter-generational transfer of Traditional Knowledge will have positive community, cultural and health benefits.

118 Guardian Programs in Canada,” supra note 10 at p 8.
119 SVA ILI Report, supra note 19 at p 16.
Enhancing Guardians Programs: Lessons from Canada and Around the World

Guardian programs are obviously a great success story. From lessons learned in other jurisdictions, what can the governments of British Columbia and Canada do to enhance Guardian programs?

[Note: In the section below we propose specific enhancements of funding and mandate for Guardian programs. In calling for dedicated funding and enhanced mandate for Guardians, it is important to keep in mind that Indigenous communities are all different – and have varying levels of capacity to implement Guardians programs.

Some communities will have capacity to operate Guardian programs with expanded mandates (e.g., to autonomously enforce the law and integrate sophisticated baseline data into land/water use planning), while Nations with less capacity may choose to operate more
limited enforcement by "observing, reporting and recording" violations and not integrate baseline information into strategic plans until they develop more capacity.

As one commentator has noted, “It can be challenging for one community to have capacity on its own to set up a well-functioning Guardian program, to train people in both traditional and Western science, and to ensure funding and qualified staff that sustain the program over time.”

The bottom line is that support for Guardians must meet each community on its own terms. Programs must be tailored. “One size fits all” is not appropriate. A tiered approach is needed, which differentiates between communities with low, medium, and high stewardship capacity – and allows communities to evolve and develop increased capacity over time.

120 Discussion Paper, supra note 14 at p 11.
Recommendation: “Early in the process of planning for self-government agreements, whether in treaties or other agreements, provisions be drafted to:

a) recognize education and training as a vital component in the transition to Aboriginal government and implement these activities well before self-government takes effect; and

b) include provisions for the transfer of resources to support the design, development and implementation of education and training strategies.”

– Report of the Royal Commission on Aboriginal Peoples121

An effective Guardian Network Initiative will need to ensure that Guardians receive relevant training and education. Such education and training can ensure that Guardians do their jobs effectively, and that the goals of the GNI are met. It can also ensure that the long-term

121 Recommendation 2.3.36, RCAP Report – Vol 5, supra note 5 at p 157
capacity of individuals and communities is significantly enhanced. It can provide skills transferable to other jobs.\textsuperscript{122}

Guardian work has been found to increase skills, confidence, income, and the health and wellbeing of those that do it.\textsuperscript{123} There are numerous examples of Guardian programs providing education and training in the community, building both individual and community capacity:

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{image.jpg}
\caption{Kelp Monitoring (Photo courtesy of Hakai Institute)}
\end{figure}

\textbf{Coastal First Nations (CFN)} have successfully implemented comprehensive training programs for their guardians. CFN, through the Coastal Stewardship Network, offers training and professional development courses that emphasize the importance of culture and learning in the field, and encourage one-on-one coaching and follow-up trainings.\textsuperscript{124} This regional Network allows CFN members’ Guardian programs to support and bolster each other’s training and operational efforts.

\textsuperscript{122} Indeed, as powerfully illustrated by the success of the Coastal Stewardship Network, largescale networks such as the proposed GNI present “the obvious opportunity to build in economies of scale in the planning and delivery of [Guardian] training and education programs” (Discussion Paper, supra note 14 at p 11).

\textsuperscript{123} SVA ILI Report, supra note 19 at p 15. The SVA ILI Report studied two guardian programs of the Dene people; however, SVA has studied ranger programs in Australia with similar results – see SVA Australia Report supra note 21 at p 48.

Furthermore, CFN has established a University partnership to implement further training courses that combine traditional knowledge with technical skills. More than 50 students have completed the Stewardship Technicians Training Program (STTP), which CFN ran in collaboration with Vancouver Island University.\footnote{Ibid note 124.}

In 2011 the University of Victoria Environmental Law Centre collaborated with the Coastal Guardian Watchmen Network to produce Environment Laws: A Field Guide,\footnote{Environmental Laws – A Field Guide for BC’s North and Central Coast and Haida Gwaii (May 2011), online: <www.elc.uvic.ca/publications/environmental-laws-a-field-guide-for-bc%25C2%2592s-north-and-central-coast-and-haida-gwaii/>.} which summarizes the plethora of resource and environmental laws applicable to the coast. The Guide has been used for Guardian training sessions, and has been a useful field guide for Guardians overseeing activities in their territory. [Note: The Guide needs to be updated, and other guides need to be developed for other parts of BC and Canada].

The Innu Nation collaborates with the Gorsebrook Research Institute at Saint Mary’s University to run the Environmental Guardians Program – which recognizes “the importance of both the longstanding and substantial body of knowledge of the land held by the Innu, and the need for the Guardians to develop competency within western scientific and technical disciplines concerned with environmental protection, management, and resource use.”\footnote{Gorsebrook Research Institute, “Innu Nation Guardian Program,” online: Saint Mary’s University <smu.ca/research/innu-guardian-program.html>.}

Indigenous stewardship leaders from across Canada met in Squamish, BC, in 2014, convened by Nature United (formerly TNC Canada), Tides Canada and the Indigenous Leadership Initiative. Based on the direction provided by meeting participants, Nature United initiated production of the Indigenous Guardians Toolkit – which provides guidance on how to set up and operate a Guardians program, from operating boats to monitoring water quality.\footnote{“About the Toolkit,” online: Indigenous Guardians Toolkit <www.indigenousguardianstitoolkit.ca/about>.}

The BC government acknowledged this work, stating: “Indigenous communities often work with other communities to share ideas and approaches – investing and making use of the Coastal [Stewardship] Network and the Indigenous Guardians Toolkit.”\footnote{Provincial Report, supra note 9 at p 14.} Networks such as the Coastal Stewardship Network have numerous benefits. For instance: they build trust between members that increases with time, allowing for further fruitful collaboration; they help share the workload of guardian support staff; they decrease the costs of monitoring equipment, teaching and training materials, and continued education and quality control; and they make monitoring more effective through the sharing of observational information.\footnote{Discussion Paper, supra note 14 at 12.} Such networks can also prompt the storing of emergency spill response equipment in communities, allowing for quicker responses in the event of emergencies.

The Dena Kayeh Institute of the Kaska Nation launched the Dechenla Environmental and Cultural Studies Program in 2007. This 3-6 week program trains Dena youth in the areas of environmental management and monitoring, as well as Dena culture and bush skills. The program aims to develop technical and certifiable skills that will enable graduates to work as

\footnote{125 Ibid note 124.}
\footnote{127 Gorsebrook Research Institute, “Innu Nation Guardian Program,” online: Saint Mary’s University <smu.ca/research/innu-guardian-program.html>.}
\footnote{128 “About the Toolkit,” online: Indigenous Guardians Toolkit <www.indigenousguardianstitoolkit.ca/about>.}
\footnote{129 Provincial Report, supra note 9 at p 14.}
\footnote{130 Discussion Paper, supra note 14 at 12.}
guardians or environmental monitors – and to “build the capacity of participating individuals
to engage in land planning and management processes within their communities.” The
Yukon Department of Education authorized the program as a Grade 11 course.

The Kaska Dene Nation approached the Dechinta Bush University for Research and Learning
“about expanding their existing coursework on indigenous governance and law to include
areas like environmental monitoring or science in a land-based context.” As a result,
Dechenla Lodge and the Dechinta Bush University for Research and Learning launched the
Indigenous Boreal Guardians training program in 2015. The course “features an
interdisciplinary curriculum taught by a variety of experts, elders and university professors
at Dechita, a land-based postsecondary institution accredited by the University of
Alberta.” The program is expected to have “multiple secondary benefits that stem from
connecting people with their land and culture in a stewardship context.”

The Gwa’sala’-’Nakwaxda’xw Nations training program for their Guardian Watchmen covers
everything from small motor mechanics to archeological inventory training.

The Tšilhqot’in National Government Rangers are trained in professional and traditional
monitoring, safety and resource management methods.

Prince Albert Model Forest, in partnership with the Prince Albert Grand Council and
Saskatchewan Polytechnic’s Integrated Resource Management Program, facilitates the
Stewards for the Land program (previously known as the Junior Resource Rangers
program). The program “features the development of skills related to Traditional
Ecological Knowledge (TEK), cultural awareness, forestry, law, fire management, health, and
environmental sciences,” and “adopts a holistic approach that combines teachings from
Elders, while providing youth with hands-on experiences in basic skills required for natural
resource careers.”

Beardy’s and Okemasis’ Cree Nation, Nêhiyawak, and Muskeg Lake Cree Nation
developed the program, building off the success of the Junior Resource Ranger program. The previous
program “produced over 400 graduates and at its peak … had 10 participating communities
between 2006 and 2015.”

131 Inventory Project, supra note 2 at p 50.
132 Ibid note 2.
133 Meagan Wolhiberg, “NWT bush university trains ‘Indigenous Boreal Guardians’,“ (10 August 2015), online:
134 Ibid note 133.
135 Ibid note 133.
136 “Return to the Homelands: Establishing the Gwa’sala’-’Nakwaxda’xw Guardian Watchmen Program,” online:
Coast Funds <coastfunds.ca/stories/return-to-the-homelands-establishing-the-gwasala-nakwaxdaxw-guardian-
watchmen-program/>.
137 From personal correspondence with JP Laplante, TNG Senior Advisor, and Paul Grinder, TNG Enforcement
Coordinator (11 March 2020).
138 “Stewards for the Land Program” (2 April 2019), online: Prince Albert Model Forest
<pamodelforest.ca/?p=276>.
139 Ibid note 138.
140 Ibid note 138.
141 Ibid note 138.
The *Daylu Dena Council and Dease River First Nation*, in partnership with Living Lakes Canada and WWF-Canada, started a water monitoring program for the Dane Nan Yé Dāh Guardians. These Wild River Guardians are trained in Environment Canada’s CABIN [Canadian Aquatic Biomonitoring Network] protocol, a standardized monitoring technique.¹⁴²

In the US, conservation officers of the *Great Lakes Indian Fish and Wildlife Commission* (GLIFWC – an inter-tribal initiative), who are also sworn peace officers of the State of Wisconsin,¹⁴³ are trained both internally and in conformance with Wisconsin Department of Justice Training Standard requirements.¹⁴⁴ This is an “important achievement that increases credibility.”¹⁴⁵ Officers are trained annually, with instruction centering on rescue, safety, firearms, and the advanced use of motorized patrol craft.¹⁴⁶ Officers are required to complete 60 college credits, as well a 55-week training course, which includes 13 weeks of basic training followed by post-training.¹⁴⁷

In Australia, *Indigenous Rangers* are supported by the Working on Country program, which, among other things, provides nationally accredited training and career pathways for Indigenous people in land and sea management.¹⁴⁸ As of 2014, over 60 per cent of ranger projects had one or more rangers who had completed an accredited training course (385 rangers in total), and 950 employees took more practically based, non-accredited training courses, including “on the job” training.¹⁴⁹

**RECOMMENDATION #1** The Governments of British Columbia and Canada should provide resources to support the design, development and implementation of education, training and certification programs for Guardians.

**RECOMMENDATION #2** Governments should work in partnership with Nations, academic institutions, technical/professional associations, and industry to implement such programs.

¹⁴⁷ GLIFWC Brochure, supra note 143 at p 12.
Jobs and Economic Development

"Our third key commitment is to build a strong, sustainable, innovative economy that works for everyone, not just the wealthy and the well-connected. Together, we are going to tackle poverty and inequality, create good-paying jobs in every corner of the province, and ensure people from every background have the opportunity to reach their full potential."

Mandate Letter to the BC Minister of Indigenous Relations and Reconciliation

As already discussed, Guardian programs are an excellent investment. All Guardian programs create jobs, often in small communities where jobs are scarce and most needed. For example, the Innu Nation, consisting of approximately 2200 people, employs 14 Environmental Guardians. The Guardian Watchmen program of Gwa’sala’-Nakwaxda’xw Nations in Port Hardy employs seven people out of a population of about 1,035.

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151 “Welcome to Innu.ca!” online: Innu Nation <www.innu.ca>.

152 Not including the support staff who work at the dedicated Environmental Office. See: Gorsebrook Research Institute, “Innu Nation Guardian Program,” online: Saint Mary’s University <smu.ca/research/innu-guardian-program.html>.

153 This includes a full-time Program Manager, two Guardian Watchmen and two vessel operators (both on 8-10 month contracts), and two Junior Watchmen summer students. Inventory Project, supra note 2 at p 59. See also: “Gwa’sala’-Nakwaxda’xw Nations,” online: Government of British Columbia
Kitasoo/Xai’xais Nation, which has a population of approximately 513, has a staff of nine in its Stewardship Department. The Tahltan Guardian program employs five people out of a Tahltan Nation population of about 400. The Tsidyot’i’in National Government (TNG) (population: approximately 3,818) employs six full-time Rangers, two seasonal Auxiliary Rangers, one Supervisor and one part-time Technical Advisor. The Dasiqox Tribal Park project also employs two seasonal Guardians.

Indeed, in some cases Guardian jobs may exceed conventional resource development jobs. For example, the Xaxli’p First Nation claims:

...we have employed and trained more community members [through eco-cultural restoration thinning] than we would have, had we pursued conventional logging.

In many remote communities, there are few opportunities for work – and available jobs are often in resource extraction industries, which “may allow little time left over for traditional cultural obligations and may even directly contradict the core cultural values of protecting land and water.” Guardian jobs can offer opportunities consistent with Indigenous conservation ethics – and (as discussed in detail below), with significant opportunities to heal the land and restore fish and wildlife.

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<www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations-negotiations/first-nations-a-z-listing/gwa-sala-nakwaxda-xw-nation>


155 Including a youth stewardship program coordinator and four Guardian Watchmen: Inventory Project, supra note 2 at p 65.

156 Including one full time Guardian and four seasonal Guardians. See: Provincial Report, supra note 9 at p 33. Also see: “Territory,” online: Tahltan Band Council <tahtlan.ca/nation/territory/).


158 Who cover the entire Tsidyot’in territory (including the Tsidyot'in Title Land).

159 From personal correspondence with JP Laplante, TNG Senior Advisor, and Paul Grinder, TNG Enforcement Coordinator (11 March 2020). According to Laplante, the work of the Rangers is primarily focused on fish, wildlife and environmental monitoring and compliance but they are also engaged with community education and public relations, traditional law development, predator control, fire patrol, emergency response, campsite monitoring, commercial tenure monitoring, wildlife inventories and road deactivation assessments. The work of the Dasiqox Guardians is focused on facilitating the identification or inventorying of cultural sites, place names and traditional practices in the Dasiqox area and other sites around Yunesit’in in cooperation with Yunesit’in elders. They are also involved in the transmission of this cultural information to the Nation and in observing and reporting misbehavior on the land.

160 As quoted in Inventory Project, supra note 2 at p 100. This quote is with respect to the the Xaxli’p Forest Crew, which, while not technically a “Guardian” program of the Nation carries out a guardian-type function. For example, a member of the Forest Crew has stated: “I think the purpose is to be guardians of our home territory, because we’re the ones that are out there all the time ... I used to go for hikes, and I didn’t know anything. Now it’s cool that I know something. I know where I’m going. We’ve been to every corner of the territory.” (Quoted in Sybyl Diver, Community Voices: The Making and Meaning of the Xáaxl’ip Community Forest (2016) at pp 126–127, online: XCFC <www.xcfc.ca/community-voices>.

161 SVA ILI Report, supra note 19 at p 16.
Potential Additional Jobs Related to Tourism

Furthermore, Guardian work can support the development of jobs in the community, reflect conservation values, and build an industry. For example, many Guardian programs enhance tourism — supporting multiplier jobs in the tourism industry.

A fascinating recent example of the link between Guardians and tourism is occurring in the North, at the site of the shipwrecks left by the famed Franklin expedition in its vain 1840s search for the Northwest Passage. Inuit Guardians are involved with protection and monitoring of the wrecks of the HMS *Erebus* and HMS *Terror* — the first national historic site co-managed by Inuit and Parks Canada. Currently, in “one of the largest and most complex underwater archaeological undertakings in Canadian history,” Inuit and Parks Canada are collaborating to explore, study and protect the wrecks. Once the site is open to the public, Inuit “Guardians will play a key role in hosting visitors to the wreck sites — sharing knowledge and Inuit culture and presenting the Franklin story as well as monitoring the two wreck sites.” 162

On a much larger scale, the Indigenous Rangers program in Australia is a remarkable example of how Guardian programs provide jobs for Indigenous people in their homeland, while simultaneously bolstering the job-creating tourism industry. Indeed, the Australian Government sees the Rangers program as a significant contributor to the success of Australian tourism.163

Rangers commonly undertake management of tourists and tourism assets, and one of the objectives of the Aboriginal Ranger Program is to provide training for Indigenous people to develop skills in, among many other things, tourism and guided experiences.164 This is due to the high demand for rangers to engage with tourists. Rangers work across Australia on: cultural awareness and immersion experiences for visitors; guided welcome to country tours and/or talks for visitors; and management of visitors or tourists and tourism assets.165

One overall goal of the Ranger program is to create new jobs for Indigenous people working on the land, which includes tourism operations. Additionally, communities develop more capacity to manage land, sea and tourism activities.166 Cross-cultural awareness arising from the tourism experiences is simply a bonus.

The Australian Rangers have been both well-publicized and successful. Thanks to government investment of more than $650 million (projected into 2021), there were 839 full-time equivalent rangers contracted in 2018 through the Working on Country program.167

The important contribution that Guardians can make to tourism has already been demonstrated in BC:

The Haida Gwaii Watchmen Program’s primary mandate is to safeguard Gwaii Haanas National Park Reserve and Haida Heritage Site. In particular the Watchmen protect the five most frequently visited cultural sites by educating tourists about the natural and cultural heritage of Gwaii Haanas.168

The Kitasoo/Xai’xais Nation has an integrated Stewardship Department that includes guardian watchmen program. The nation’s stewardship activities in part aim to demonstrate

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163 Reference: personal communication with Tony Buti, Australian MP. According to the Western Australia Environment Minister Stephen Dawson, “… 78 per cent of visitors to Western Australia seek a traditional Aboriginal cultural experience” (as quote in Western Australia Environment Minister’s Office, “Successful Aboriginal Rangers Program and new tourism experiences mark National Reconciliation Week” (29 May 2019), online: Government of Western Australia <www.mediastatements.wa.gov.au/Pages/McGowan/2019/05/Successful-Aboriginal-Rangers-Program-and-new-tourism-experiences-mark-National-Reconciliation-Week.aspx>.


165 Ibid note 164.

166 Ibid note 164 at p 2.


168 Guardian Programs in Canada, supra note 10 at p 4.
that there are “sustainable economic options available to the community,” including in
ecotourism and wildlife viewing.\footnote{Inventory Project, supra note 2 at p 66.}
Over 50% of Kitasoo/Xai’xais territory is set aside in protected areas, which incentivized the community to shift to non-extractive industries.\footnote{“Economic Development – Spirit Bear Lodge,” online: Kitasoo/Xai’xais First Nation – Klemtu <klemtu.com/economic-development/spirit-bear/>.}
In particular, the Nation operates Spirit Bear Lodge, a world class ecotourism and adventure travel business that employees many people in the community in a variety of capacities – from guest services to boat operations.\footnote{Ibid note 170.}

Moreover, the Kitasoo/Xai’xais Nation works with all ecotourism operators in their territory by negotiating tourism protocol agreements; this involves a nightly fee per person, the proceeds of which fund the Kitasoo/Xai’xais Watchmen.\footnote{“Story – Tourists and Visitors Helping to Fund Indigenous Guardian Programs,” online: Indigenous Guardians Toolkit <www.indigenousguardianstoolkit.ca/story/tourists-and-visitors-helping-fund-indigenous-guardian-programs> (“Tourists Fund Guardians”); see also “Stewardship – Planning – Protocol Agreements,” online: Kitasoo/Xai’xais First Nation – Klemtu <klemtu.com/stewardship/planning/protocol-agreements/>.}
Kaska Dena Land Guardians help to educate the public and interact with hunters during peak season, provide local knowledge, undertake harvest data collection, and monitor wildlife health and climate change.\(^{173}\)

The Ahousaht Stewardship Guardian Program runs a tourism operation that issues permits to recreational visitors to Maquinna Marine Park.\(^{174}\) The Ahousaht Nation has a contract with BC Parks to manage and maintain the park and hot springs; guardians maintain trails and welcome and educate tourists.\(^{175}\)

The Nuu-chah-nulth First Nations work collaboratively with Parks Canada in the Pacific Rim National Park Reserve – in particular, West Coast Trail Guardians care for the world-famous trail, which is hiked by over 7,500 backpackers every year.\(^{176}\) Since 1995, the three First Nations whose traditional territory is crossed by the Trail – Huu-ay-aht, Ditidaht, and Pacheedaht\(^{177}\) – have each serviced a 25-kilometre stretch of the 75-kilometre trail. A Parks Canada spokesperson has commented:

\begin{quote}
Thanks to the Guardians, weary hikers recovering from a gruelling day can find themselves joined on a remote beach by First Nations drummers and singers who introduce the visitors to their traditional territory and offer a mesmerizing musical immersion in their culture.\(^{178}\)
\end{quote}

Approximately 12 Guardians are employed each year. They maintain the trail, protect and interact with hikers, and contribute to wildlife reporting.\(^{179}\) The Ditidaht Nation further offers large canvas tents and wood cabins for rent, and runs a Crab Shack, at Nitinaht Narrows – a third entry point for the trail about midway through.\(^{180}\)

The Tofino area offers an excellent example of how the synergy between Guardian conservation activities and tourism can be mobilized. Tourism is booming around Tofino, including in the Tla-o-qui-aht Tribal Parks, generating approximately $230 million in direct

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175 Ahousaht Guardian Program, ibid note 174.


177 The Pacheedaht First Nation is not part of the Nuu-chah-nulth Tribal Council.


179 Ibid note 178.

The Case for a Guardian Network Initiative

revenue in 2018. The Tla-o-qui-aht First Nations are developing a fascinating model for harnessing tourism revenue to help fund Guardians. The Nations are working so that 1% of annual direct revenue (e.g., $2.3 million per year) can return to the community and help fund the Guardians program. This meets the concern that: “The Tourism Economy benefits from our stewardship, yet we don’t benefit from tourism.”

To this end, the Tla-o-qui-aht have established the Tribal Parks Alliance, a voluntary network of local businesses who become Tribal Parks Allies by, among other things, participating in community-building events and collecting and remitting an Ecosystem Service Fee to the Tla-o-qui-aht. As of 2019, 28 businesses were certified Tribal Parks Allies, and over $84,000 was raised – enough to pay the wages of three Junior Guardians employed in the summer, and for Tla-o-qui-aht to buy a marine vessel for the Guardians to better monitor and maintain remote areas of the Tribal Parks. The Guardians maintain the internationally renowned Big Tree Trail and are improving and expanding trail networks throughout the Tribal Parks – both improving and contextualizing visitors’ experiences and bolstering the local tourism economy.

RECOMMENDATION #3 Recognizing the broad benefits provided by Guardian programs (including cost savings), the Governments of British Columbia and Canada should provide resources similar in scope to Australia’s Rangers program to encourage Guardian job creation in First Nation territories.

RECOMMENDATION #4 The Governments of British Columbia and Canada should collaborate with First Nations to establish partnerships with the tourism industry to further Guardian job creation.

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182 Ibid note 181, quoting the Tla-o-qui-aht Lands Director.
183 “About the Tribal Parks Allies,” online: Tla-o-qui-aht Tribal Parks Alliance <tribalparksalliance.com/about/>.
185 About the Tribal Parks Allies, supra note 183. See also Guardian Programs in Canada, supra note 10 at p 11 and We Rise Together, supra note 42 at pp 88-89.
Jobs for Healing Lands and Waters

Almost two centuries of colonial resource development has done serious damage to the lands and waters of British Columbia. Fisheries and wildlife have been severely depleted, watersheds contaminated, forests and soils mismanaged.

Millions of hectares of forests have been logged. It has been estimated that BC old-growth forests are being cut at the rate of more than 500 soccer fields per day;¹⁸⁶ that about 80% of the original old growth forests have been logged on Vancouver Island over the last century;¹⁸⁷ and that between 2005 and 2017, an area larger than Vancouver Island was clearcut across BC.¹⁸⁸ Stream and fisheries restoration work is badly needed across the province, to fix the legacy of past forestry and other industrial development. Nearly 1,200

¹⁸⁷ Ibid note 186 at p 2.
¹⁸⁸ “Report finds ending clearcutting of forests is as important for B.C. climate action as phasing out fossil fuels” (12 December 2019), online: Sierra Club <sierraclub.bc.ca/media-release-clearcutcarbon/>.
old mine sites need to be monitored, and in many cases, remediated. The Auditor General has concluded that inspection of closed mines is seriously deficient, especially in light of the major risks they pose to fish, water and other resources.

Furthermore, extensive damage across the oil and gas fields of the Northeast must be fixed before further harm is done to other resources. The BC Auditor General recently identified more than 10,000 non-operating oil and gas sites in BC that had not been properly restored – with an estimated $3 billion price tag for total restoration. The Auditor General noted:

> Potential contamination from oil and gas activities can affect ground and surface water quality, air quality, human health, wildlife and livestock; [furthermore,] [i]f operators do not restore their inactive sites in a timely manner, environmental risk and resulting financial liability will remain.

Similarly, there is a need to clean up the “ghost” fishing nets and crab traps that continuously trap and waste fish and other marine life. For example, when 4538 derelict fishing nets and 2,889 crab pots were removed from Puget Sound, it was estimated that the removed gear had already killed almost 300,000 entangled animals, including porpoises, sea lions scoters, grebes, cormorants, rockfish, Chinook salmon and crabs. Indigenous organizations have played a key role in removing such derelict fishing gear in Washington State.

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189 The BC Government’s Historic Mine Atlas “lists over 1100 past producing mines in BC.” See “MapPlace 1,” under “Mineral Activity and Potential Maps,” online: Government of British Columbia <www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mapplace/mapplace1#mineral>. The Atlas is based on a report on historic mine sites in BC, which found “approximately 1,887 historic mine sites,” of which, “1,171 sites are classified as mineral deposits known to have geoenvironmental characteristics with the potential for generating acid and leaching of metals” (Lisa N Barazzuol & Gregg G Stewart, Historic Mine Sites in British Columbia (Victoria: Ministry of Energy and Mines, Mining Division, February 2003) at iii, online (pdf): <cmscontent.nrs.gov.bc.ca/geoscience/PublicationCatalogue/OpenFile/BCGS_OF2003-03.pdf> (“Barazzuol & Stewart”).


191 Moreover, there were 326 orphan sites (ie the operator is bankrupt or can’t be located, so the site becomes the BC Oil and Gas Commission’s (OGC) responsibility) in BC in 2018/19, leaving the OGC with a $33 million liability: The BC Oil and Gas Commission’s Management of Non-Operating Oil and Gas Sites – An independent Audit report (Victoria: Office of the Auditor General, March 2019) at pp 41 & 44, online (pdf): Auditor General of British Columbia <www.bcauditor.com/sites/default/files/publications/reports/OAGBC_Oil-Gas-Non-operating-Sites_RPT.pdf> (“Auditor General OGC Report”) (note that the $33 million figure is for “the obligatory cost of restoring orphan sites … [however] ![the liability for full restoration, was estimated to be in the range of $73 million to $104 million” (ibid at p 44). The problem is even worse in Alberta, where an estimated $40-70 billion is required to cleanup old and unproductive oil and gas wells: “Research,” online: Alberta Liabilities Disclosure Project (ADLP) <www.aldpcoalition.com/research>.


193 On this topic, see p 30 of Environmental Law Centre, Seven Reforms to Address Marine Plastic Pollution, (August 2017), online (pdf): <www.elc.uvic.ca/wordpress/wp-content/uploads/2017/08/2017-01-11-
Who better to fix all these damaged lands and waters than the original owners? Remediation of Indigenous lands and waters is clearly a necessary component of Reconciliation. The role of First Nations in restoring the damage done to fisheries habitat, forests, and water quality by placer mining, hard rock mining, logging, oil and gas development and other industrial activities must be expanded.

As discussed above, Guardians can become highly trained, and Guardian jobs provide meaningful, local jobs in their respective communities. In addition, as noted by Nature Conservancy Canada consultants, local Guardians can often do the job for less than it would cost government directly:

\[\text{The value proposition of Guardian Watchmen programs is the lower marginal cost of conducting government activities when they are completed by Guardian Watchmen... [i]n addition to cost savings ... Guardian Watchmen programs bring personnel with extensive local expertise that can help fill gaps in government capacity.}^{194}\]

In remediating historical industrial damage, there is an opportunity for Guardians to work in areas where the government has limited capacity to do so, and all for a lower cost than if the government did the same work. As a bonus, Guardians will have the profound satisfaction of restoring the lands and waters of their ancestors.

Examples of Guardians and First Nation organizations healing land and water abound.

In one of British Columbia’s most dramatic environmental restoration success stories, the Okanagan Nation Alliance successfully revitalized Sockeye salmon from the brink of extinction, by restoring habitat and carefully nursing fish populations to healthy levels.\(^ {195}\)

The Carcross/Tagish First Nation in the Yukon initiated a monitoring and planning process in the early 1990s in response to declining caribou population in the Southern Lakes region. The Nation reports, “[t]hat herd is doing better now; our monitors are responsible, in part.”\(^ {196}\)

The Saulteau First Nations and West Moberly First Nations also provide a good example of Guardian-type restoration work that is remediating damage caused by forestry, oil and gas and other development in their territories. They have run the Twin Sisters Native Plants

\[\text{MarinePlastics_2017Oct23.pdf}. \text{As we reported there: “Indigenous organizations have played a large role in the removal of derelict fishing gear in Washington. The Nisqually Indian Tribe works with the Northwest Straits Marine Initiative to remove derelict fishing gear in central and northern Puget Sound. Further, the Quinault Indian Nation has partnered with the Nature Conservancy and the Washington Coastal Restoration Initiative to retrieve derelict fishing gear in Grays Harbor County, Washington. The partnership has removed over 58.4 metric tons of marine debris. There are numerous other notable examples of indigenous organizations and partnerships addressing the issue of derelict fishing gear in Washington” (The original sources of this information include Dr. Steve Katona, “Busting Ocean Ghosts,” Ocean Health Index, October 29, 2014 and Briana Goodwin for Pacific States Marine Fisheries Commission, “Derelict Fishing Gear on the West Coast,” online: <http://marinedebrisalliance.org/wp-content/uploads/2016/04/DFG_Report_Final.pdf>).}^{194}\]

\(^ {194}\) EPI Report, supra note 17 at pp 58 and 59.

\(^ {195}\) "Inventory Project, supra note 2 at p 82.

\(^ {196}\) Ibid note 2 at p 45.
Nursery, which champions “...environmental restoration that reflects traditional ecological wisdom” by reclaiming large areas with native and culturally significant plants.\textsuperscript{197}

In addition, since 2014 the two Nations have partnered to save the critically imperiled woodland caribou in the Columbia Mountains – with the help of Guardians from each Nation. Only six decades ago, there were so many caribou that elders described them as like “bugs on the landscape;”\textsuperscript{198} unfortunately, by 2016, five out of six caribou herds in the south Peace region were imperiled, with a seventh herd declared “functionally extirpated” in 2013.\textsuperscript{199} The region is the “epicenter for resource extraction in BC” – including logging, mining, natural gas fracking, and pipeline and hydro projects\textsuperscript{200} – with devastating consequences for caribou. These iconic creatures rely on having a large intact range in which to migrate, but they have been “[s]queeze[d] ... into smaller and smaller areas, crisscrossed by roads and other linear disturbances,” increasingly vulnerable to predators, especially wolves, for whom road and seismic lines “function as highways.”\textsuperscript{201} Clear-cutting of old growth has also removed the only mid-winter food source for the southern mountain caribou – low-protein lichen from the trees.\textsuperscript{202}

In an effort to bring the species back from the brink of extinction, the Salteau and West Moberly First Nations set up a penning project to house at-risk reproductive female caribou. Two Guardians from each First Nations take turns living by the pen for a week at a time; the Guardians patrol the area on ATVs, with binoculars and rifles, protecting the pen from cougars, bears, and wolves.\textsuperscript{203}

Recently, the provincial and federal governments entered into a historic deal with the Salteau and West Moberly First Nations.\textsuperscript{204} The 30-year partnership “promises long-term support for caribou recovery efforts, including multi-year funding for maternal penning, habitat restoration and an Indigenous Guardians program.”\textsuperscript{205} A new 206,000 hectare provincial park will be created pursuant to the agreement, and there are interim protections on an additional 550,000 hectares.\textsuperscript{206}

In sum, at the site of BC’s most intensive resource extraction efforts, following decades of mismanagement that nearly eradicated the southern mountain caribou, numerous


\textsuperscript{198} As reported in Sarah Cox, “The caribou guardians” (13 September 2018), online: The Narwhal \<thenarwhal.ca/the-caribou-guardians/>.

\textsuperscript{199} Ibid note 198.

\textsuperscript{200} Ibid note 198.

\textsuperscript{201} Ibid note 198.

\textsuperscript{202} Ibid note 198.

\textsuperscript{203} Ibid note 198.


\textsuperscript{205} Ibid note 204.

\textsuperscript{206} Ibid note 204.
endangered and threatened species will be “robust[ly]” protected, assisted by the crucial work of Guardians.207

Of course oil and gas development has done far more than just impact caribou. Seismic lines have fragmented ecosystems, wells have left contamination, and a variety of other oil and gas impacts need to be remediated. Fortunately, new legislation,208 makes oil and gas activity permit holders pay an orphan site restoration levy, in an amount based on the permit holder’s “share of the total deemed liability for wells and facilities under the Liability Management Rating (LMR) Program.”209 Additional regulations210 have made BC the first Western province to impose legal timelines for the restoration of oil and gas wells.211

Altogether, the BC Oil & Gas Commission (OGC) aims to ensure that “100 per cent of the cost of reclaiming oil and gas sites continues to be paid for by industry.”212 The funds raised by the new levy present a remarkable opportunity to employ Guardians to restore orphan oil and gas wells. Indeed, the OGC has stated, with respect to the new timeline regulation, “[t]his new regulation increase opportunities for Indigenous communities … to identify high priority sites for reclamation.”213 Indigenous communities can do more than “identify” these sites – they can and should participate fully in their reclamation.

As discussed, it is not only oil and gas wells that need remediation. The nearly 1,200214 historical mine sites that are potentially generating acid and leaking metals215 need to be monitored, and many likely need to be cleaned up. According to MiningWatch, based on the current pace of cleanup, as of 2016 it will take 64 years for BC to clean up the remaining priority contaminated sites that the Crown Contaminated Sites Program has identified – many of which are abandoned mine sites.216 Guardians can help fill the yawning gap in government capacity with respect to mine site reclamation.

207 Ibid note 204. According to The Narwhal, “36 provincially endangered (red-listed) and threatened (blue-listed) species” will be protected in the areas covered by the agreement, including “fisher, grizzly bear, white sturgeon and bull trout, birds such as the Canada warbler and olive-sided flycatcher, and plants like the small white water lily and birdfoot buttercup” (ibid).

208 The new regulations are in Part 4.1 of the Fee, Levy and Security Regulation, BC Reg 8/2014, under the Oil and Gas Activities Act, SBC 2008 c 36 (“OGAA”); s 47 of the OGAA was also amended.


210 Dormancy and Shutdown Regulation, BC Reg 112/2019, under the OGAA (supra note 208).


212 Ibid note 211.

213 Ibid note 211.

214 This number is separate from the approximately 160 temporarily or permanently closed mines across the province that the Auditor General identified in her scathing 2016 report on compliance and enforcement in the mining sector in BC, two-thirds of which are older mines that “government could be left with the full cost of remediation [for] if water quality issues were to develop at these mine sites” (Auditor General Compliance Report, supra note 190 at p 29).

215 See Barazzuol & Stewart, supra note 189 at p iii.

216 See: Carol Linnitt, “Cost of Abandoned, Contaminated Mine Sites in B.C. $508 Million, Up 83 Per Cent” (10 June 2016), online: The Narwhal <thenarwhal.ca/cost-abandoned-contaminated-mine-sites-508-million-up-83-cent-2014/>. Also see: “Crown Contaminated Sites Program,” online: Government of British Columbia <www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/contaminated-sites/crown-contaminated-sites-program>. There are over 14,000 contaminated or potentially contaminated sites being tracked in government records, many of which became contaminated from toxic chemicals or materials spilled or deposited on land during past industrial or commercial activities (“Contaminated Sites,” online: Government
Two recent major studies of the mining industry have pointed out the need to implement the Polluter Pays Principal by ensuring adequate financial assurances from mine operators for mine cleanup and disasters, and establishment of an industry clean up fund for old polluting mines.\textsuperscript{217}

BC needs to build on the orphan well site restoration levy, and institute a similar levy for the mining industry, as the Environmental Law Centre has previously recommended.\textsuperscript{218}

[Note: In light of the COVID-19 pandemic, the federal government is providing up to $1.72 billion in funds to clean up orphan and/or inactive oil and gas wells.\textsuperscript{219} The provincial government plans to use $120 million of this money for this purpose in BC.\textsuperscript{220} Notably, Indigenous communities (among other groups) will be able to nominate sites for priority consideration. Premier Horgan estimates that the BC program will “support upwards of 1,200 jobs, helping BC workers, the environment and our economy.”\textsuperscript{221} This, and more, should be made available to Guardians.]

**RECOMMENDATION #5** The Governments of British Columbia and Canada should fund Guardians to restore and remediate lands and waters damaged by industrial activity.

**RECOMMENDATION #6** Funding for such Guardian restoration work should be contributed by the industries that created the damage, using the new orphaned well levy system as a model.

\textsuperscript{217} The studies were completed by the First Nations Energy and Mining Council (FNEMC) and the Environmental Law Centre (ELC), respectively. FNEMC produced three reports on this subject in 2019: Mining Risk and Responsibility: How putting a price on risk can help British Columbia reduce it (June 2019), Reducing the Risk of Mining Disasters in BC: How financial assurance can help (August 2019), and Using financial assurance to reduce the risk of mine non-remediation: Considerations for British Columbia and Indigenous governments (November 2019). All three reports can be found at “Mining,” online: FNEMC <fnemc.ca/mining/>. The November 2019 report in particular mentions that “[a]s Indigenous nations in British Columbia increasingly exercise their inherent rights to self-determination, they are beginning to establish their own protections and requirements [with respect to mining operations on their territories]” (p 2). The November 2019 report therefore recommends that, if the BC government fails to ensure that adequate financial assurances are in place to protect against the costs and risks of mining operations, “Indigenous nations should require in-full and up-front financial assurance as a condition of their consent to mining projects” (p 21). The results of the ELC study were published in BC Mining Law Reform, supra note 190 (a summary of the Polluter Pays recommendations can be found at pp 15-16 of the “Context” section at the beginning of the report; the 9-page full “Polluter Pays” section is the last section in the report).

\textsuperscript{218} See Recommendation 6 at p 6 (“[e]stablish a rehabilitation fund for old polluting mines that active mining companies contribute to proportionally, based on the relative size of their total cleanup and reclamation liabilities”) in BC Mining Law Reform, supra note 190.


\textsuperscript{220} Office of the Premier, “New programs support jobs, clean up environment” (13 May 2020), online: BC Gov News <news.gov.bc.ca/releases/2020PREM0026-000871>.

\textsuperscript{221} Ibid note 220.
Long-term Support for Necessary Infrastructure, Capacity Building and Networks

To succeed in the long-run, Guardians support programs must provide more than just salaries for job positions. They must also provide long-term funding for necessary infrastructure and organizational capacity.

If Guardians programs are to succeed, funding and support must recognize both the “sheer size of the areas many indigenous organizations are actively trying to manage, with much of it remote and expensive to access,”222 and the fact that “[m]any communities do not have sufficient housing, office space or transportation infrastructure to adequately support people and programs.”223

Dedicated, predictable long-term financial support is essential for communities to overcome these challenges. Nations need office space, equipment necessary to monitor vast territories, including vehicles like boats and ATVs, as well as computers, GPS devices, and

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222 Inventory Project, supra note 2 at p 18.
223 Inventory Project, supra note 2 at p 18.
other technical equipment. Ongoing technical support must be provided as programs develop and communities build capacity.

Indeed, a report that quantifies the value of two Guardians programs in the Northwest Territories found that the Social Return on Investment (SROI) of these programs would likely increase, from the base case of 2.5:1 to as high as 3.7:1, if sufficient resources were provided to enable full-time, year-round Guardian work, and if the Guardians received additional technical support to enhance the quality of data from their monitoring activities.224

Funding should be provided to support individual groups – but it is vital that Guardian network organizations are also supported. Networks of Guardian groups, both formal and informal, already exist; notably, BC is home to the Coastal Stewardship Network225 and the Ha-ma-yas Stewardship Network.226 Beyond these formal setups, many Nations report that their programs have benefited from collaboration with others.227 Indeed, networking and collaboration are necessary insofar as communities have varying capacities to implement their own Guardians programs.228 Networks help to share capacity, infrastructure, training, and organizational know-how with individual Guardian groups.

The reality is that many Indigenous communities “are small and struggle both financially and with limited availability of human resources.”229 Larger communities can struggle too, since setting up effective Guardians programs involves, among numerous other things, training people in both Indigenous and western science, and providing adequate funding so that qualified support staff and necessary equipment can be retained over the long-term.230

A province-wide Guardian Network Initiative must provide dedicated funding to Guardians programs that meets each community on its own terms and allows communities with low or medium capacity to develop over time. By sharing their knowledge and experiences, Nations across the province can learn from each other. Through collaboration and pooling of resources, Nations of all capacities can efficiently develop effective Guardians programs.

**RECOMMENDATION #7** Governments must provide predictable, long-term financial and technical support to Nations as they build internal capacity. Governments must also provide support for regional Guardian Network organizations.

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226 See “About Us,” online: Ha-ma-yas Stewardship Network <hamayas.com/about-us>.
227 See generally Appendix V of Inventory Project, *supra* note 2 starting at p 32. This appendix consists of a series profiles of a number of Indigenous stewardship programs across Canada. Many communities report benefiting from networks and partnerships. The authors say, “we are concerned that without the National [Guardian] Network, the Indigenous efforts for Guardian training will become sporadic and only available in the strongest communities. There appears to be a growing awareness and interest in the communities about Indigenous Guardian programs across the country, but the main concerns are often related to the limited training and capacity in the communities” (p 11, emphasis in original).
Enhancing Enforcement Authority

There are strong national and international precedents supporting the enforcement of environmental laws on Indigenous-owned lands and waters.

Currently a number of Guardian programs across the province play a critical role in law enforcement, by monitoring compliance, notifying colonial government officials of violations, and educating the public about what the law is. A number of Guardian programs have protocol agreements with government agencies governing such enforcement actions.231

Even where a Nation doesn’t have recognized enforcement authority, Guardians on patrol routinely and successfully enforce laws – by interacting with land and marine users, “remind[ing] users of local protocols, agreements or laws with respect to the activity they are engaged in.”232 Guardians there observe, record and report violations. They educate, persuade and, if necessary, shame potential lawbreakers.

On the other hand, Nations with high capacity should be able to go beyond the “Observe, Record, Report” model. There are powerfully successful examples of Nations that are in full charge of enforcement in their territories – issuing tickets, making arrests, carrying guns and

231 For example, the Nuxalk River Monitors and others have an enforcement protocol with DFO (Guardian Programs in Canada, supra note 10 at p 9).
232 Inventory Project, supra note 2 at p 9; as an example, the Taku River Tlingit First Nation Land Guardians inform hunters about BC hunting regulations, and work with the local Conservation Officer to monitor for compliance (“TRTFN Land Guardians,” online: The T’akhu Á Tiën Conservancy <takhuatlen.org/trtfn-land-guardians/>).
laying charges. It is time for BC Guardians to have the option to emulate examples of Nations that play a more fulsome role in enforcement. For example:

The **Columbia River Inter-Tribal Fish Commission** (CRITFC), an inter-tribal initiative of four US Indian tribes, was specifically formed “[i]n response to the failure of the federal and state governments to protect salmon habitat in the Columbia River Basin.”233 As described by Harvard’s Ash Center for Democratic Governance and Innovation:

> CRITFC has become a vehicle through which the Nez Perce, Umatilla, Warm Springs, and Yakama Tribes [the member tribes] can assert their treaty rights both on and off their reservations. The Commission’s Enforcement Department, created in 1983 to regulate treaty fisheries, enforce federal and state laws for non-Indian fisheries, secure cultural resources, and protect fishers, is critical to this process. Department officers possess multiple authorities, as they hold commissions from their respective CRITFC member tribes, the State of Oregon, and the US Fish and Wildlife Service. Further, the states of Oregon, Washington, and Idaho have agreed that the Department and its officers bear primary responsibility for fisheries enforcement on and off reservation lands. **Remarkably, this enforcement not only extends the reach of tribal jurisdiction, but has the added, universal benefit of more consistent monitoring and enforcement of fishing regulations – regulations that in the past were mired in turf wars between tribal, state, and federal agencies.**234

According to the Commission, better regulation has achieved measurable results – “[t]he precipitous decline of some salmon populations was halted so recovery may now be possible and achievable.”235 Additionally, among many other accomplishments, approximately 30 fishing access sites that were destroyed by hydroelectric dam construction on the Columbia River have been replaced.236

Another inter-tribal initiative, the **Great Lakes Indian Fish & Wildlife Commission** (GLIFWC), represents 11 Ojibwe tribes in Minnesota, Wisconsin, and Michigan who reserved hunting, fishing and gathering rights under treaties with the US federal government in the 19th Century.237

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234 Ash Center – CRITFC, *ibid* note 233 (emphasis added).


237 Online: Great Lakes Indian Fish & Wildlife Commission <www.glifwc.org/>.
As an example of the authority that GLIFW exercises, each year GLIFWC biologists determine the number of fish that can be safely harvested from each lake within the ceded territory. They then share this information with tribal leaders and spear-fishers (the resource users). The individual tribes of GLIFWC proceed to collaboratively develop a unified harvest limit.  

GLIFWC has a Conservation Enforcement Division. Conservation officers monitor treaty harvest in ceded territories and Lake Superior, and enforce tribal codes that regulate each treaty season. Officers are highly trained – they are required to complete 60 college credits, as well a 55-week training course, which includes 13 weeks of basic training followed by post-training. In addition, annual training focussing on rescue, safety, firearms, and the advanced use of motorized patrol craft, takes place in accordance with Wisconsin Department of Justice Training Standard requirements.


239 GLIFWC Brochure, supra note 143 at p 12.


47. Monitoring in the Ts’udé Nilįné Tuyeta Indigenous Protected Area and Territorial Park, NWT. (Amos Scott) (Photo courtesy of the Indigenous Leadership Initiative)
In 2007, following legislation by the State of Wisconsin, GLIFWC officers became sworn peace officers of the state. Officers have conducted joint patrols with state officers as well as the US Forest Service and Coast Guard.  

GLIFWC officers enforce a large number of tribal regulations, including those respecting ricing (wild rice harvesting), open-water spearing and netting, open-water hook and line fishing, winter spearing and fishing, big and small game hunting, and aquatic invasive species. Officers also enforce state environmental laws against non-tribal members on ceded lands through cross-deputized agreements with state departments. GLIFWC, through self-regulation agreements with the Fish and Wildlife Service, Forest Service, Coast Guard and National Park Service, has concurrent jurisdiction with federal agencies, who refrain from enforcement in areas where GLIFWC practices enforcement.

George Meyer, the executive director of the Wisconsin Wildlife Federation and former Division Administration for the Wisconsin Department of Natural Resources (WDNR) Division of Enforcement, has praised the success of GLIFWC co-management of fisheries resources with state governments:

[Wisconsin has]... one of the most studied and most heavily protected fisheries the world because of the joint efforts of [GLIFWC and WDNR].

An agreement between Washington State Department of Natural Resources and the Lummi Nation establishes joint monitoring for natural resource management on Lummi Nation lands. Lummi Natural Resource Enforcement Patrol officers wear uniforms, have logos on their motor and marine vehicles, and share patrol duties with state departments. Lummi Nation Enforcement Patrol officers “make arrests, issue citations, inspect and confiscate gear and equipment, and file complaints in Lummi Tribal Court when legal provision are violated.”

While Lummi jurisdiction is mostly limited to the reserve, the Natural Resources Division has authority that “extends to traditional territories that include marine waters,” as well as

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241 GLIFWC Brochure, supra note 143 at p 12.
242 Ibid note 145.
243 Quoted in Patty Loew & James Thannum, “After the Storm: Ojibwe Treaty Rights Twenty-Five Years after the Voigt Decision,” 35:2 American Indian Quarterly 161 (Spring 2011) 161 at p 178, online (pdf): JSTOR <www.jstor.org/stable/10.5250/amerindiquar.35.2.0161.pdf?refreqid=excelsior%3A137a137a534fd665dbd968448831ee48> (note that JSTOR is a subscription service, so not all users will be able to access the pdf. For the table of contents of the full issue of American Indian Quarterly, see: <www.jstor.org/stable/10.5250/amerindiquar.35.2.issue-2?refreqid=excelsior%3A137a137a534fd665dbd968448831ee48>).
244 Enhancing the Stewardship Authority, supra note 145 at pp 45-46.
245 Ibid note 145.
authority “over non-Indigenous persons on tribal lands within the exterior boundaries of the Lummi Reservation.”

Somewhat similar fulsome Indigenous enforcement powers exists in the Yukon. The Shadhâla, Äshëyi yè kwâdân (Champagne and Aishihik First Nations (CAFN)) government has law-making authority and responsibility equivalent to those of the territorial and federal governments, with paramount jurisdiction in many areas. CAFN’s right to govern their own people, lands and resources is confirmed by the Final and Self-Government Agreements between CAFN and the Yukon and federal governments. The agreements make it clear that specific regulations and laws for CAFN remain firmly within the jurisdiction of the CAFN government.

CAFN have their own Fish and Wildlife Act, which includes law-making responsibilities over harvesting permits, trap setting, and hunting licenses. These laws are enforced by officers

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247 Ibid note 145.
250 See the CAFN Self-Government Agreement, ibid note 249.

48. Ni Hat Ni Dene Rangers monitor caribou in their territory. (Photo courtesy of Junior Monitor Denecho Catholique and Chase Lockhart, and Senior Monitors Jason Michel and Joseph Catholique)
appointed by the First Nations Council, and fines collected are retained and used by CAFN.  

Moreover, CAFN implemented a *Wildlife Harvesting Regulation* with respect to moose management. The regulation suspends all cow moose harvesting and allows for selective harvesting of bull moose only.  

Also in the Yukon, *Teslin Tlingit Nation* has extensive enforcement powers. The Nation entered into a Self-Government Agreement with the federal and territorial governments in 1993, and signed an Administration of Justice Agreement with the same governments in 2011. The Teslin Tlingit government proceeded to pass the Teslin *Tlingit Peacemaker Court & Justice Council Act: ax’kh xh’adu wus’ýé*, which created the Peacemaker Court.  

Currently the Peacemaker Court provides consent-based dispute resolution court services; eventually this will evolve into adjudication and appeal court services. The Teslin Tlingit Council has jurisdiction over a number of areas, including but not limited to natural resources, gathering, hunting, trapping or fishing, and protection of fish, wildlife and habitat.  

Teslin Tlingit game guardians are employed to investigate and collect evidence with respect to environment infractions that occur on Teslin Tlingit traditional territory – game officers wear uniforms and carry rifles, and must receive land and resource training.  

In BC, the *Halfway River First Nation* (HRFN) recently entered into a historic partnership with the BC Conservation Officer Service (COS). The agreement creates a dedicated HRFN Conservation Officer position, “the first position of its kind in the history of the COS.” HRFN identified critical areas that the partners will target collaboratively to “promote compliance, protect natural resources and...”  

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252 *Fish and Wildlife Act*, *ibid* note 251, ss 30 & 49, respectively.  
257 *ibid* note 256.  
258 Enhancing the Stewardship Authority, *supra* note 145 at p 47  
259 “New Conservation Officer” (January 2020), online: HRFN <hrfn.ca/new-conservation-officer/>.  

*The Case for a Guardian Network Initiative*
ensure public safety through education and enforcement.” \(^{260}\)

The new HRFN Conservation Officer will “respond to human-wildlife conflict reports, undertake proactive patrols, liaise with First Nation governments, RCMP and other law enforcement partners as needed, attend community events, school talks and more, all in consideration of traditional laws and customs.” \(^{261}\)

The Tšilhqot’in National Government (TNG) employs Rangers and Natural Resource Officers, the latter of whom wear uniforms and ride in vehicles with TNG logos on them. The Rangers, two of whom are designated DFO Guardians, \(^{262}\) “play a vital role in compliance surrounding hunting, and … mushroom harvesting.” \(^{263}\) In May 2018 the TNG began issuing permits to those wishing to harvest mushrooms on traditional territory. \(^{264}\)

Nits’ilʔin (Chief) Joe Alphonse, Tribal Chairman of the TNG, said “[a]nyone who thinks they can come into the territory without the appropriate permit or license should think twice about coming this way. We welcome those that want to explore and experience our territory in a respectful way that is in line with our stewardship values.” \(^{265}\) Moreover, the Rangers are increasingly developing a working relationship with DFO enforcement, the BC Conservation Officer Service and provincial Natural Resource Officers. \(^{266}\)

Finally, another type of general Guardian-type arrangement should be noted. Pursuant to the federal Fisheries Act, \(^{267}\) the Minister of Fisheries, Oceans and the Canadian Coastguard may designate people as “fishery guardians.” \(^{268}\) Although not limited to Indigenous people, a number of Indigenous Fishery Guardians have been designated; these Guardians “are

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\(^{260}\) Ibid note 259.

\(^{261}\) Ibid note 259.

\(^{262}\) From personal correspondence with JP Laplante, TNG Senior Advisor, and Paul Grinder, TNG Enforcement Coordinator (11 March 2020).


\(^{265}\) As quoted in TNG News Release, supra note 263.

\(^{266}\) From personal correspondence with JP Laplante, TNG Senior Advisor, and Paul Grinder, TNG Enforcement Coordinator (11 March 2020).

\(^{267}\) RSC 1985 c F-14.

\(^{268}\) Ibid note 267, subs. 5(1).
employees of their respective community or organization;” however, in some cases they conduct joint patrols and share training opportunities and equipment with the DFO.

**Enforcement of Indigenous Laws**

Indigenous peoples, in exercising their right to self-determination, have the right to autonomy or self-government in matters relating to their internal and local affairs...

*UNDRIP, Article 4, as incorporated in the Declaration of the Rights of Indigenous Peoples Act*

The Province of British Columbia and First Nations share the following mutual and respective goals and objectives for reconciliation... ensure that lands and resources are managed in accordance with both provincial and Indigenous laws, knowledge and values...

*BC Government – First Nations Leadership Council Shared Goals and Objectives*

There are numerous places where Nations enforce not just colonial laws, but also their own Indigenous laws. For example, the Lummi Nation in Washington State has enforcement authority “that stems from Lummi tribal laws and the Lummi Nation’s constitution.”

In the US Midwest, tribal regulations are enforced by tribes and tribal organizations like the Great Lakes Indian Fish and Wildlife Commission. GLIFWC officers enforce a large number of tribal regulations, including those respecting ricing (wild rice harvesting), open-water spearing and netting, open-water hook and line fishing, winter spearing and fishing, big and small game hunting, and aquatic invasive species.

In Canada, the *Fisheries Act* has specifically authorized Fishery Guardians to enforce the laws of certain First Nations. In particular, Fishery Guardians can enforce Nisga’a, Tla’amin, Tsawwassen, and Maanulth laws. Nisga’a enforcement staff wear uniforms and safety equipment, including bullet-proof vests, and receive training at the Justice Institute in Vancouver, enforcing Nisga’a fish and wildlife laws and federal laws of general application – primarily by means of a ticketing system.

The Xeni Gwet’in First Nation and the BC Conservation Officer Service have a memorandum of understanding that allows for joint enforcement with the Tsilhqot’in Title Land Rangers.

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269 Provincial Report, *supra* note 9 at p 35.
272 Enhancing the Stewardship Authority, *supra* note 145 at p 45 (emphasis added).
273 See the references at *supra* note 242 on this point.
274 *Subs. 5(4) of the Fisheries Act, supra* note 267.
275 Para 5(4)(a) of *ibid* note 267.
276 Para 5(4)(a.1) of *ibid* note 267.
277 Para 5(4)(b) of *ibid* note 267.
278 Para 5(4)(c) of *ibid* note 267.
279 Enhancing the Stewardship Authority, *supra* note 145 at p 38.
280 *Ibid* note 145.
“This includes enforcing communal restrictions, which prohibit the harvesting of cow moose for Xeni Gwet’in membership in its traditional territories.”282

**Listuguj Mi’gmaq First Nation**

Enforcement of Indigenous laws is an important reflection of a Nation’s inherent sovereignty and governance authority. Indigenous people enforcing Indigenous law can enhance resource management. This was dramatically demonstrated in Listuguj Mi’gmaq First Nation in Quebec. This Nation, dissatisfied at inadequate fisheries management by the province of Quebec, unilaterally and successfully took over control and management of their fishery. In fact, “traditional knowledge passed on through the generations made [Listuguj fishermen] acutely aware that the runs were nowhere near what they used to be. Canada’s determination that the salmon were endangered had only confirmed what [the] fishermen already knew: something had to be done to save the fishery.”283

Through an approximately 18-month process of community consultation, the Listuguj Mi’gmaq First Nation Law on Fisheries and Fishing (the “Fishing Law”) was drafted, then ratified by traditional Listuguj leaders in 1995 pursuant to Mi’gmaq custom.284 The Fishing Law’s authority comes from the inherent jurisdiction of Listuguj Mi’gmaq First Nation, and is not dependent on delegated authority from another government.

The Fishing Law provides for a Listuguj Rangers Program; the rangers are responsible for enforcement. The result has been:

\[\text{...increased regulatory compliance ... [because] Indigenous laws are being enforced and are seen to have an inherent authority that is rooted in the knowledge and traditions of local families and fishers, as opposed to state laws which are viewed as an externally imposed constraint on Listuguj affairs.}^{285}\]

Moreover, in 1995 the Atlantic Salmon Federation awarded the Listuguj Mi’gmaq First Nation for the best-managed river in the province.286 The river is the Restigouche River,

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284 Enhancing the Stewardship Authority, supra note 145 at p 40.

285 Ibid note 145 at p 41.

286 Ibid note 145.
which the rangers patrol using three boats, a canoe, and two fully serviced trucks. From June to October, about forty rangers are employed.287

One Listuguj citizen puts it as follows: “you wouldn’t see what I call a foreign government patrolling our waters and telling our fishers when and how they could fish. It’s nice to know that we can employ our own people to patrol our waters and protect our fishers.”288

**Enforcement Powers Will Reflect the Capacity and Choice of Each Nation**

Note that it takes a great deal of time for a Nation to establish its own enforcement division. For instance, the Nisga’a began negotiations with the Canadian government regarding Nisga’a land claims in the 1970s (BC joined in the 1990s), but it wasn’t until 2000 that a final agreement was reached. Nonetheless, by the mid-2010s, although the Nisga’a had enforcement authority with respect to natural resources, they were still dealing with personnel shortage and working towards a “full Nisga’a-DFO joint enforcement program.”289

Some Nations will not have capacity to take on more formal legal enforcement powers, whereas larger Nations may welcome the opportunity. Therefore, a tiered approach to enforcement authority is necessary. This approach must be sensitive to the unique situation of each Nation, including not only their respective capacities, but also their goals, values, and long-term vision.

**RECOMMENDATION #8** The Governments of British Columbia and Canada should make statutory and regulatory space for Nations and Guardians to take part in law enforcement on their territories.

**RECOMMENDATION #9** The Governments of British Columbia and Canada should make statutory and regulatory space for Indigenous enforcement of Indigenous resource laws in their territories.

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288 Quoted in Making First Nation Law, supra note 283 at p 19.

289 Enhancing the Stewardship Authority, supra note 145 at p 38.
Beyond Monitoring to Full Stewardship and Management

New government-to-government relationships require new approaches and models to the co-existence and exercise of [BC and First Nations’] respective jurisdictions, including strategic level planning, decision-making, and management roles and responsibilities. [BC and First Nations will] design and implement new models of:

- Strategic planning, including land use planning;
- Decision-making approaches, models and structure;
- Management...²⁹⁰

Joint Agenda: ...BC’s Concrete Actions: Transforming Laws, Policies, Processes and Structures

Guardians are the “eyes and ears” on the ground – but to be meaningful they must feed into a Nation’s plans and strategic decisions on resource management.

This is happening. An inventory of stewardship/Guardian programs across Canada found that “[o]rganizations report they are successfully using local knowledge, research and monitoring data, mapping analysis, satellite imagery and other information to respond to referrals, make decisions, build land and marine management plans, and negotiate agreements.”

In fact, planning is “the backbone of many stewardship programs.” As Guardians gather information on the condition of resources, lands and water, that baseline information needs to be constantly updated and incorporated into plans – and into ongoing strategic decisions about the type and intensity of development that the land can healthily support.

A crucial function of Guardian programs is the collection of baseline data with respect to land and marine resources and uses, and the continued monitoring of these resources and uses. This baseline information can enable Nations to make more informed resource management decisions. The information allows Nations to craft Indigenous land and marine use plans that create community jobs while conserving resources, consistent with traditional law, knowledge and values. Such information is vital to making good decisions – helping a community to say yes to beneficial developments, no to bad developments, and being well positioned to distinguish the difference. Again, informed consent under the “free, prior and

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291 Inventory Project, supra note 2 at p 17.
292 Ibid note 2 at p 8.
293 Ongoing information about what is going on across the landscape is critical. As the Inventory Project has noted: “[g]ood plans are iterative and shaped by the information gathered by on-the-ground activities” (ibid note 2).
informed consent” requirement of UNDRIP clearly requires information – and Guardians can provide much of this requisite information.

Planning and on-the-ground Guardian work are closely connected. Currently, BC Nations that employ guardians also develop and implement an impressive number of plans, including “[l]and and marine use plans, conservancy and protected area plans, wildlife management plans, corridor plans, source water plans, forest stewardship plans and climate change strategies.”

The Coastal First Nation Guardian Watchmen program is a good example of how Guardians can enhance the capacity of Nations to sustainably manage their territories. The program is the “most mature and largest Guardian program in Canada,” and is viewed as the “Gold Standard” by many Canadian Indigenous communities. They have played a key role in developing marine use plans amongst many integrated activities:

Guardian Watchmen provide a physical presence while overseeing a wide array of cultural and natural resource stewardship services. As the “eyes and ears” they monitor lands and waters, resource use, have the opportunity to promote compliance with Indigenous laws and federal/provincial government regulations. They ensure environmental management, resource development, and recreational activities occur in accordance with existing land and marine use plans and agreements. The Guardian Watchmen also monitor and collect data about ecologically/culturally significant species, review resource use, impacts on ecosystems, educational programming and public engagement and awareness.

Thus, Guardian monitoring and information-gathering help Nations conserve resources today – and help ensure that resources are protected in the long-term, and across the entire landscape. Guardian monitoring and data collection feed into a community’s planning process, and allow for more effective strategic decisions.

**Guardians and Environmental Assessment**

Guardians can and should be more deeply involved in impact assessments of proposed major industrial projects on their territories.

British Columbia’s new *Environmental Assessment Act* already acknowledges the unique and critical role of First Nations in impact assessments. Under the new Act, one of the statutory purposes of the Environmental Assessment Office (EAO) is to:

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294 Ibid note 2.
295 Provincial Report, supra note 9 at p 31.
296 Ibid note 9.
297 Supra note 98. The federal *Impact Assessment Act* also contains relevant provisions, including those requiring the consideration of “indigenous knowledge,” see supra note 96. Additionally, s 22(1)(q) of the *Impact Assessment Act* requires impact assessment to take into account “any assessment of the effects of the
support reconciliation with Indigenous peoples in British Columbia by …

supporting the implementation of [UNDRIP], … recognizing the inherent
jurisdiction of Indigenous nations and their rights to participate in
decision making that would affect their rights … [and] collaborating with
Indigenous nations in reviewable projects. 298

Another statutorily mandated purpose of the EAO is to use:

...the best available science, Indigenous knowledge and local knowledge
in decision making under the Act. 299

Furthermore, in certain circumstances, the Environmental Assessment Act requires that a
project be consented to by an Indigenous nation before the project can proceed. 300 In
addition, the Act requires the province to “seek to achieve consensus with participating
Indigenous nations” with respect to certain decisions, including whether to exempt or
terminate a project before an assessment, 301 and assessment process planning. 302

Moreover, the Act also allows for a Nation’s assessment to be substituted for a provincial
assessment – or for a Nation to work with the province to complete an assessment
coopertatively. 303 First Nations that participate in an assessment must be invited to sit on a
technical advisory committee, which provides advice on technical matters related to the
assessment. 304 Moreover, every assessment must consider a project’s “consistency with any
land-use plan of the government or an Indigenous nation if the plan is relevant to the
assessment.” 305

designated project that is conducted by or on behalf of an Indigenous governing body and that is provided with
respect to the designated project,” and s 31 allows for impact assessments conducted by “an Indigenous
governing body” (see paragraphs (f) & (g) of the definition of “jurisdiction” in s 2, as well as the definition of
“Indigenous governing body” in the same section) to be substituted for an impact assessment under the federal
act. The act further references UNDRIP in its preamble, requires Indigenous representation on the expert
committee that advises the Impact Assessment Agency (s 157(2)), and requires consideration of the impact of a
project on Indigenous culture (among other things, see s 22(1)(l)).

298 See ss 2(2)(b)(ii)(A) – (D).

299 See s 2(2)(b)(i)(C).

300 See s 7; consent is only required for a project to proceed (a) “on treaty lands if the final agreement with the
Indigenous nation requires this consent, or (b) in an area that is the subject of an agreement, between an
Indigenous nation and the government, that (i) requires this consent, and (ii) is prescribed by the Lieutenant
Governor in Council.”

301 See s 16(1).

302 See s 19(1).

303 See s 41. This section allows for agreements to be made between the province and other jurisdictions,
including “one or more Indigenous nations” (para 41(1)(c)); these agreements may “provide a means to
substitute another party’s or jurisdiction’s assessment for an assessment required under this Act” (para
41(2)(a)), or “establish procedures with another party or jurisdiction to cooperatively complete an assessment of
and regulate a reviewable project” (para 41(2)(b)). Moreover, the minister may, by order, require that an
assessment be conducted “by … an Indigenous nation” (subpara 24(3)(a)(iii)).

304 See ss 21(1) and (3).

305 See s 25(2)(g).
Indeed, a number of First Nations in BC have already conducted their own impact assessments for proposed projects on their respective territories:

The Stk’emlúpsemc te Secwépemc Nation (SSN) conducted a review of the proposed KGHM Ajax Mine Project, which would have seen an open-pit mine just outside Kamloops. The SSN review process was based on their own laws and traditional governance structures, and included information on the project’s impacts on spirit and culture as well as the environment. The SSN, following its review, did not consent to the project – and the project did not receive Provincial approval.

The Skwxwú7mesh stelmexw (Squamish) Nation conducted an assessment of the proposed Woodfibre LNG Limited (WLNG) liquefied natural gas (LNG) facility. The Nation created the review process “to assert [its] rights and title and to protect [its] traditional lands and

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307 Honouring Our Sacred Connection to Pípsell - Stk’emlúpsemc te Secwépemc Says Yes to Healthy People and Environment (March 2017) at p 3, online (pdf): Stk’emlúpsemc te Secwépemc Nation <stkemlups.ca/files/2013/11/2017-03-ssnajaxdecisionsummary_0.pdf>. 53. Near Prince Rupert, BC (Photo by Holly Pattison)
waters.” As a result of the assessment, the Nation consented to the project on certain conditions, which WLNG agreed to.

The Tsleil-Waututh Nation conducted an assessment of the proposed Trans Mountain Expansion (TMX) tanker and pipeline project. The assessment was carried out in accordance with the Nation’s Stewardship Policy. The assessment report concluded, among other things, that the project would “slow or deny achievement of the objective of [Tsleil-Waututh] Marine Stewardship Program” and “violate Tsleil-Waututh law because it will undermine [Tsleil-Waututh] stewardship obligations.” As a result, the report recommended that the Chief and Council of the Nation continue to withhold consent for the project.

In short, First Nations are already conducting their own comprehensive impact assessments, and the provincial government already recognizes that Nations have a critical role to play in the assessment process. As the BC Government’s Proponent Guide states:

First Nations may wish to conduct environmental assessments or undertake traditional use studies. These studies could help build a First Nation’s capacity and facilitate a mutual understanding of interests, concerns, or values.

Many Nations are already heavily involved in impact assessments for projects on their territories. For example:

The Metlakatla Stewardship Office (MSO), which runs the Metlakatla Guardian Watchmen program, is heavily involved in reviewing proposed projects on their territory; if a project is approved, the MSO continues to monitor impacts. Monitoring the health of Metlakatla lands and waters is the job of the guardian watchmen, who work to ensure that “all

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309 “If any of the conditions aren’t met, then the project can’t move forward.” Squamish Update, ibid note 308 at p 2.
310 Which “is an expression of Tsleil-Waututh jurisdiction and law [and] ... mandates a review of all proposed water, land, and resource policies inside [the Tsleil-Waututh] Consultation Area.” Treaty, Lands & Resources Department, Assessment of the Trans Mountain Pipeline and Tanker Expansion Proposal at p 6, online (pdf): Tsleil-Waututh Nation Sacred Trust <wtsacredtrust.ca/wp-content/uploads/TWN_assessment_final_med-res_v2.pdf> (“TMX Assessment”) The Consultation Area “encompasses all the waters and lands used by Tsleil-Waututh” (ibid).
311 TMX Assessment, ibid note 310 at p 3.
312 TMX Assessment, ibid note 310 at pp 3 and 86.
314 Inventory Project, supra note 2 at p 67.
activities occurring within [Metlakatla] boundaries are carried out in a respectful manner that is considerate of Metlakatala environmental, cultural and economic interests.”316

Although the Daylu Dena Council (DDC), one of the three nations of the Kaska Dena Council, does not explicitly have a guardians program, the DDC has nonetheless done extensive guardian-type work, especially with respect to impact assessment and monitoring. The impetus has been increased development of placer mining and oil and gas projects in DDC territory; in response, the DDC initiated water quality testing to obtain baseline data, with some success.317

The DDC further gathers traditional use study (TUS) data, focussing on areas of proposed new development. Moreover, “various other working groups are formed as needed to deal with such things as new mines in the traditional territory.”318

In Syilx/Okanagan territory, BC Hydro is the largest and most impactful company – over 50% of BC’s electricity is produced on this territory. In 2011 the Upper Nicola Band, ONA, and the Nlaka’pamux Nation Tribal Council jointly reached an agreement with BC Hydro. As part of the agreement, the parties committed to a new approach to working together in territory. The new approach is called the Enduring Relationship.319

316 “Stewardship – Guardian Watchmen,” online: Metlakatla First Nation <www.metlakatla.ca/stewardship/guardian-watchmen>
317 Inventory Project, supra note 2 at pp 47-48.
318 Ibid note 2.
As part of the Enduring Relationship approach, full-time project coordinators, who are Syilx/Okanagan members, have been hired to support engagement with BC Hydro on mega projects. Furthermore, funding has allowed 15 Syilx/Okanagan members to take the Natural Resources Training Group/Nicola Valley Institute of Technology Environmental Technician Certification Program, among a variety of other training programs.320

In a similar vein, the Tr’ondëk Hwëch’in First Nation works to monitor commercial forestry,321 and works with territorial mine inspectors to ensure adherence to licenses – including licenses issued by the Tr’ondëk Hwëch’in. The nation is also gathering data for detailed reports on traditional camps and ecologically or culturally important areas, which are provided to the Yukon Placer Secretariat in the interest of more effective protection of these sites by placer mining regulators.322

Similarly, the Innu Nation Guardians, who have existed since 1992, negotiated an Impacts and Benefits Agreement (IBA) with industry with respect to massive nickel mining operations in Voisey’s Bay. The IBA provides for Innu participation in cooperative environmental monitoring, management and planning of the project, while a companion agreement with the federal and provincial governments gives the Innu a direct role in regulatory oversight and compliance monitoring. Out of 14 Innu Environmental Guardians, 2 are employed as full-time Voisey’s Bay Monitors.323 Moreover, Guardians are dispatched as part of every industrial development in Innu territory.324

**RECOMMENDATION #10**  The Governments of British Columbia and Canada should provide resources to enable Guardians to gather the baseline and other information necessary for Nations to: develop land and marine use plans, make strategic resource use decisions, participate in environmental assessments, and make fully informed decisions about proposed developments.

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321 Including on non-settlement lands in their territory in cooperation with the Yukon government: Inventory Project, supra note 2 at p 92.

322 Ibid note 2 at pp 92-93.

323 Gorsebrook Research Institute, “Innu Nation Guardian Program,” online: Saint Mary’s University <smu.ca/research/innu-guardian-program.html>.

324 Guardian Programs in Canada, supra note 10 at p 14.
Traditional Practices

"Traditional knowledge is helping to inform modern environmental science in managing our landscapes, protecting native species, and in the ways we adapt to changing climates."

- Susan Ley, Australian Minister of Environment at the announcement of a $700 million commitment to the Australian Indigenous Rangers program in March, 2020.325

"There is a shared interest in environmentally sustainable resource development, informed by science and First Nations traditional knowledge and wisdom. [BC and First Nations] can better steward the land if we commit to better understand and implement the most progressive and successful aspects of our respective perspectives, approaches, and practices."326


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It has been argued that “[t]he work that Indigenous guardians do is in keeping with the UN-backed scientific consensus that Indigenous people are better at protecting biodiversity in their communities than outsiders.”327

As discussed earlier, thanks to a wealth of Traditional Knowledge accumulated over millennia, Indigenous communities using traditional practices (joined with state-of-the-art scientific techniques) “…are arguably better at preserving biodiversity.”328

At least, this is how one commentator summarized the findings of a 2019 study329 that looked at Indigenous management of natural resources in Australia, Brazil, and Canada. The study notes that “curtailing Indigenous management involving fire, forestry, fishing, or hunting practices can cause declines in species diversity and ecosystem productivity.”330 Moreover, “given high overlap between many threatened species ranges and Indigenous lands, collaborative agreements with Indigenous land stewards may be essential to insure persistence of many species in future.”331

Indeed, more governments are beginning to acknowledge that Guardian programs can be well-positioned to manage the land, using traditional conservation and stewardship practices – such as traditional burning practices, cultivation of clam gardens, and live herring roe fisheries.

For example, the wisdom of Indigenous burning programs is now fully acknowledged by both the Australian government – where areas managed by Aborigines are being spared the worst of wildfires – and by the BC and federal governments, which are increasingly supporting Indigenous controlled burning as a long-term wildfire strategy.332 There is now a

329 Schuster Article, supra note 106.
330 Ibid note 106, with reference to a number of other studies in this regard.
331 Ibid note 106.
“global effort ... to reintroduce indigenous burning practices as a permanent tool in landscape management.”\textsuperscript{333}

Indigenous burning practices in BC and elsewhere have been used for thousands of years to enhance wildlife populations and berry production, and to reduce the threat of catastrophic fires. Western science is now realizing the wisdom of such practices. For example, research ecologist Paul Hessburg has documented that traditional burning contributed to more resilient forests, more biodiversity, better protection of the soil and more resistance to catastrophic fire events.\textsuperscript{334} Guardians are well positioned to carry out such practices.

While the “core practice is fire management,” cultural burning has broader benefits, including “allowing Indigenous groups to re-establish access to and connect with Country, rebuild cultural knowledge, and protect animals and ecosystems that are important to them.”\textsuperscript{335}


\textsuperscript{334} See Dr Hessburg’s November 2017 TED talk at “Speakers – Paul Hessburg,” online: TED <www.ted.com/speakers/paul_hessburg>. Dr Hessburg is co-author of numerous articles; for instance, see Paul F Hessburg \textit{et al}, “Climate, Environment, and Disturbance History Govern Resilience of Western North American Forests” (10 July 2019) 7 Front Ecol Evol, Article 239, online: Frontiers in Ecology and Evolution <doi.org/10.3389/fevo.2019.00239>. The authors state that “BC forest management could benefit from incorporating knowledge of natural fire regimes and cultural burning” (p 8).

In Australia, “[p]rior to European contact, Aboriginal peoples ... used fire as a tool for managing Country. The cultural use of fire is a socially and ecologically complex practice, governed by kinship, eldership, spiritual connections to Country and environmental interactions with fire.”336

As one senior of the Olkola people put it:

Fire creates new life. That’s how they start it off. They burn, then new grasses grow, then the animals came on. It was part of the daily routine—you burn grass, you get new shoots coming up, you get wallabies and kangaroos coming on, and emus and that feeding. And that’s how they survived, that was the main reason for fire. People have been doing that for centuries.337

336 Federation of Victorian Traditional Owner Corporation, the Victorian Traditional Owner Cultural Fire Knowledge Group et al, The Victorian Traditional Owner Cultural Fire Strategy (Funded by the Department of Environment, Land, Water and Planning (DELWP)), online (pdf): Australian Institute for Disaster Resilience – Knowledge Hub <knowledge.aotr.org.au/media/6817/fireplusstrategyplusfinal.pdf>.  
Indeed, the “post-colonial disruption of traditional Indigenous fire regimes is considered one of the major causes for Australia’s extraordinary number of mammal extinctions.”\(^{338}\)

Indigenous Rangers all over Australia now undertake both traditional knowledge transfer and fire management work.\(^{339}\) As one of many examples, the Banbai Aboriginal Nation in New South Wales, which owns and manages the Wattleridge Indigenous Protected Area (IPA), has reintroduced cultural burning in the IPA by the Banbai Rangers.\(^{340}\)

The importance of fire management applications of cultural burning by Indigenous Rangers is hard to overstate – especially in light of recent and ongoing catastrophic wildfire seasons around the globe. In fact, as is now widely recognized, “[i]n recent times the ongoing absence of appropriate fire in the landscape has led to the bush becoming prone to wildfire, which is devastating to the ecology”:\(^{341}\)

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[a] \text{ a wild fire is an unplanned fire that has a high hot flame, which burns right into the crown of the tree canopy and it is very hard for the ecological system to recover after } ... \text{ A ‘cool’ fire is a preferred type of fire used by Indigenous people to look after Country. This type of flame is very low – from 1 to 2 metres. It does not get too hot, which allows the plants to recover quickly and the animals to have a chance to escape or find cover.}\(^{342}\)
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Moreover, cultural burning actually benefits wildlife. Notably, since “[c]ool burning leaves habitat behind for animals, birds, and plants,”\(^{343}\) the echidna or kuka (also known as the spiny anteater – a cultural keystone species of the Banbai Nation) benefit greatly from the Banbai Ranger’s burns. One ranger described how “[t]he fire opened up the Country to the echidna finding the food source easier. I think he don’t have to scrounge around under logs and thicker area ... he can just come along after you’ve burnt the Country and eat what he’s got ... I think that’s one of the things he would thank us for.”\(^{344}\)

The wisdom of traditional burning in BC is now widely acknowledged by academics and BC forestry officials:

In the Okanagan-Similkameen area of BC, where “traditionally, the open forest and grassland ecosystems ... were maintained by low intensity, controlled burns, lit and managed by the Syilx ... people,” the Okanagan Nation Alliance is supporting the Syilx communities’ “responsibility to re-establish prescribed fire [or cikilax̤m] on the Okanagan

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\(^{338}\) McKemey Article, supra note 335 at p 894.


\(^{340}\) McKemey Article, supra note 335 at p 895.


\(^{342}\) Ibid note 341.

\(^{343}\) McKemey Article, supra note 335 at p 897 (quoting a Ranger).

\(^{344}\) Ibid note 335 at p 898.
The Case for a Guardian Network Initiative

The Okanagan Nation Alliance has further partnered with the Penticton Indian Band, the Forest Enhancement Society of BC, and local industry on the Munro/Garnet Valley Fire Maintained Landscape project. The project’s goals are to reduce wildfire risk, increase forest stand values, protect ecological values and enhance cultural resource values. Another goal, to reduce stem density to less than 100 stems per hectare, has already been achieved.

A prescribed broadcast burn (i.e. a fire ignited in areas with little or no forest canopy present) will take place in the spring or fall of 2020.

Similarly, the ?a?am community, a member of the Ktunaxa Nation, successfully completed a 368 hectare prescribed burn in their territory, with the aim of returning “the lands to a natural grassland/open forest complex that historically existed prior to fire suppression efforts.” In 2017 the community had been threatened by a 400 hectare wildfire – forcing 36 homes to be evacuated for 3 days.

The Xaxli’p Community Forest (XCF) Forest Crew undertake prescribed burning. At least some of this work is done with the support of the Forest Enhancement Society of BC.

The Fort Nelson First Nation (FNFN) have a relationship with fire that is “culturally complex, and dates back thousands of years.” Today, “many traditions … live on … [including the] use of fire in: [s]upporting fertilization and re-growth of vegetation, [h]unting and survival, comfort and aesthetic practices, [and] ceremony.”

In particular, wood bison rely on an open range to access forage and vegetation – an open range that was traditionally maintained with prescribed burns. In 2013, FNFN “embarked on efforts to use controlled burns as away to attract the [threatened] Nordquist [bison] herd.”

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346 Ibid note 345.
349 Munro/Garnet Valley Project, supra note 347.
351 Ibid note 350 at p 7.
352 “People,” online: Xaxli’p Community Forest <www.xcfc.ca/people>.
355 Ibid note 354.
back to its home range.” The herd had been extirpated in the area in the early 20th Century before being reintroduced. In 2015, FNFN set fire to almost 3,000 hectares of forest, in a project funded by Environment Canada. The then-chief of FNFN said at the time, “[b]urning is our right and our responsibility as stewards of the land.”

The Yunesit’ni and Xeni Gwet’in First Nations pioneered a pilot project in 2019, with the aim of developing, implementing and evaluating a traditional fire management program for Tšilhqot’in title lands and the Dasiqox Tribal Park area. The area was devastated in 2017 by the largest wildfire ever recorded in BC, which burned over 500,000 hectares in the Chilcotin Plateau. The Nations are working with the First Nations Emergency Services Society, the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development, the BC Wildfire Service, and Professional Foresters and Indigenous fire management experts.

In the spring of 2019, the Gathering Voices Society coordinated a pilot burning session with the guidance of an Australian Indigenous fire expert. The pilots were “incredibly successful, employing and training more than 10 local community members, and applying Indigenous burning techniques to more than 30 hectares of important habitat on Tšilhqot’in lands.”

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357 Ibid note 356.
358 As quoted in ibid note 356.
360 Ibid note 359.
361 Ibid note 359.
In 2020, the aim is to develop a carbon credit framework, as well as implement traditional wildfire management on a broader scale.\(^{362}\)

In a British Columbia that has suffered billions of dollars in fire-related losses in recent years,\(^{363}\) it would now be a sound investment to provide jobs for Guardians to carry out traditional controlled burning, and to more effectively manage forest resources in BC, as Indigenous people have done since time immemorial.

\(^{362}\) Ibid note 359.

\(^{363}\) See BC Wildfire Service, “Wildfire Averages,” online: Government of British Columbia <www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/wildfire-statistics/wildfire-averages>. The cost of managing the wildfire season in 2017 was $649 million; the preliminary estimate for 2018 is $615 million. See also Jennie Wang & Katharine Strong, “Environment Fact Sheets – British Columbia’s forest fires, 2018” (date modified: 29 May 2019), online: Statistics Canada <www150.statcan.gc.ca/n1/pub/16-508-x/16-508-x2019002-eng.htm>, which notes that, beyond the $615 million spend on fire management and suppression, “[a]dditional costs can be associated with evacuations and property losses; however estimates of property losses are not yet available.” Moreover, “[t]he true costs of wildfires for society are currently ill accounted for. Missing from most accounting of wildfire costs are those indirect costs, such as rehabilitation, real estate devaluation, and emergency services, that can be **two to 30 times more** than the actual expenses to fight the fire” (Association for Fire Ecology, the International Association of Wildland Fire, & The Nature Conservancy, Reduce Wildfire Risk or we’ll continue to pay more for fire disasters (16 April 2015), online (pdf): Association for Fire Ecology <fireecology.org/Resources/Documents/Reduce-Wildfire-Risk-16-April-2015-Final-Print.pdf>.

59. Wildfire-charred landscape in Central BC (Photo by Holly Pattison)
Successful Indigenous management of marine resources has occurred in BC and around the world.

A striking example of the effectiveness of traditional practices comes from Fiji, where Indigenous communities “have long practiced traditional methods of preserving their valuable food sources, such as imposing seasonal bans and temporary no-take areas.”364 In Fiji, as is the case throughout Pacific island communities, traditional marine management methods are based on a system of community marine tenure; the Fijian marine tenure system consists of qoliqolis, or traditional fishing grounds that are under the control of adjacent communities.365 Traditional management of qoliqolis included various restrictions on the number of fishers, the amount of harvest, and so on, but in particular the imposition of a tabu, or prohibition, on fishing for certain species.

60. One experienced Guardian is taking measurements of a crab and the other two are recording specific aspects like width of the shell, male or female etc. Guardians are trained on the methods used by the federal government so that their reports are based on data collected to the same standard that DFO collects data. (Photo contributed by Nanwakolas)

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364 Village by Village, supra note 105 at p 144.
365 Ibid note 105 at p 144-145.
In response to declining marine resources, Fijian villages combined modern techniques with traditional practices in locally managed marine areas (LMMAs).

Chiefs are applying this customary *tabu* concept to more practical ends – to protect spawning or overexploited areas and to increase fish stocks – with mounting interest and success. They are linking their traditional practices with modern techniques – assessing fishing stocks, measuring potential no-take zones, monitoring the *tabu* area – to establish locally managed marine areas.

Communities set aside at least part of an LMMA as a restricted area, typically 10-15 percent of the village’s fishing waters, in order to allow habitat and resources to recover from fishing pressure ... Technical experts may offer their advice to the community on optimal placement of the *tabu* area, but ultimately the community itself has the final say about location. 366

In the first village to implement an LMMA, Ucunivana, the clan totem of the village is a clam called *kaikoso*, which is also a food staple and primary source of income. Partnering with the University of the South Pacific, the community set up a 24-hectare *tabu* area and

learned how to establish a baseline of clam populations in the tabu and adjacent sites. They then undertook annual monitoring of the clam populations. 367

The result was a dramatic increase in both the number and size of clams – for example, in 1997 when the tabu area was first established, there were no clams with a diameter of less than 2.5 cm in the tabu area. By 2004, there were 3,502 clams of this size per 50 square metres in the same area. 368 Clams increased in size too: at the start of the project, “it was extremely rare to find a clam bigger than 5 cm in diameter,” but by 2004, “the Ucunivanua community routinely [found] clams in the tabu area that are over 8 cm in size.” 369

Following similar dramatic successes in other villages that implemented LMMAs 370 the Fiji LMMA Network (FLMMA) was established to “serve as a forum in which communities with LMMA projects could share methods and results.” 371

As a result of the ecological benefits, the Ucunivanua community also saw significant economic rewards:

---[t]he increased resource yields of clams, crabs, and other species from areas adjacent to the no take area that can be sold in the municipal market of the capital, Suva, has led to a 35% increase in household income over three years and a tripling of the resource catch per unit effort. This project has also had an enterprise component by which the people of Verata district [of which Ucunivanua is a part] have received to date US$30,000 in proceeds from licensing biodiversity samples for testing. 372

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367 Ibid note 105 at pp 145-146.
368 Ibid note 105, Figure 1 at p 146.
369 Ibid note 105 at p 146.
370 For example, the village of Sawa imposed a tabu on a mangrove island; the result was a 250 percent annual increase in the numbers of the mangrove lobster Thalassina anomala (ibid note 105).
371 Ibid note 105 at p 147.
BC Clam Gardens

Clam gardens are a sophisticated form of shellfish management designed to ensure a reliable food source for the large populations of First Nations and Native Americans that inhabited the Northwest Coast. Prior to European contact, First Nations’ and Native American towns and villages dotted every stretch of habitable coastline. Many areas were more heavily populated than today, with people living in settlements of a few hundred to potentially thousands of people. Clams would have provided a reliable, easy to harvest protein and vitamin-rich food that could have been eaten fresh at any time of year or dried for later consumption. In addition, people valued clams as a trade item and for their use in community events and gatherings.

– The Clam Garden Network

For millennia BC Indigenous peoples have cultivated clam gardens – “an ancient form of mariculture ... that magnified shellfish production in a limited space.” The construction and maintenance of these remarkable human-engineered intertidal terraces was carried out

373 “Cultural Importance,” online: The Clam Garden Network <clamgarden.com/clamgardens/cultural-importance/>.
by Indigenous people from Alaska down the coast to Washington State. Some clam gardens are estimated to be at least 5,000 years old.

Clam gardens dramatically increase the productivity of clam beds, and greatly enhance the amount of healthy food available to the community. Gardens “can be highly productive, supporting four times as many butter clams and twice as many littleneck clams compared to unmodified beaches.” Clams in clam gardens are also bigger, and reach harvestable size at a faster rate.

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375 Ibid note 374.
376 Ibid note 374.
378 Groesbeck Study, supra note 374.
A clam garden is not only a source of healthy food for the community. A garden is vitally important to the culture and cohesion of the community. A garden is “a classroom, where Elders share knowledge and work alongside youth.”  

“Today, clams and clam harvesting remain important economically, culturally, socially and ceremonially for Indigenous Peoples on the Northwest Coast, and feature prominently in original stories, rituals and songs.”

The cultivation of clam gardens is also good for the environment and for biological diversity. Indeed, the cultivation of clam gardens is acknowledged in Canada’s Sixth National Report to the Convention on Biological Diversity. In particular, the report mentions as a case study the Indigenous restoration of Coast Salish clam gardens.

The Gulf Islands National Park Reserve partnered with Hul’q’umi’num and WSÁNEC peoples on the project, which has begun restoring and monitoring two clam gardens which hadn’t been tended for hundreds of years. The restoration work is guided by both modern science and traditional knowledge: “Some days, they move big boulders while listening to stories. On others, they use scales and gauges to assess the health of the intertidal ecosystem.”

As Canada’s National Report says, “Coast Salish peoples care for their beaches using traditional practices such as removing kelp and sea lettuce. They turn their beaches with specialized tools to loosen the sand, allowing more room for creatures to grow.”

Clearly, there is a significant opportunity for Guardians to foster and oversee traditional activities like clam gardens – a source of healthy foods for the community and of vital cultural reconnection.

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379 Target 12 Details, supra note 377 at p 11.
380 “Cultural Importance,” online: The Clam Garden Network <clamgarden.com/clamgardens/cultural-importance/>.
382 Target 12 Details, supra note 377 at p 11.
383 Ibid note 377.
384 Ibid note 377.
385 Ibid note 377.
386 In this regard, see the brief discussion on the National Energy Board Northern Gateway hearings, supra note 15.
Spawn on Kelp Herring Harvest

Similarly, Guardians can monitor and help carry out the ecosystem-friendly spawn-on-kelp herring roe harvest.

Herring have “significant cultural value for coastal First Nations such as the Haida. Since time immemorial, the Haida have traditionally gathered herring spawn-on-kelp or k’aaw fishery.” Similarily, “[f]or generations, Heiltsuk have been connected to herring in a myriad of tangible and intangible ways ... [h]erring roe on hemlock branches and kelp ..., flat kelp ... has always been a significant component of people’s seasonal diet, ceremonial potlatch feasts, and economy.”

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Traditional practice ensured a sustainable harvest. In this regard, the Heiltsuk:

...applied a variety of strategies ... includ[ing] the selective placement and setting of branches, the removal of roe and herring from the traps, and the leaving behind of some branches that were laden with spawn so that those eggs could hatch ... Furthermore, the more general philosophy of 'leaving some behind' and remaining quiet while on the spawning grounds ... were considered to be fundamental to the health of the herring populations. These strategies are in stark contrast to the modern industrial sac roe fishery that requires removing the egg sac whole from pregnant females, which results in the death of the adults as well as the roe, and does not have an ethic of being quiet while harvesting.  

Despite warnings from Indigenous fishers, DFO allowed decades of the industrial “kill fishery” to seriously deplete herring stocks in the 1950s and 1960s, and the stocks “have recovered by less than 40 percent since [then] ... with serious consequences for the traditional spawn-on-kelp fishery.” Meanwhile, “[a]rchaeological evidence ... demonstrates that herring were consistently abundant for many coastal indigenous communities for thousands of years prior to the industrial harvesting of the last century.”

The Peter Wall Institute for Advanced Studies at UBC used an ecosystem- and values-based approach to fisheries management to study the herring fishery in Haida Gwaii. An ecosystem-based approach “considers the interactions of the full range of sea life from plankton to whales.” A values-based approach “considers the significance of the herring to the community members of Haida Gwaii that are directly impacted by the fishery.”

The study concluded:

The ecosystem- and values-based approach favours the commercial [traditional] spawn-on-kelp fishery – which has negligible impacts on the many species that depend on herring for their survival and benefits the Haida culturally by allowing the harvest of a traditional food source.

Guardians have an important role to play in monitoring this vital resource and are already doing so. For example, the Metlakatla Fisheries Program, which is supported by Guardian Watchmen, monitors the local spawn-on-kelp fishery, as does the Haida Fisheries.

389 Ibid note 388.
390 Fishing For Solutions, supra note 387.
391 Everything Revolves Around Herring, supra note 388.
392 Ibid note 388.
393 Ibid note 388.
394 Ibid note 388.
395 Guardian Programs in Canada, supra note 10 at p 8.
Program. Additionally, Heiltsuk authorities have worked with the DFO to negotiate and set herring harvests within some areas of their traditional territory.

Such practices as traditional burning, clam garden cultivation and spawn-on-kelp fisheries provide important opportunities for Guardians to implement and oversee traditional resource management measures, to the benefit of the environment, Indigenous communities and the province’s economy.

RECOMMENDATION #11  The Governments of British Columbia and Canada should provide resources to Guardians to carry out traditional land management practices, including traditional burning, clam gardens and spawn on kelp fisheries.

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396 Ibid note 10 at p 4.
397 Everything Revolves Around Herring, supra note 388.
Conclusion

The Governments of Canada and British Columbia face a visionary and powerful Reconciliation opportunity – to establish a fulsome Guardian Network Initiative across British Columbia and Canada.398

Building upon the proven success of existing Guardian programs, the benefits of this Initiative will far outweigh its costs. The Initiative will provide better enforcement of environmental laws and provide key jobs and technical training in Indigenous communities.

398 In calling for the federal and provincial governments to provide fulsome funding for Guardian programs, we are making a distinction between such funding of Guardians, which enhance Nations’ self-governance and autonomy, and devolution programs which have had a contrary effect. There’s a long history, dating back to the 1960s, of the federal government devolving its responsibilities with respect to Indigenous affairs to the provinces, but without providing adequate resources or a framework to the provinces to help them fulfill this mandate – and without differentiating between diverse communities. The result has been a program of assimilation, with historic devolution of child welfare programs being an example. Guardian Programs will not work or be well received within Indigenous communities if they follow an assimilative path.
Additional jobs and cross-cultural understanding will be created as Guardians enhance tourism.

Guardians will enable the systematic transfer of Traditional Knowledge from elders to youth. They will integrate that knowledge with Western science to optimize the protection of lands, waters and wildlife. Guardian programs have been proven to enhance cultural renaissance, community well-being and pride.

Furthermore, Guardians can significantly contribute to Indigenous health, by restoring traditional sources of healthy country foods to communities. In addition, many jobs can be created as Guardians implement traditional practices and Western science to heal the damage inflicted by resource development on Indigenous territories over the last 150 years.

Guardians are absolutely essential as resource development moves into the era of Reconciliation. Guardian monitors are needed to provide Nations with the baseline ecological information necessary for meaningful self-governance – the information needed to create land and marine use plans, and to meaningfully consider “informed consent” to new development.

Finally, Guardian programs can benefit general society. They can dramatically enhance British Columbia’s tourism industry, enhance responsible stewardship of common resources, utilize traditional practices to safeguard communities from wildfire, contribute to the resilience of Indigenous communities and profoundly advance the Reconciliation Project.

For these reasons, we urge the Governments of British Columbia and Canada to act on the recommendations of this report. There is a need for robust ongoing investment so that communities – and Canada as a whole – can reap the remarkable benefits of increasingly effective Guardian programs.

“I feel like this [program] strengthened my bond with the community, with the culture, and with the people. It let me see the whole picture as one ... It helps me to understand why I need to represent the community and the land but also help fight for it, help others respect it and care for it, share the experiences.

Ni Hat’ni Dene Guardian

I’m proud to be First Nations and to be looking after the territory that we got there. And each one of us are proud of that, to have a territory that we value.

Clark Robinson, Kitasoo/Xai’xais Nation

399 The Ni Hat’ni Dene (“Watchers of the Land”) is the Guardians program of the Lutsel K’e Dene First Nation. The quote is from Guardian Jake Basil, as found in SVA ILI Report, supra note 19 at p 16.

400 As quoted in EPI Report, supra note 17 at p 41.
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