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Special Issue on Muiwatmnej Etnaptmumk: Two-Eyed Seeing From Vision to Action

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The Artwork

The colours, style, and design of the artwork featured on the cover page of this special issue were used as a logo for a conference organized by the Bras d'Or Lakes Collaborative Environmental Planning Initiative (CEPI), held at the Membertou Convention Centre in Nova Scotia in 2023. The theme of the conference was "Honouring Two-Eyed Seeing: Turning Vision Into Action."

The artwork was inspired by the works of Loretta Gould and was created by Steven Rolls, Director of Creative Services at Rise Results, specifically for this conference.

Imagery within the logo

Colour Choices: Earthy blues and browns are present in the logo, representing both Indigenous and Western cultures. Blue can signify the sky, water, and open-mindedness, while brown can symbolize the earth, grounding, and a connection to nature.

Interpreted Two Eyes: The stylized eyes reflect the concept of seeing through both Indigenous and Western perspectives, reinforced by the brown and blue colouring. This signifies the idea of dual vision and balanced understanding. Within these eyes, one can see visions of nature and life, as well as a glint of light from the future.

Sun and Horizon: The sun and horizon are powerful symbols. The sun often represents illumination, enlightenment, and the dawn of a new day or the future — a single destination for both views.

Eagle Interpretation: Together, the logo incorporates unexpected imagery of an eagle watching over us from the horizon. The eagle symbolizes vision, courage, and a connection to the spiritual world, serving as a messenger to the Creator.

Muiwatmnej Etuaptmumk: "Two-Eyed Seeing Fom Vision to Action"

I want to start this editorial by expressing my sincere gratitude to everyone who has supported the publication of this special issue of *JAED*. I joined the editorial board of *JAED* two years ago, during a time of transformation. Penelope Sanz, *JAED*'s Managing Editor, and I discuss some of these recent changes to the editorial board in this issue's concluding remarks. But in the meantime, I will use this editorial space to frame this issue of *JAED* by exploring the concept of Two-Eyed Seeing and what it means to me.

Today, many academics and practitioners have heard about Two-Eyed Seeing. It is an approach that weaves between Western and Indigenous knowledge systems to create space for collaborative co-learning across different ontologies and epistemologies (Bartlett et al., 2012; Roher et al., 2021). This special issue was inspired by a conference held in Membertou, Cape Breton, Nova Scotia, in the fall of 2023. The conference, Muiwatmnej Etuaptmumk: "Two-Eyed Seeing From Vision to Action," was organized by the Bras d'Or Lakes Collaborative Environmental Planning Initiative (CEPI) and its secretariat Unama'ki Institute of Natural Resources (UINR). The conference's primary motivation was to honour and celebrate the work and words of Dr. Albert Marshall and his late wife, Dr. Murdena Marshall, who were both Elders in Eskasoni, as well as to celebrate their friend and collaborator Dr. Cheryl Bartlett. Being guided by the principles of Etuaptmumk/Two-Eyed Seeing was one of the eight lessons in their collaborative co-learning journey (Bartlett et al., 2012).[1] The presentations delivered at the conference, and the articles in this special issue, demonstrate this lesson's appeal.

Over time, people have interpreted Two-Eyed Seeing in various ways, through their eyes, for their own journey. Personally, I refer to Etuaptmumk/Two-Eyed Seeing as a guiding principle honouring the teachings shared with me by Elder Albert Marshall, Dr. Bartlett, and the network of friends who continue to engage with them.

The Bras d'Or CEPI

When the Integrative Sciences Team adopted Two-Eyed Seeing as a guiding principle more than two decades ago, Elder Albert used the phrase to describe what he was witnessing all around him. At the time, he was working with L'nu Elders Charlie Joe Dennis, Murdena Marshall, Charlie Labrador, and others to transform the relationship between Mi'kmaw organizations and communities and various government departments: the Bras d'Or CEPI is a result of these efforts.

While we have included Senator Daniel J. Christmas' story of CEPI's formation in Lessons From Experience, some background context might prove helpful here. The Bras d'Or Lakes CEPI arose in response to a request

by the Cape Breton First Nations Chiefs in 2003. It was envisioned as "lead[ing] a unique collaboration of partners that incorporates both traditional Mi'kmaw and western perspectives in order to foster a healthy and productive Bras d'Or Lakes Watershed ecosystem" (Bras d'Or Lakes CEPI, 2011, p. 3): that is, it was formed to work through emerging social and interjurisdictional tensions to develop an overall environmental management plan for the Bras d'Or Lakes and watershed. Since its formation, CEPI has worked to enact Etuaptmumk/Two-Eyed Seeing by embracing the guiding principles of collaborative co-learning as established by the Integrative Science Program (Bartlett et al., 2012). CEPI continues to regularly host meetings and workshops with the broader local community and government partners from four levels of government—First Nations, federal, provincial, and municipal—to exchange information and stories and to foster collaborative co-learning relationships.

In 2023, CEPI hosted a conference whose theme "Muiwatmnej Etuaptmumk" was a specific response to Elder Albert Marshall's urgent call to move beyond just talking about Two-Eyed Seeing to enacting it in practice as a collaborative co-learning endeavour, both now and into the future. The conference was a resounding success. Chaired by the Honourable Mr. Daniel Christmas, the three-day event showcased enlightening presentations on integrating Indigenous and Western ways of knowing and doing. All the presentations in the main hall were simultaneously translated into the Mi'kmaq language to facilitate participative dialogue and discussion for all involved. The conference reinforced co-learning dialogue and action and inspired participants to integrate the principles of Two-Eyed Seeing in their professional and personal lives—one attendee described the experience as "enormously provocative," providing a beacon of hope and a call to action for all those committed to a harmonious and sustainable future in the region. In addition, it was an historic moment for Unama'ki/Cape Breton and for Dr. Elder Albert Marshall and Dr. Cheryl Bartlett, showcasing their vision of drawing on traditional and modern perspectives to solve local, national, and global challenges.

The Articles in the Special Issue

Building on the energy the conference theme inspired, this special issue shares some wonderful and thought-provoking papers, including the work of Indigenous and non-Indigenous scholars and communities of interest who are actively applying the tenets of Two-Eyed Seeing. In this way, we extend the dialogue beyond the conference network to those who wish to share their experiences and research using Etuaptmumk/Two-Eyed Seeing as a guiding principle for your own work.

Lessons from Experience highlights first-person accounts from groups using Two-Eyed Seeing to collaboratively navigate complex systems. Each of the stories refer to and rely on teams of researchers working together, embracing and modelling Two-Eyed Seeing in practice and sharing their stories in their own words. The section begins with Daniel Christmas' story of CEPI's journey to collaboration and is followed by a collective reflection on the lessons learned over the course of the partnership between the Unama'ki Institute of Natural Resources (The CEPI Secretariate), Confederacy of

Mainland Mi'kmaq, commercial fisher Darren Porter, Ocean Tracking Network, Acadia University, Dalhousie University, and Fisheries and Oceans Canada-Science (DFO-Science). The project is named Apoqnmatulti'k, which means "we help each other," a name given by Elder Albert Marshall to signify the partners' commitment to "learning from one another through shared decision-making, dialogue, and mutual benefit." The section closes with a case study about an Indigenous-led social enterprise in Ka'a'gee Tu First Nation (KTFN), Northwest Territories, by authors Ruby Simba and Maverick Simba-Canadien, who are community members from Ka'a'gee Tu First Nation, and collaborating researchers Laura Rodriguez-Reyes, Charlotte Spring, Andrew Spring, and Jennifer Temmer from Wilfrid Laurier University. The case study describes an ongoing collaboration between researchers and the community to achieve the community's vision of self-sufficiency during a time of rapid environmental change: it shares KTFN's vision of a revitalized enterprise that can bridge economic development needs and secure members' access to food while respecting and protecting their Dene values and knowledge.

In Lessons From Research, five academic papers highlight the multiplicity of meanings and methods ascribed to Two-Eyed Seeing. In "Land, Language, and Leadership," Tara Atleo analyzes agreements between Indigenous, municipal, and provincial governments in British Columbia's forestry sector, highlighting how the language of governance and partnership is used in those agreements. This is followed by a collaborative article written by Ella Henry, Andre Poyser, and Bettina Schneider that explores accountability frameworks in Indigenous financial institutions in New Zealand, Australia, and Canada: the authors discuss three case studies where Indigenous institutions and peoples—specifically First Nations in Canada, Torres Straight Islanders in Australia, and Māori in New Zealand—are creating novel approaches to governance. The third article by Eleanor Anderson applies Two-Eyed Seeing frameworks to tourism programming. While there has been a rise in Indigenous tourism and Indigenous-led tourism initiatives and programs across the country, Anderson argues that mainstream tourism associations should also incorporate Etuaptmumk/Two-Eyed Seeing into their policy and planning processes: for true reconciliation, all organizations must be more deliberate about integrating Indigenous communities from the initial planning stages. Tiffany Sack also uses Etauptmumk/Two-Eyed Seeing when analyzing codeveloped housing policies in two First Nations communities. She draws on participant interviews with members of Kitigan Zibi Anishinabeg, Quebec, and Potlotek, Nova Scotia, to explore the localized historical contexts of policy development. She also identifies principles for effective policy codevelopment, such as meaningful engagement, respectful dialogue, shared decision-making, and recognizing Indigenous rights and sovereignty. Finally, Kate Kish and Kate Pal consider Indigenous knowledge's potential to (re)shape technical and legal definitions of land. They discuss the opportunities and challenges of using Ecological Footprint and Biocapacity calculators as tools to quantify the availability of ecological assets, using Two-Eyed Seeing to identify the theoretical limitations of existing Biocapacity calculators, and, in the process, presenting an example of how integrating Indigenous understandings of territory, space, place,

and tradition into mainstream research methods can lead to new ways of approaching land claims.

All the articles in Lessons From Research demonstrate the places where Indigenous knowledge systems confront and are contested by colonial systems: this is where reconciliation happens. Some of the authors identify as Indigenous and ground their research in communities, while others focus on doing the work to learn from and about Indigenous world views and understand their personal positionality within colonial systems. All articles highlight the depth, breadth, and diversity of economic development efforts in all regions, including treaty territories, where communities and economies continue to adapt and adjust to modernization, political priorities, and climate change.

The special issue concludes with the Book Review section, in which Donn Feir, Dara Kelly-Roy, and Chloe Price review two books by Robin Kimmerer, *Braiding Sweetgrass* and *The Serviceberry*. The reviewers highlight the metaphors Kimmerer uses to contemplate an alternative to the dominant Western scientific and capitalist approach that informs our global and interconnected world. In *Braiding Sweetgrass* Kimmerer suggests, through story and analogy, another approach to globalization, one in which the values of collaboration, reciprocity, and sharing dominate, rather than competition, individuality, and hoarding. In *The Serviceberry,* Kimmerer translates these ideas to the field of economic development, focussing on the idea of metaphor as providing another way of viewing the organization and structure of economic models or belief-systems, opening the door for a multitude of ways a manager can "see" the strengths and weaknesses of all models at hand, thereby expanding their knowledge base.

Wela'lioq to the authors who contributed to this special issue and to all the reviewers who provided feedback on the articles along the way.

Mary Beth Doucette

END NOTES

[1] There are eight key lessons in Bartlett et al.'s teachings:

"1. Acknowledge that we need each other and must engage in a co-learning journey
2. Be guided by Two-Eyed Seeing
3. View "science" in an inclusive way
4. Do things (rather than "just talk") in a creative, grow forward way
5. Become able to put our values and actions and knowledges in front of us, like an object, for examination and discussion
6. Use visuals.
7. Weave back and forth between our worldviews.
8. Develop an advisory council of willing, knowledgeable stakeholders, drawing upon individuals both from within the educational institution(s) and within Aboriginal communities." (2012, p. 334)

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CEPI's Journey to Collaboration

Dan Christmas

FORMER CHAIR OF BRAS D' OR LAKES
COLLABORATIVE ENVIRONMENTAL PLANNING INITIATIVE

The Collaborative Environmental Planning Initiative (CEPI) is a one-of-a-kind organization in Unama'ki-Cape Breton. Fittingly, it was brought together through the vision and dedication of Charlie Dennis who was searching for a way to turn around the ecological health of the Bras d'Or Lakes or Pitupaq in Mi'kmaq, an inland estuary in the heart of Cape Breton. This essay will describe the events leading to the founding of CEPI and outline its first seven years of growth as it struggled with its identity.

Early Advocacy and the Middle Shoal Decision

To begin the story, we must start with its founder, the late Charlie Dennis of Eskasoni (1949-2015). Charlie was an oyster farmer early in his career and later he became one of the founders of the Unama'ki Oyster Farm that operated within Pitupaq/Bras d'Or Lakes. In the early 1990s, his passion for shellfish farming led him to become the Executive Director of the Eskasoni Fish and Wildlife Commission (EFWC). At the time, EFWC managed the communal fishing licenses for the Eskasoni Community. It was also during that time that I had the opportunity to work with Charlie.

I was working for the Union of Nova Scotia Indians (UNSI) now called the Union of Nova Scotia Mi'kmaq (UNSM), which is a tribal council representing most of the First Nations of Nova Scotia. One of my responsibilities was to oversee litigation related to Mi'kmaw Aboriginal and treaty rights. In 1990, the UNSI was successful in defending three Mi'kmaw fishers before the Nova Scotia Supreme Court Appeal Division. The court acquitted the fishers by finding that the fishers had an Aboriginal right to fish for food. Two of the fishers were harvesting in the Bras d'or Lakes.

In 1996, Little Narrows Gypsum (LNG), a US owned gypsum company, applied for federal permits to dredge the Middle Shoal located near the mouth of Pitupaq/Bras d'Or Lakes in the Great Bras d'Or Channel. Charlie raised questions about the impact of the proposed dredging operation on the migration of fish entering and exiting the Lakes. Officials from the two permitting federal agencies, Environment Canada (EC) and Fisheries and Oceans Canada (DFO), were unable to determine the project's impact

on fish migration, but nevertheless, they issued two federal permits to LNG on July 15, 1996. UNSI challenged the decision before the Federal Court of Canada and, on October 29, 1996, the Court set aside the two federal permits. The dredging project was halted, even though the dredging operation was 80% finished by the time of the decision.

Because of the court case, Charlie recognized the need for the Mi'kmaq to develop their own marine science capabilities rather than rely upon others for the work. He began discussing ways of bringing together traditional and western ways of research. In time, he was successful in securing federal funding to construct the Crane Cove Seafoods Building, which is located near the eastern entrance of Eskasoni. The building featured a marine science lab on the bottom floor next to Crane Cove.

Charlie also began articulating a vision of bringing together Mi'kmaw and non-Mi'kmaw partners to protect and preserve threatened marine species within Pitupaq/Bras d'Or Lakes. These discussions led to the formation of the Unama'ki Institute of Natural Resources (UINR) in 1999. As its founding executive director, he worked diligently to bring together the five First Nations of Cape Breton with government and industry partners. The task was not an easy one given the aftermath of the Middle Shoal decision. The working relationship between the Mi'kmaq and the two federal departments involved was strained to say the least.

Gathering Across Jurisdictions and Leading with Good Intent

Fortunately, Charlie was skilled in diplomacy and in creating and maintaining personal relationships. Shortly after the court decision, he invited three federal regional-director generals from Fisheries and Oceans Canada, Environment Canada, and Indian and Northern Affairs Canada (INAC) to come to Eskasoni and meet with the five Chiefs of Unama'ki (Cape Breton). Although the initial meeting was somewhat tense, Charlie was successful in bringing the group back together the following year for further discussions. He proposed that a workshop be held with Mi'kmaq and government officials about the ecological future of Pitupaq/Bras d'Or Lakes.

The workshop was held in Wagmatcook and Eskasoni in October 2003 with about 100 people in attendance. The gathering brought together federal, provincial, and municipal officials with Mi'kmaq representatives and community organizations. One of the purposes of the workshop was "to develop a working relationship between all entities that have a responsibility to help protect the Bras d'Or Lakes." [1] The workshop went much better than anticipated.

But Charlie was determined to broaden the circle by bringing community leaders, stakeholder groups, and local citizens into the discussion as well. A second workshop was held in Wagmatcook in October 2004; this time with about 150 people in attendance including 42 Mi'kmaw elders. Traditional Medicine Wheel teachings were introduced and subsequently endorsed. The Medicine Wheel includes four quadrants of a circle that symbolize knowledge, action, emotions, and spirit. "When the elements are not treated evenly, the Medicine Wheel is out of balance and will have a negative impact on an individual or subject at hand." [2] The Two-Eyed Seeing approach was also presented and discussed. Two-Eyed Seeing, or Etuaptmumk in Mi'kmaq, teaches that one eye

can see with the strength of Mi'kmaw traditional knowledge and the other eye with the strength of western scientific knowledge.[3]

These gatherings launched the process of developing a broad understanding about Pitupaq/Bras d'Or Lakes and began to identify what actions were necessary to restore their wellbeing. Charlie's vision of having all the necessary partners work collaboratively towards the environmental health of the Lakes was quickly coming together. He proposed that a new organization be formed by all four levels of government who had a responsibility for the ecological health of Pitupaq/Bras d'Or Lakes.

The vision statement of the proposed new body was "to lead a unique collaboration of partners that incorporate both traditional Mi'kmaq and western perspectives in order to foster a healthy and productive Bras d'Or Lakes Watershed ecosystem." [4] In the months that followed, Charlie spearheaded intense discussions between the five Unama'ki Chiefs, the five municipal mayors and wardens of Cape Breton, and senior officials of four provincial and three federal departments. Finally, on November 23, 2005, at a meeting of leaders and officials of the four levels of government, the Bras d'Or Charter was signed by all 17 representatives and the Collaborative Environmental Planning Initiative (CEPI) was created (See Appendix A). Charlie was appointed as its first chairperson.

In hindsight, the establishment of CEPI was a remarkable achievement for the time. It happened when the idea of reconciliation was not even a concept, let alone a topic of discussion. [5] Although First Nations had a long-standing relationship with the federal government at times it was a very difficult one. The federal government's failure to recognize Mi'kmaw land and treaty rights and the imposition of the *Indian Act,* residential schools, centralization, and the Sixties Scoop all had a devastating impact on First Nations in Cape Breton. The Middle Shoal dredging project did not make things any better.

The Mi'kmaw relationship with the Province of Nova Scotia had also been severely strained. The Mi'kmaq had ongoing court battles with the province over treaty hunting rights, tobacco, and tax exemption rights. The low point was the release of the final report of the Royal Commission of the Donald Marshall Jr. Prosecution in 1990. It portrayed a dysfunctional and broken relationship between the government of Nova Scotia and the Mi'kmaq. Although some progress was made during the 1990s, the relationship between the Province and the Mi'kmaw remained less than cordial.

The relationship between Unama'ki communities and Cape Breton municipalities was even worse; there really was no relationship to speak of at the time. Even though municipalities were the closest neighbors to First Nations, their respective government representatives rarely interacted with each other. In many ways, they were complete strangers. As the Marshall Report indicated, racism was still alive and well.

These realities highlight how remarkable the formation of CEPI was. It has now been almost twenty years since the Bras d'Or Charter was signed. We have not been able to identify another document like it. Its substance was unique, but its form was also quite different. The Charter was displayed on a traditional Medicine Wheel utilizing the four traditional colours: black, white, yellow and red. CEPI became a true reflection of the intended collaboration between Mi'kmaq and non-Mi'kmaw governments.

CEPI's coming-into-existence underscores Charlie's natural leadership abilities that opened the doors for relationships between the Mi'kmaq and non-Mi'kmaw governments. He was a true ambassador for the Mi'kmaw Nation. He also served two terms as the Chief of Eskasoni (2006—2010) before health issues forced him to step down. His successor, Chief Leroy Denny, commented that "[Charlie's] vision and quiet diplomatic approach achieved great success through collaboration, partnerships, working relationships and earned respect by so many." [6] CEPI is Charlie Dennis's living legacy.

CEPI's Early Years

Given the mandate of the 17 signatories of the Charter, collectively known as the Senior Council, a steering committee was established by the Senior Council to oversee CEPI's work. The CEPI Steering Committee initially consisted of 19 volunteer members drawn from the four levels of government and various non-government organizations who had expertise about Pitupaq/Bras d'Or Lakes. During its first full year of operation, the Steering Committee met on 10 different occasions and provided the necessary energy and momentum to launch the organization. Shelley Porter, a marine biologist, was selected as CEPI's first full-time coordinator. Mi'kmaw Elder, Albert Marshall, was appointed as CEPI's Elder Advisor on a part-time basis.

CEPI's early years were a time for gathering knowledge—both traditional ecological knowledge (TEK) and western scientific knowledge—and conducting research about Pitupaq/Bras d'Or Lakes. One of CEPI's first major projects was to bring together Mi'kmaw and non-Mi'kmaw elders from across Unama'ki to discuss and share their knowledge about Pitupaq/Bras d'Or Lakes. On May 3 and 4, 2006, 63 elders were brought together in Eskasoni. The participants discussed the evolution of plants, invertebrates, fish, birds, and mammals within the Bras d'Or ecosystem as well as changes in water quality and water levels over time. The TEK workshop provided a treasure trove of valuable information. [7]

CEPI and its members also conducted and completed a series of scientific studies and reports about Piti'paq/Bras d'Or Lakes. These reports included:

- *Bras d'Or Lakes Watershed Freshwater State of the Environment Report,* ADI Limited, 2006
- *Ecosystem Overview and Assessment Report for the Bras d'Or Lakes,* Nova Scotia, Oceans and Habitat Branch, Maritimes Region, Fisheries and Oceans Canada, 2007,
- *Bras d'Or Lakes Marine Environmental Water State of the Environment Report,* Bras d'Or CEPI and UINR, 2007
- *Developing an Environmental Management Plan for the Bras d'Or Lakes Watershed – an analysis of its scope and approach for addressing issues,* Jason Naug, Master's thesis, Dalhousie University, 2007

The purpose of the TEK workshop and the subsequent reports was to provide the background for the development of a management plan for Pitupaq/Bras d'Or Lakes. The Charter stated that the purpose of CEPI was "to develop an overall management plan for the Bras d'Or Lakes Watershed ecosystem and to facilitate its implementation by governments and other relevant stakeholders." [8] From the outset, a Management Planning Task Team was established to oversee the development of the management plan. A strategy session, facilitated by Fourth Wave Strategy Inc, was held on July 4 and 5, 2007. The purpose of the session was to produce a roadmap for the delivery of a draft management plan to the Senior Council by November 1, 2008.

However, by 2007, First Nations members had begun to question the value of CEPI. Several Mi'kmaw members felt that their input was not being valued and that their advice was often ignored. Elder advisor, Albert Marshall, had repeatedly put forward Mi'kmaw perspectives at CEPI meetings but he had become frustrated and impatient that First Nation concerns were not being adequately addressed. He commented that the Mi'kmaw worldview was not being accepted or included in the CEPI process. It was also mentioned that there was even resistance to the inclusion of Mi'kmaw imagery in CEPI materials. It was obvious that the strong Mi'kmaw cultural imprint left from the 2003 and 2004 workshops was beginning to fade. Mi'kmaw representatives were having serious discussions about leaving CEPI.

These concerns were first brought to my attention on February 27, 2008, at a lunch meeting in Membertou by several Mi'kmaw members of CEPI including then Chief Charlie Dennis and Elder Albert Marshall. I was quite surprised and shocked that the relationships within CEPI had deteriorated so soon after its founding. I had assumed that once the foundation had been laid the implementation of the new organization would proceed smoothly. Sadly, it appeared to me that the Medicine Wheel teachings and the Etuaptmumk/Two-Eyed Seeing approach had fallen by the wayside (see Figure 1).

FIGURE 1 - Medicine Wheel

I was asked if I would become more involved with the CEPI process. Over the next two and half years, I played several roles in assisting with CEPI's restructuring. My first task was to determine what had happened within CEPI after the signing of the Charter in November 2005. I suggested an internal evaluation be conducted and its findings and recommendations be presented at the next meeting of the Senior Council scheduled for April 2008.

Both Dr. Rene E. Lavoie (a retired DFO fisheries scientist) and I were commissioned with the task. We reviewed all available documentation with CEPI. After I had re-read the proceedings from the 2003 and 2004 workshops, I compared CEPI's achievements with the four quadrants of the Medicine Wheel (see diagram below). The exercise revealed some startling results.

It was evident that the knowledge and action quadrants had demonstrated considerable progress since 2005. CEPI had increased its knowledge about Pitupaq/Bras d'Or Lakes through its TEK workshop and its various studies and reports. It also demonstrated action by producing the Charter (2005) and Terms of Reference (2006) and conducting a Project Strategy Session – Synopsis and Project Plan (2007). The knowledge and action quadrants are sometimes viewed as 'strong areas' for non-Indigenous Peoples.

However, it was obvious that there was very little progress in the other two quadrants feelings/emotions and spirit/values areas of strength that are often associated with Indigenous Peoples. It was evident that Mi'kmaw participation in the CEPI process had significantly diminished by 2007. The views and perspectives expressed by Mi'kmaw representatives were often not respected and they certainly felt marginalized by the entire process. Unfortunately, little or no progress had been achieved in spirit/values quadrant since the 2004 workshop, which had upheld strong spiritual values such as trust building, cooperation, respect, and cultural sharing.

Dr. Lavoie and I submitted the executive summary of our internal evaluation report titled *'Unama'ki First Nations and CEPI'* to the CEPI Senior Council on April 8, 2008. In our findings, we commented that "based on the Medicine Wheel analysis, it appears that CEPI has lost its balance and harmony that was envisioned in 2003 and 2004… From a Mi'kmaw perspective, all four quadrants are vital and critical to the success of CEPI." (fn). Without progress in the feelings/emotions and spirit/values quadrants, the Mi'kmaq had experienced a serious disconnection with CEPI.

Among our recommendations, Dr. Lavoie and I suggested that CEPI "consider hosting a Talking Circle of participants in the process so far to clear the air." [9] In the coming months, Dr. Lavoie and I discussed the evaluation report with the Steering Committee and a Mi'kmaw learning component was added to the Committee's monthly agenda. Presenters were invited to share their teachings about the Medicine Wheel and Etuaptmumk/Two-Eyed Seeing approach with the Steering Committee. The Committee also suggested that Mi'kmaw elders should be brought together prior to the CEPI Talking Circle. Their advice about CEPI would be crucial for its future. Both the Elders meeting and the Talking Circle with the Steering Committee members occurred during the summer months of 2008. It was an intense period of learning about each other, self-reflection, and acceptance of our differences.

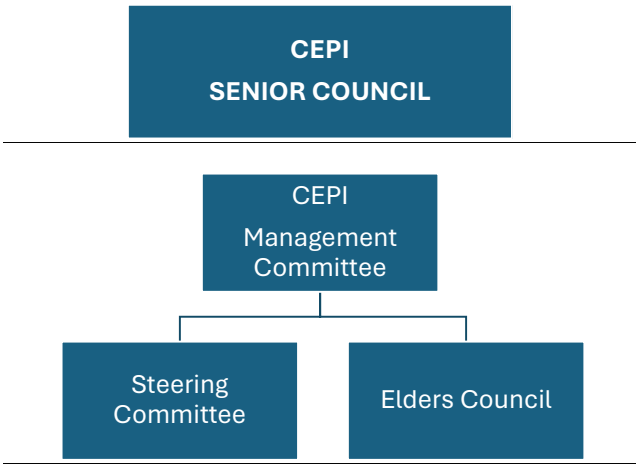
When the Steering Committee reconvened in the fall of 2008, there was a renewed sense of purpose in CEPI's vision and mandate. The Mi'kmaw learning component continued with the Steering Committee. We discussed improvements to CEPI's management structure, integrating input from the Elders, and revising CEPI's Terms of Reference. There was also a considerable amount of discussion as to how to approach the proposed management plan for Pitupaq/Bras d'Or Lakes.

In 2009, one focus of my work with CEPI was improving its management structure. By this time, there were approximately 40 members serving on the Steering Committee from at least 20 different government departments, First Nations, and other organizations. It was becoming increasingly difficult to manage such a large and diverse group. Informal discussions were held with various government and First Nations leaders and a revised management structure was discussed with the Steering Committee on June 26, 2009.

On December 1, 2009, I presented a recommendation to the Senior Council that a seven-member management committee be established with one representative for each of the four levels of government plus three ex-officio members. The three ex-officio members would be the chair of the Steering Committee, the UINR Executive Director, and the CEPI Coordinator. The management committee would report directly to the Senior Council and meet monthly. The new committee would be responsible for the annual workplan, the budget, staffing, communications, and reporting. I also recommended that the Steering Committee meetings be held quarterly. The recommendation was unanimously accepted by the Senior Council. Please see the new organizational chart below.

My second focus was to develop a path forward for the drafting of the management plan for Pitupaq/Bras d'Or Lakes. A previous task team was established in 2005. However, due to CEPI's organizational problems, the task team was unable to move forward. I recommended that a new task team be formed with the goal of preparing a draft management plan by March 31, 2010. This recommendation was also approved by the Senior Council on December 1, 2009. Dr. Lavoie and I offered to co-chair the new Management Planning Task Team.

FIGURE 2
New Organizational Chart



Unfortunately, Chief Charlie began to experience serious health problems around this time, so I was asked to serve as the chair of the Steering Committee on an acting basis. I also offered to serve as the Unama'ki representative on the new Management Committee, also on an interim basis. Charlie assumed both roles after his return to health in 2011.

Rejuvenation: Planning as a Process & The Lakes as a Living Being

The new Management Planning Task Team held its first meeting on January 22, 2010, in Sydney. Dr. Lavoie and I succeeded in assembling a diverse group of individuals who shared a passion for the Bras d'Or Lakes and who also brought relevant expertise to the table. The group included Pat Bates (Bras d'Or Lakes Stewardship Society), Shelley Denny (UINR), Paul Gentile (DFO), Annie D. Johnson (UINR), Rick McCready (Cape Breton Regional Municipality), Lorne Penny (DFO), Shelley Porter (CEPI), Guy Rochon (EC) and Lisa Young (UINR). Chief Charlie also participated when he could.

From the outset, the Task Team decided "to write a document that would be inspiring, simple, short, non-threatening, saleable and engaging." [10] Given that the goal was to produce a draft by March 31st, the group worked intensely over the winter months. Remarkably, a transformation began to take place. The Etuaptmumk/Two-Eyed Seeing approach became most evident during the initial meetings. Centuries of traditional and scientific knowledge about the Lakes was shared and expressed. The group embraced the traditional teaching that the Lakes are a living being. Soon members of the Task Team began drafting 18 vignettes in the first-person voice of Pitupaq/Bras d'Or Lakes. Each section began with "I am the heart of Cape Breton." Appropriately enough, the document was titled The Spirit of the Lakes Speaks.

The other big change was also unexpected. The drafting exercise was no longer about writing a management plan (a noun) but instead the Task Team began describing a management planning process (a verb) for Pitupaq/Bras d'Or Lakes. The group saw the management plan as a static document that would only be relevant for a short period of time. By outlining a planning process, future generations would have a clear process as to how they could work together in taking care of Pitupaq/Lakes regardless of the issues at hand. Like the Charter, *The Spirit of the Lakes Speaks* introduced a one-of-kind document—an on-going planning process—that would apply the Medicine Wheel teachings to Pitupaq/Bras d'Or Lakes.

The March 31st draft was submitted to a group of reviewers from a mix of federal, provincial, and municipal agencies as represented on the Senior Council. During the summer of 2010, the Task Team reconvened and integrated the reviewers' comments into the final draft. After discussions with the Steering Committee, the final version was presented to the Senior Council on October 18, 2010, and, subsequently, approved. As a point of interest, document's executive summary was written in English, French, Gaelic, and Mi'kmaq—the languages spoken around Pitupaq/Lakes. The printed version was publicly released on July 8, 2011, at an outdoor ceremony along the shores of Crane Cove at Eskasoni.

The last remaining piece in the restructuring process was to update CEPI's Terms of Reference. In the previous couple of years, several significant changes had been made about how CEPI would operate. As mentioned earlier, there were major changes to CEPI's management structure. The Spirit of the Lakes Speaks had outlined a new planning cycle plus it had articulated eight new guiding principles for CEPI that "offer a moral compass, or theme, which will influence how decisions are made and which actions are to be taken." [11] These principles included:

- We are part of Nature, not the owners of Her.
- We will assist in healing previous damages.
- We will consider the impact of our present actions on future generations.
- We will pay attention.
- We will cause no net loss of habitat.
- We will work together.
- We are accountable. [12]

These new components were incorporated in the revised Terms of Reference. After extensive discussions with the Steering Committee, the updated Terms of Reference were presented and approved by the Senior Council on October 18, 2010. For me, this completed a journey that began on February 27, 2008, when I was first advised that CEPI was in danger of collapsing. Charlie returned to good health the following year and I stepped down from CEPI confident that the Medicine Wheel teachings and the Etuaptmumk/Two-Eyed Seeing approach had found a home within the organization.

One of the most memorable moments was the day when *The Spirit of the Lakes Speaks* was released. It was a beautiful sunny July morning. The gathering was held near the wharf along Crane Cove in Eskasoni. The Lake was shimmering in the sunlight. CEPI had arranged for a large outdoor tent for the announcement, which I had agreed to MC.A large crowd turnout for the event. It was a perfect morning in many ways.

My only regret was that Charlie was not there with us that morning. He was still in a local hospital. But as we were wrapping up the event, I noticed someone walking down the driveway leading towards the tent. I couldn't believe my eyes. It was Charlie. He had just been released from the hospital that morning. I remember giving him a copy of *The Spirit of the Lakes Speaks* and telling him that I was giving him back his chair. The smile on his face was priceless.

About the Authors

Dan Christmas, a Mi'kmaq from the Community of Membertou, assisted Charlie Dennis with the founding of CEPI and served as the interim Chair of CEPI from 2009-11 while Charlie was on sick leave. Dan was appointed as CEPI Chair when Charlie passed away in 2015 and continued in that role until his retirement in 2023. During

his career, Dan worked for the Union of Nova Scotia Indians for 15 years and was employed with Membertou for another 25 years. He also served as a Canadian Senator from 2016 to 2023.

Charlie Dennis from Eskasoni (1949-2015) was instrumental in the creation of several initiatives that promoted the wellbeing of the Bras d'Or Lakes including the Eskasoni Fish and Wildlife Commission, the Unama'ki Institute of Natural Resources and the Collaborative Environmental Planning Initiative just to name a few. He was also elected as Chief of Eskasoni and served two terms from 2006 to 2010.

END NOTES

1 Unama'ki Institute of Natural Resources, *Bras d'Or Lakes Workshop 2003 Proceedings,* 1.
2 Unama'ki Institute of Natural Resources, *Bras d'Or Lakes Workshop 2004 Proceedings,* 15.
3 This concept was developed and introduced by Albert and Murdena Marshall of the Eskasoni First Nation, NS to the Integrative Science program at University College of Cape Breton in the early 1990s.
4 Collaborative Environmental Planning Initiative, *Bras d'Or Charter.* https://brasdorcepi.ca/cepi-homepage/bras-dor-charter/.
5 The TRC process in Canada would be launched two years later, in 2007.
6 Greg MacNeil, "When Charlie Spoke, people listened," Cape Breton Post, May 1, 2015.
7 Collaborative Environmental Planning Initiative, *Bras d'Or Lakes Traditional Ecological Knowledge Workshop Proceedings.*
8 Collaborative Environmental Planning Initiative, *Bras d'Or Charter.* https://brasdorcepi.ca/cepi-homepage/bras-dor-charte r/.
9 Christmas, Dan and Rene E. Lavoie, *Unama'ki First Nations and CEPI, An Internal Evaluation,* 3.
10 Bras d'Or Lakes Collaborative Environmental Planning Initiative, *The Spirit of the Lakes Speaks,* 50.
11 Ibid, 17.
12 Ibid, 18.

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APPENDIX A


Bras d'Or Charter
Bras d'Or Lakes
CEPI
Collaborative Environmental Planning Initiative
VISION
To lead a unique collaboration of partners that incorporate both traditional Mi'kmaq and western perspectives in order to foster a healthy and productive Bras d'Or Lakes Watershed ecosystem
PURPOSE
To develop an overall management plan for the Bras d'Or Lakes Watershed ecosystem and to facilitate its implementation by governments and other relevant stakeholders
OBJECTIVES
A balance of environmental, social, cultural and institutional objectives will be pursued to ensure the health and sustainable use of the Bras d'Or Lakes Watershed ecosystem
By signing this Bras d'Or Charter, we commit to work together to pursue the vision, purpose and objectives outlined for the Bras d'Or Lakes Watershed by the Collaborative Environmental Planning Initiative. (CEPI) Signed on 23 November 2005 at Eskasoni, Cape Breton, Nova Scotia.
Chief Wagmatcook First Nation–Lester Peck
Chief Membertou First Nation–Terry Paul
Chief Eskasoni First Nation–Blair Francis
Chief Wa'kogma'q First Nation–Sandy Googoo
Chief Potlotek First Nation–Wilbert Marshall
Cape Breton Regional Municipality
Victoria County
Inverness County
Richmond County
Town of Port Hawkesbury
Deputy Minister, NS Department of Natural Resources
Deputy Minister, NS Department of Agriculture and Fisheries
Deputy Minister, NS Department of Aboriginal Affairs
Deputy Minister, NS Department of Environment and Labour
Regional Director General, Atlantic, Environment Canada
Regional Director General, Department of Fisheries and Oceans
Regional Director General, Indian and Northern Affairs Canada

Apoqnmatulti'k: Turning the Tide for Collaborative Research

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ACADIA UNIVERSITY

Rod Bradford
FISHERIES AND OCEANS CANADA

ABSTRACT

A collaborative and holistic approach is essential to achieving a healthy and resilient aquatic ecosystem. Apoqnmatulti'k (Mi'kmaw for "we help each other") is a partnership that involves the Unama'ki Institute of Natural Resources, the Confederacy of Mainland Mi'kmaq, commercial fisher Darren Porter, the Ocean Tracking Network, Acadia University, Dalhousie University, and Fisheries and Oceans Canada-Science. Apoqnmatulti'k is founded on the shared participation of Mi'kmaw, local, and Western scientific knowledge holders, aiming to better understand valued aquatic species in Pitu'pa'q (Bras d'Or Lake) and Pekwitapa'qek (Minas Basin). Guided by the principle of Etuaptmumk (Two-Eyed Seeing), Apoqnmatulti'k serves as a model for how the incorporation of diverse perspectives can enhance knowledge, ensure transparency and accessibility of information, and transform fisheries management and conservation. This paper focuses on the challenges, lessons learned, and achievements derived from collaboration and the development of a strong partnership.

KEYWORDS: Two-eyed seeing; aquatic telemetry; integrated science; fisheries management; fish ecology; marine biology; animal tracking

POSITIONALITY

We are a collaborative group of Indigenous and non-Indigenous individuals who collectively hold a complement of Mi'kmaw, local, and western knowledge. Our backgrounds span the natural, social, and integrative sciences, as well as technical and traditional techniques and approaches. While we come from different places, we work together in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. In Mi'kma'ki, the treaties were established not to determine ownership of land but to ensure peace and friendship among all who live in the region. This is the spirit in which this project was born and is central to how we work together. Our project was named Apoqnmatulti'k ("we help each other") by Mi'kmaw Elder Dr. Albert Marshall. Apoqnmatulti'k signifies our commitment to learning from one another through shared decision making, dialogue, and mutual benefit. This paper is a collective reflection on the lessons we have learned over the course of our partnership and is inspired by what we shared at the Muiwatmnej Etuaptmumk Conference in Membertou, Unama'ki, in November 2023. While we continue to explore what reconciliation can look like in the sciences, we hope that Apoqnmatulti'k can serve as a model for others working collaboratively across knowledge systems and worldviews.

INTRODUCTION

Around the world, many aquatic species are in decline from anthropogenic impacts including overfishing, habitat destruction, pollution, and climate change (Costello & Ovando, 2019; Reid et al., 2019). Fisheries management is complex, evolving, and—in many jurisdictions—overly reliant on a western science-driven approach to guide its policies (Holling, 2001). In Canada, academic, government and, industry researchers feed data into regulatory bodies to support decision making (Hamelin et al., 2023), but some argue that these decisions are overly politicized and made by managers thousands of miles away from where the impacts are felt (von der Porten et al., 2019).

In contrast, Indigenous and coastal communities have had a rich relationship with the coast and its inhabitants for millennia: however, bridging or integrating their perspectives and knowledge into regulatory decisions and management frameworks remains challenging (Alexander et al., 2021). Fisheries management in Canada continues to be structured around the coloniality of positivism, imperialism, and capitalism (Cadman et al., 2024a). As a result, Indigenous perspectives and wisdom about fisheries and oceans have been lost over time, with key pieces of historical and lived knowledge missing from management and regulation frameworks. If management decisions are to be truly effective, holistic, and inclusive, they must include the perspectives of those with Indigenous and local knowledge—the people who live, work, and play in coastal communities.

Apoqnmatulti'k is a collaborative initiative that brings together three knowledge systems (Indigenous, local, and western scientific) to generate and mobilize information on culturally, ecologically, and commercially valued aquatic species in Mi'kma'ki (Atlantic Canada). Founded in 2018 with funding from the Natural Sciences and Engineering Research Council of Canada, Apoqnmatulti'k is a partnership among the Unama'ki Institute of Natural Resources (UINR), Confederacy of Mainland Mi'kmaq (CMM), commercial fisher Darren Porter, Ocean Tracking Network (OTN), Acadia University, Dalhousie University, and Fisheries and Oceans Canada- Science (DFO-Science).

The credibility of non-scientific knowledge is often questioned or not recognized (Latulippe, 2015). While this perception is starting to shift, it is rare that all three knowledge systems are brought together through a united collaborative effort. Apoqnmatulti'k emerged out of a shared desire to demonstrate the power in bringing all perspectives to the table from the beginning. Built on joint participation from Mi'kmaw, local, and western scientific knowledge holders, Apoqnmatulti'k has two core goals: (a) gather and apply knowledge about valued aquatic species to help inform stewardship initiatives for current and future generations, and (b) advance a collaborative and holistic research model that ensures transparency and accessibility.

The project's approach is relatively novel, but it should not be. Collaborative partnerships are one avenue for continuing the process of reconciliation with Indigenous peoples and ensuring that treaties are honoured and upheld. In Mi'kma'ki, these treaties were established to ensure peace and friendship among all who live in the region. As aquatic species and ecosystems face growing threats, building trust and relationships

with communities that depend on these resources deepens our collective understanding and stewardship of the natural world.

Seeing with Two Eyes

Apoqnmatulti'k is guided by the principle of Etuaptmumk (Two-Eyed Seeing). Conceptualized by Mi'kmaw Elder Albert Marshall and the late Murdena Marshall, it refers to learning to see from one eye with the strength of Indigenous knowledge and ways of knowing and from the other eye with the strength of western knowledge and ways of knowing (Bartlett et al., 2012). As a result, Two-Eyed Seeing requires space for co-learning and co-development through respectful dialogue. In keeping with this principle, all aspects of Apoqnmatulti'k have been co-developed, such as project governance, communication outputs, knowledge co-production, and capacity building. Even so, the group has continually reckoned with positionality and power in project relationships and functioning. Just as fisheries management derives power from its coloniality, so do universities and their partnerships. Partnerships formed with the best of intentions can still falter when university systems control their work (Cadman et al., 2024b). To that end, sustained conversation and reflection on who project members are and what expertise they bring are essential, and team members have worked hard on listening with open hearts to find shared space for learning.

Drawing on the strengths of Mi'kmaw, local, and western scientific knowledge systems—and learning to see with both eyes—enables partners to gather new information about study species and has the potential to transform decision making and fisheries management. Dr. Shelley Denny, senior advisor at the Unama'ki Institute of Natural Resources, explains that true collaboration requires relinquishing comfort and familiarity and embracing new-to-you perspectives:

Two-Eyed Seeing expects you to leave your comfort zone and explore another way of interpreting the world around you. When we do this, our knowledge systems will collide. While this may be a potential barrier to collaborating, it is also the opportunity for Two-Eyed Seeing. This is where values and beliefs, and underlying tensions, surface. Instead of walking away from those collisions, Apoqnmatulti'k uses them to guide our work.

FIGURE 1
At the Muiwatmnej Etuaptmumk Conference

Note. Pictured are project partners Dr. Shelley Denny (UINR), Meghan Borland (OTN), Evelien VanderKloet (OTN), Skyler Jeddore (UINR), and Alanna Syliboy (CMM) at the Muiwatmnej Etuaptmumk Conference, hosted in Membertou, Unama'ki, in November 2023.

Bridging Apoqnmatulti'k and Communities

As part of putting Etuaptumumk into practice and facilitating knowledge transfer, paid community liaisons have been appointed to the Pitu'pa'q (Bras d'Or Lake) and the Pekwitapa'qek (Bay of Fundy), two study sites in Nova Scotia. While not typically built into a natural science project, community liaisons play a critical role in connecting communities to the project and ensuring community considerations and values are front and centre in project activities.

Skyler Jeddore, the community liaison and field technician for the Pitu'pa'q, demonstrates how Etuaptumumk can be practiced. Growing up in Eskasoni and based at UINR, Jeddore has spent his entire life on the Bras d'Or. His strong ties to the community and good-natured personality make him a natural at bridging the gap between project activities and community interests. An avid recreational fisher, Jeddore works closely with Mi'kmaw harvesters to gather samples. As Jeddore explains,

> Mi'kmaw fishers know not to fish lobster during certain times in the summer out of respect that lobsters are molting. By working with Mi'kmaw harvesters, we ensure we're tagging at the right time of year. When we set out to collect samples in the fall, we check for shell thickness and wait for these cues to start tagging. Together, we have the shared goal of waiting to start tagging once the lobsters finish molting that season.

This is one of many examples of how Jeddore's knowledge about important ecological cues helps inform research plans.

FIGURE 2
Deploying Acoustic Receivers into the Pitu'pa'q (Bras d'Or Lake)

Note. Pictured are Skyler Jeddore (UINR) and Nathan Glenn (OTN) in the field. Photo credit: Nicolas Winkler Photography.

Alanna Syliboy is another key member: she is the Culture, Education, and Engagement Manager at CMM and the Apoqnmatulti'k community liaison in the Pekwitapa'qek. Her deeply rooted connection to her culture and community help guide and shape project activities, including communications outputs and outreach events. Through her passion for sharing knowledge, Syliboy is continually finding ways to bring Mi'kmaw practices and teachings into the project, whether through building traditional eel pots or beginning meetings with an invitation to reflect on how partners are—or can—put reconciliation into action.

Project members like Jeddore and Syliboy are key to redirecting the project if it becomes too narrowly focused on western science. They also reinforce the importance of taking time to build relationships, thinking holistically, and listening to learn instead of listening to respond. As Syliboy notes,

> Apoqnmatulti'k is about sharing, growing, and learning for the future of our environment and all that is needed to sustain life for the next seven generations. By learning from one another, we are able to strengthen our collective knowledge and understanding of the natural world.

Co-Learning in Practice

Within a collaborative project, each team member and their associated organization brings unique core values and desired outputs to the table. Since Apoqnmatulti'k's inception, partners have worked together to understand these core values and to adapt project processes and activities to better reflect individual and organizational priorities. For Syliboy and Jeddore, Apoqnmatulti'k offers an avenue to restore and rebuild knowledge that has been lost through generations of oppression and the legacy of residential schools. But developing relationships with community members and sharing knowledge takes time and flexibility: it does not happen in a boardroom or during a standard work week. It requires conversations in communities, for partners to be present and take the time to connect with elders, youth, and harvesters, who are all integral to informing research activities.

To do this work properly and meaningfully, academic partners must let go of control and traditional academic timelines. As Evelien VanderKloet, senior operations manager at OTN,[1] explains,

> There are timeline pressures that fall onto western science that do not align and often actively contradict the amount of time it takes to build relationships, seek input from communities, and incorporate Indigenous values and perspectives into the research study. Collaborative projects like Apoqnmatulti'k require academic partners to let go of control over the timing of research activities, the timing of meetings–including how long meetings might take–and what's important to be discussed. They have to not only commit to taking this time, but they also need to value the time it takes to do this work meaningfully.

Through Apoqnmatulti'k, project partners have learned the importance of sharing information beyond the traditional academic sphere in order to reach a broader audience. Examples include social media posts in plain language and the translation of materials, infographics, and videos into Mi'kmaw. Within Apoqnmatulti'k, there is a communications subcommittee, with representation from each knowledge system, that works together to co-develop content and communications outputs.

However, while sharing information is important, it is essential that First Nations' data sovereignty is recognized and respected. To support this, the project has a commitment to abide by the First Nations Principles of Ownership, Control, Access, and Possession (OCAP), and all partners receive training through the First Nations' Information Governance Centre. These principles help determine not only how information is shared, but also collected, used, and stored. Per Syliboy,

> It is important to make sure we are respectful. When we gather knowledge, we need to have permission and consent because it is not our information. We must let the individual pave the way to how it will be shared and what that will look like and that may not match a typical academic timeline.

FIGURE 3
Fishing for Punamu

Note. Alanna Syliboy (CMM) tosses a net into the Shubenacadie River to catch punamu (Atlantic tomcod).

Conflict as a Catalyst

While co-learning and co-development are key to building a holistic and inclusive research paradigm, it comes with challenges. Darren Porter, a local commercial fisherman and project partner, describes his onerous journey in developing a relationship with academia and the people working within it:

> It started in conflict—I disagreed with the papers I was reading. The reality was different compared to what academics were publishing, and it took a long time to build relationships with them. My relationship with Mi'kmaw communities started in friendship—I had some friends with like-minded ideals, which led to networking. I'm very honoured to now be at the table, and to help dismantle the idea that one system of knowledge is the only one.

What started as a collision of two worlds burgeoned into a transformative approach that brought scientists and fishermen together to find more comprehensive answers to their mutual questions. Dr. Michael Stokesbury, professor of biology at Acadia University, recognizes the power and necessity of this approach:

> Both local and Indigenous knowledge holders are closely tied to the natural process of the ecosystem. By pairing these knowledges with western scientific methods, we not only extend the time scale of observation from tens to hundreds to thousands of years, but we also learn new ways to observe and understand the natural world that science alone cannot achieve. This is critical for determining long term temporal trends in biological and physical variables, and, therefore, for gaining a comprehensive understanding of the natural history of organisms and the functioning of healthy ecosystems.

Denny echoes the importance of bringing all perspectives to the table. She emphasizes the necessity of not only expecting conflict along the way, but of learning how to properly navigate it for the benefit of relationships and the project as a whole:

> Expect those bumps, I think those happen in relationships, and knowing how to navigate those bumps is very handy. Even if you don't know, it's just as important to have that courage and honesty to come forward and be truthful to your partners.

Turning the Tide

Apoqnmatulti'k has built a successful, holistic partnership, one that takes time to establish and requires listening, learning, and finding resolutions along the way. The project is shaped by research that is guided by, and responds to, community knowledge and priorities. Its co-developed approach to understanding the aquatic environment enhances the quality and richness of the information collected and ensures transparency and accessibility to communities that rely on healthy coastal ecosystems. VanderKloet stresses that while the project's approach is relatively novel, it can be tailored to any research project:

> While this project is place-based, the approach can be adapted and applied anywhere. It starts with the premise that we all hold knowledge, and an exchange of what we do know, what we do not know, what we want to know. All of that is based on the understanding that in order to truly do collaborative science, all partners need to be at the table from the beginning.

Apoqnmatulti'k is generating new, valuable information on commercially and culturally important species in Nova Scotia and is facilitating co-learning and the transfer of knowledge across cultures and sectors, slowly and steadily helping turn the mainstream paradigm of research and management on its head. At its core, this is what Two-Eyed Seeing is all about: generating transformative knowledge with the purpose of bringing about transformative change and action. With each new hurdle and accomplishment, Apoqnmatulti'k is demonstrating possibilities for turning the tide for a more inclusive and just future. As Denny notes,

> When we talk about Two-Eyed Seeing we talk about transformative knowledge but what about transformative change and the action that Elder Albert Marshall is always talking about? That's what we want. We want action. Through this project we have demonstrated a lot of change and a lot of action.

Apoqnmatulti'k's purpose extends well beyond aquatic animal tracking and the collection of scientific data—it provides a scaffold for co-learning, equal participation, and building relationships and trust that reflect the treaties encircling us all.

FIGURE 4
Apoqnmatulti'k Steering Committee Members

Note. Apoqnmatulti'k is a collaborative partnership comprised of the UINR, CMM, commercial fisher Darren Porter, OTN, Acadia University, Dalhousie University and DFO-Science.

END NOTES

[1] OTN brings tracking equipment and expertise to the project in addition to providing project management and communications support.

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Envisioning Community Economic Development Through an Indigenous-Led Social Enterprise in Ka'a'gee Tu First Nation, Northwest Territories

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ABSTRACT

The Ka'a'gee Tu First Nation, in Kakisa, Northwest Territories, is cultivating food to strengthen their food systems against multifaceted threats posed by colonization, climate change, and socioeconomic disparities. Community efforts to grow food are new and stand as an adaptation response to their changing food system. Although establishing food-growing initiatives has been a gradual process, their success is now evident with substantial quantities of food being produced. This research addresses the need for a sustainable food distribution model in Kakisa to ensure food is accessible to the community. Using a participatory action research approach, community members shared their vision, leading to the exploration of an Indigenous-led economic model merging Western approaches with Indigenous values. Kakisa's enterprise will support food distribution systems, including a store, and act as a space to host social gatherings,

facilitate Traditional Knowledge workshops, and share food. The community's vision of an Indigenous-led social enterprise embodies a holistic approach to economic development that emphasizes social bonding and community well-being over pure economic activities. Accomplishing this vision requires continuous efforts toward fostering collaboration, nurturing cultural resurgence, and empowering Indigenous leadership within economic development.

KEYWORDS: Climate change; Aboriginal economic development; food sovereignty, food security, traditional knowledge, Two-Eyed seeing; First Nations social enterprise

POSITIONALITY STATEMENT

The partnership between Wilfrid Laurier University and Ka'a'gee Tu First Nation (KTFN) began in 2013, fostering a collaboration built on trust that continues to this day, with a focus beyond research alone. We—Laura, Charlotte, Jennifer, and Andrew—are settlers working within KTFN territory. Dr. Andrew Spring has overseen this partnership since its inception, with others (including ourselves) joining the collaboration at different points over the years, living in the community for extended periods, building relationships, and working alongside the community to help achieve their vision of self-sufficiency.

Ruby and Maverick are community members of KTFN, living in the settlement of Kakisa. Their perspectives and contributions are rooted in the rich cultural and historical context of the Dene community, which shapes our collaborative efforts.

INTRODUCTION

Situated on the east side of Kakisa Lake (called K'agee Tue in the local language, Dene Zhatie) in the Dehcho region of the Northwest Territories (NWT), the community of Kakisa is home to the Ka'a'gee Tu First Nation (KTFN). The Dene People of Kakisa have lived in this region since time immemorial, with many continuing to practice land-based activities as part of their livelihoods. However, with the rapid onset of climate change, community members are finding it increasingly difficult to access traditional foods from the land (Spring et al., 2018). Since 2013, KTFN has been collaborating with university researchers on projects to support climate change adaptation and food system sustainability. KTFN's Local Food Action Plan (2025-2030) aims to increase the community's self-sufficiency and food security and to advance holistic community well-being (KTFN & Temmer, 2024). As part of this planning process, community members have discussed the best ways to support community well-being in ways that incorporate both Western notions of economic development and Dene values centered

on sharing, reciprocity, and the health and sacredness of the land and all beings. This visioning process fits well with the Mi'kmaq concept of *Etuaptmumk,* or Two-Eyed Seeing, as it articulates KTFN's existing strengths of working across multiple ways of knowing, being, and doing that align with community values (Young, 2021). In this case study, we share KTFN's vision for the form and function of a revitalized enterprise that can bridge economic development needs and aspirations to secure members' access to food while respecting and protecting their Dene values and knowledge. This work is an ongoing collaboration between researchers and the community to achieve the community's vision of self-sufficiency during a time of rapid environmental change.

Participatory Action Research and Two-Eyed Seeing

Kakisa, in many ways, serves as a model community to highlight climate change adaptation and sustainability projects. By building strong connections with researchers, the community has been able to collaborate with students and regional organizations to test new ideas. Participatory Action Research (PAR) serves as the basis for this work. The results of KTFN's collaborations can be seen in the community, from composting and recycling programs to youth culture camps to greenhouses. These projects are a source of pride to all those involved. PAR is well suited to Indigenous communities due to its emphasis on power-sharing: researchers and community members work closely together to determine research needs and co-develop research methods. Two-Eyed Seeing offers a framework for decolonizing PAR by ensuring it incorporates Indigenous research paradigms and by requiring researchers to incorporate other ways of knowing into their perspectives (Peltier, 2018). KTFN community members are co-researchers and partners in ways that challenge who the expert is, what counts as knowledge, and whom research serves (Fine & Torre, 2019). Through such collaborative research projects, community members ideally gain greater capacity and voice in decision-making and play a key role in activities leading to individual, social, and policy change to meet community needs (Eliassen, 2016). This engagement also encourages non-Indigenous researchers to deconstruct their own institutional and cultural assumptions and knowledge, allowing them to better contribute to social justice through their research (Ray, 2021). In these ways, a Two-Eyed Seeing approach to research is grounded in respect for different ways of knowing and the assumption of responsibility to act on these ways of knowing, as Elder Albert Marshall has been teaching (Bartlett et al., 2012).

PAR requires deep engagement, relationship-building, and a common vision to succeed (Adams et al., 2014), and our research is part of a broader, decade-long PAR initiative. In 2013, KTFN sought support to address climate-related changes that were impacting the community's traditional ways of life, culture, and well-being (Spring et al., 2018). Community members and researchers have collaborated for over 10 years, designing and implementing action projects and forging relationships that build trust and extend beyond the boundaries of research. Researchers engage with the community as they volunteer for events, support action projects, participate in cultural camps, go out on the land with community members, and share food. These experiences allow researchers to develop connections with residents and see them beyond their research

roles, establishing trust and a long-lasting commitment to collaborating with the community.

As part of this relationship building, the community sought assistance in exploring how local enterprises can contribute to the community's well-being, support health initiatives, and create economic opportunities for its residents. PAR has helped to initiate and facilitate this collaborative work.

Conversations around economic development, included establishing a store dedicated to the distribution and sale of produce from Kakisa's community garden and local handicrafts to visitors and neighbouring communities.

Kakisa's Vision of a Future Enterprise

As the community of Kakisa continues to adapt to the impacts of climate change and pursue projects that build resilience and self-sufficiency, their ongoing PAR projects can play an important role in community and economic development. While the community's economic development organization, Noda Enterprises (Noda), has not been operational for some time, it has been identified as an important piece of infrastructure to further food programming in Kakisa. Through ongoing conversations, workshops, and interviews, KTFN members provided their vision of what a new and improved Noda could look like. In keeping with community priorities, ideas and visions are organized into two categories: Sustainable Livelihoods and Food Sovereignty (KTFN, 2014, KTFN & Temmer, 2024). Importantly, relationship building and social connectivity are foundational to these two themes.

Sustainable Livelihoods

Sustainable Livelihoods includes all the activities that enable people to acquire the resources they need to live a good and meaningful life, to weather life's difficulties, and to ensure resources are available for future generations' livelihoods (Chambers & Conway, 1992). Kakisa's many community members participate in both economic (e.g., trades, local government, healthcare services) and subsistence-traditional activities (e.g., crafting, hunting, fishing, gathering, and sharing traditional foods), often referred to as a mixed economy (Natcher et al., 2014). By balancing livelihood options between these two worlds, households can generate income to purchase the goods and supplies needed to participate in traditional food harvesting activities that provide sustenance for the community and are culturally affirming. However, this balance can be difficult to attain, as there are limited employment options. Meanwhile, climate change and increased equipment and fuel costs have made harvesting less safe and more expensive.

Noda could support community members' efforts to more fully engage in the mixed economy by bringing in flexible employment and personal business opportunities: it could function as a hub from which to offer additional services and diversify income sources. For example, the Lady Evelyn Falls Territorial Park, located 10 km from Kakisa, attracts campers, some of whom come to Kakisa Lake to fish. Noda could provide tourism services such as guided hiking and ATV tours through KTFN trails and canoeing and fishing trips on Kakisa and Tathlina Lakes. These services would

generate income for Noda and allow community guides to monitor changes to the land while earning income. Dene guides could talk about their connection to the land and water while advocating and informing tourists about how climate change is impacting traditional ways of life. While most tourism would be offered during the summer season, winter tourism could include guided ice-fishing, skidoo trail rides, and hikes. Community members suggested hosting an ice-fishing derby to build inter-community solidarity and celebrate Dene culture by being on the land together, a highly valued Dene principle. Such services and events could also create short-term employment opportunities for community members as guides and event organizers.

A communal space providing opportunities for local artists to sell handicrafts, teach Traditional Knowledge and skills, and socialize was also discussed. The community has many talented artists with traditional crafting skills such as beading, sewing, drawing, moose hair tufting, and moccasin making. Selling traditional crafts and teaching how to make them promotes Indigenous arts and allows community members to earn a living while practicing traditional livelihoods. Likewise, empowering and involving women and youth is important for overall community well-being, and reviving traditional skills is linked to female self-sufficiency, allowing women to reclaim these skills and incorporate them into a sustainable livelihood by creating businesses to sell their traditional crafts—an enterprise that requires both Traditional and Western skillsets. Community members emphasized that empowering and involving women and youth is important for overall community well-being. Here we acknowledge a long tradition of Two-Eyed Seeing through Indigenous-owned art commerce, where Northern cooperatives have served as economic drivers as well as tools for strengthening governance and Indigenous resurgence (MacPherson, 2009).

Finally, Noda could provide office space and hotel accommodations for tourists, community researchers, government officials, and medical staff. Doing so would provide flexible employment opportunities (such as hotel and office management and maintenance) to supplement household livelihoods. Profits would be reinvested into community programs and services and support new initiatives that enhance residents' quality of life.

Food Sovereignty

KTFN residents, as part of the ongoing collaboration with researchers, have been cultivating food through vegetable gardens and greenhouses as part of the broader effort to adapt to climate change impacts on community health and well-being (Spring et al., 2018). The consensus is that foods harvested and grown in Kakisa are to be primarily shared among residents to improve access to healthy food and thus support greater food sovereignty. Sharing, particularly of traditional food, is an important Dene value passed across generations (Price et al., 2022), and a redesigned community enterprise could function as a communal space for food preparation and distribution, and whose food storage, refrigerators, and freezers could offer an alternative to organizing and distributing food baskets to individual houses. This space could include a kitchen area so garden produce and traditional foods can be preserved and used in meals for

community members. It could also serve as a space to teach cooking and preservation skills, to share meals, and to cater community events.

At the same time, community members are open to selling surplus vegetables and some prepared foods outside the community. As Kakisa's gardens and greenhouses expand, more food will be produced than can be consumed by households. One community member suggested canning surplus vegetables to reduce waste, prolong food availability beyond the growing season, and provide an alternative way to market food to potential customers. The enterprise could support training for food preserving skills such as canning as ways to both uphold Dene values of not-wasting and sharing, to support community goals of self-sufficiency, and to increase families' ability to choose where their food comes from and how it is produced and distributed to others. A community enterprise could then sell surplus food from the community garden, prepared food, and other staples to tourists from the nearby campground and neighbouring communities to generate revenue and to cover some of the garden program's costs. In this way, the enterprise can act as a mechanism to support traditional food-sharing practices and economic development.

In addition to selling garden foods, the revived store could process and sell fish. One community member noted how tourists and people from surrounding communities often come to Kakisa looking for fish and suggested that KTFN's commercial fishers could sell frozen, vacuum-pack fresh fillets as well as dry fish, a delicacy for which Kakisa is well-known regionally. There is an underutilized fish processing building in Kakisa that could be used, and a store would support in-community sales while fishers sell and deliver their product regionally.

However, while KTFN is making strides toward self-sufficiency, some foods cannot be produced within the community itself. Considering this, community members' hopes for the enterprise include a small-scale and informal store providing staple foods and household goods to community members and visitors. Since food and household items not harvested from the land must be purchased outside the community, often at inflated prices, stocking basic items and staple foods could save both time and money by reducing trips to the nearest store. A small, local store can also provide community members with the ability to reinvest in their own economy as profits from food sales are redistributed through jobs and investment in local services.

Insights from Building a Community Enterprise (Lessons Learned)

Kakisa's vision for a community enterprise expresses the Two-Eyed Seeing of financial viability guided by Dene principles: everyone should participate in decision-making, individual rights are contingent on collective wellbeing, and stewardship responsibilities are part of existing in equality with the land and all living beings (DFN, 2024). This vision prioritizes community well-being through access to space for socializing and preventing loneliness—an aspect often overlooked in Western enterprises (Weissbourd et al., 2021). Furthermore, the community's vision runs counter to capitalist notions of continual growth, which can harm people and the environment for monetary gains. KTFN's conception of wealth is held in common with many other Indigenous

communities: they believe that community economic development should enrich the lives of future generations (Nelson et al., 2019) and that true profits come from being on the land, maintaining cultural traditions, and nurturing relationships (Hilton, 2022). Furthermore, KTFN believes, as do many Indigenous Peoples, that economic, social, and environmental development are interconnected to and dependent on the ability to pass on Traditional Knowledge and cultural identity (Padilla-Melendez et al., 2022).

KTFN and partners realize that this vision is something to work towards over several years and that progress may be slow at times. This good work is rooted in the relationships built with people and the land: building support and capacity over time is key to making this enterprise a success. Understanding the value of meaningful interactions, fostering genuine relationships, respecting traditional practices, and honouring cultural and environmental stewardship enriches our understanding of community needs and aspirations. This holistic approach to economic development asserts that sustainable success is achieved not just through financial gains but through connecting commercial activities to a broad range of community priorities, institutions, and values.

Challenges remain in meeting the goals KTFN members expressed for a revived community enterprise. These include the small population and the community's relative isolation in relation to larger markets for selling foods and other services. There remains a perennial challenge of retaining skilled workers, who are often drawn to employment outside of the community or who take on other essential administrative, programming, and governance roles. And, while the community-research partnership provides researchers and summer students to assist with work during the summer field season as well as some administrative and funding support, the longer-term vision for self-sufficiency requires a combination of youth engagement, training, stable funding sources, and governance to ensure the balance of commercial and social priorities. We also recognize potential shortcomings—and even harms—of attempting to weave between the worlds of Western business and Indigenous values, given the historical reality of how colonial mindsets and political-economic structures have negatively impacted Indigenous Peoples' well-being and sovereignty (Young, 2021). Because of this, we have focused on anti-capitalist economic models developed in non-Indigenous contexts, positioning them as the strength of Western ways of knowing. Nevertheless, the potential for Eurocentrism within alternative movements for economic and social justice convinces us that Two-Eyed Seeing provides a necessary framework for these movements to better see and understand their blind spots, exclusions, and weaknesses in a plural world (Hossein & Pearson, 2023; Kepkiewicz & Dale, 2019).

Conclusion

This article presents a case study of a participatory process to create a vision for revitalizing an enterprise in a small Indigenous community in the NWT. Community members envisioned a social enterprise that draws on Dene's wisdom and cultural practices alongside ethical Western practices and values, helping to achieve the community's broad goals of food sovereignty, economic development, and political

self-determination. This enterprise would provide space for social bonding by providing a place to meet for coffee, organize workshops and knowledge-sharing events, and share food. Employment opportunities in managing the enterprise and providing services (such as excursions for tourists and selling food, crafts, and gas) would also be created. Ultimately, we hope that sharing the community's visioning process and aspirations might inspire other Indigenous communities and entrepreneurs to seek solutions that meet their specific needs and values, while furthering a holistic and community-driven approach to economic development that minimizes ecological and human harms.

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Land, Language, and Leadership: Two-Eyed Seeing in British Columbia's Natural Resource Management

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ABSTRACT

Indigenous law and governance systems across British Columbia have experienced tremendous hardship and transformation since first contact. Colonial systems have stifled Indigenous cultural governance structures, compromising Indigenous communities' centuries-old methods of sustainable land and resource management through stewardship. Despite the acknowledged importance of Indigenous stewardship in natural resource management initiatives, land-based decision making within British Columbia continues to design and implement processes and mechanisms that stifle Indigenous law and governance and misrepresent Indigenous values.

This article uses document analysis of 123 forestry-centric government-to-government Forest Consultation and Revenue Sharing Agreements within British Columbia to explore how Two-Eyed Seeing manifests through the opportunity to uphold Indigenous law and governance in these agreements. Focusing on the use of Indigenous language, cultural values, and hereditary leadership, nine of the agreements studied showed signs of Indigenous law and governance in their terms. These findings highlight the need for a path forward that is inclusive and empowers Indigenous law and governance in natural resource decision making to ensure enhanced stewardship opportunities for future generations.

KEYWORDS: Indigenous law; governance; forest management; Two-Eyed seeing; environmental stewardship

Empowering Indigenous communities and promoting stewardship through sustainable natural resource management depends on the recognition, integration, and collaboration of Indigenous knowledge systems with Western scientific methods (Atleo, 2004; Coté, 2010). Indigenous governance systems' comprehensive approach to stewardship is firmly anchored in ecological and cultural contexts and stands in contrast to the technocratic and compartmentalized environmental management methods used elsewhere (Atleo, 2023). Because of this, it is important to balance and harmonize cultural Indigenous and non-Indigenous perspectives during the decision-making process to ensure a comprehensive and holistic approach to resource management and stewardship within Indigenous territories (Cajete, 2000; Caverley et al., 2020; Nikolakis & Hotte, 2020). This integration supports more effective resource management and empowers Indigenous communities by validating and asserting their law and governance systems.

Two-Eyed Seeing—a concept introduced by Mi'kmaq Elder Albert Marshall—emphasizes the value and necessity of using both Indigenous and Western ways of knowing to develop more inclusive and effective management practices and governance (Bartlett et al., 2012; Kutz & Tomaselli, 2019). Indigenous communities have practiced stewardship in their territories for millennia (Hamilton et al., 2021; Redvers et al., 2020; Sobrevila, 2008; Zander, 2013). In this context, modern concepts of natural resource management are a relatively recent development. Before colonization, there was no need to manage land. Communities existed in a reciprocal relationship with the land: people were one with the land and the land was one with the people (Atleo, 2004; Coté, 2022). The Two-Eyed Seeing approach would likely not resonate with Indigenous ancestors of this time, as their relationship with the land was strong and intact: additional ways of seeing would not have provided any added benefit. Today's world, however, has brought many new challenges to Indigenous communities, including issues brought forward by colonization, changes to governance, changing climates, urbanization, loss of culture, and loss of connection to land. As a result, the Two-Eyed Seeing approach is often inherent in Indigenous stewardship practices today, becoming the default framework for those working to reinvigorate and revitalize cultural ways of stewardship while navigating the new relationships and social, cultural, environmental, and economic challenges brought on by the impacts of colonization.

The concept of Two-Eyed Seeing can be used to examine the empowerment of Indigenous law and governance in natural resource management in British Columbia (Bartlett et al., 2007). Indigenous communities in this province continue to assert their rights to and responsibilities for their territories, so the recognition and application of Indigenous law and governance is not only a matter of justice but also an ecological imperative. This article explores how Two-Eyed Seeing manifests through the inclusion of Indigenous law and governance within forestry-specific government-to-government natural resource management agreements in British Columbia; it also looks at how language and cultural governance structures can invoke Indigenous law and governance values and perspectives.

Methodology

The 203 Indigenous communities within the 34 distinct language groups in British Columbia are diverse, with their own unique systems of law, governance, resources, and capacity (Dunlop et al., 2018; First Peoples' Cultural Council, 2025). A nuanced methodological approach designed to respect these differences while also optimizing research outcomes is imperative to appropriately reflect individual communities' values and perspectives.

This methodological approach was developed in response to needs observed through years of work within Indigenous communities and Crown government settings, and is further reinforced by the researcher's cultural identity as an Indigenous scholar and practitioner. It is grounded in a lived understanding of the issues at hand, and framed by a community-based perspective that emphasizes responsibilities rooted in Indigenous law and governance. This dual positioning offers a unique combination of academic and experiential insight, allowing for a richer and more nuanced analysis of the data.

Document Analysis

The primary data sources for this paper consist of Forest Consultation and Revenue Sharing Agreements (FCRSAs) between Indigenous communities and the Government of British Columbia (British Columbia Ministry of Indigenous Relations and Reconciliation [BCMIRR], 2022a). In the context of impact benefit and revenue agreements in British Columbia, forestry tenure agreements were initially established in 2003 to meet consultation obligations and to offer Indigenous communities the means to engage with forestry activities in their territories. Governed by the British Columbia Forest Act, these agreements began as direct award payments to Indigenous communities and were eventually replaced by FCRSAs. These agreements allocate a portion of forestry revenues to communities in exchange for their consent to allow forestry operations, and they include a commitment from the communities to refrain from disrupting the forestry activities. By entering into these agreements, the signing Indigenous community effectively acknowledges that the revenue sharing or compensation they receive reflects their acceptance of the potential negative impacts associated with forestry activities in their territory. As the FCRSAs were not created for the purpose of this research, they provide a non-reactive data source: this adds to their authenticity and credibility and offers a reliable reflection of both Indigenous and non-Indigenous governments' participation in the Forest Consultation and Revenue Sharing process (Scott, 1990; Stockmann, 2011).

While some caution against using documents as standalone data sources due to their potential to represent a constructed representation of reality, this paper contends that FCRSAs offer a reliable reflection of the legal and governance positions of both Indigenous communities and the provincial government (Atkinson & Coffey, 2011; Sankofa, 2022). The agreements are legally binding, and any deviation from the agreed terms would require an official amendment, reducing the likelihood of discrepancies between the documented terms and their real-world application.

The analysis of terms within the FCRSA documents focused on identifying the presence of Indigenous law and governance. This was achieved by closely examining the terminology and intent of the agreements, particularly acknowledgments of Indigenous governance bodies and the use of Indigenous language. References to specific Indigenous-led community organizations or leadership within the agreements also served as markers of representation. Additionally, references that explicitly mentioned culturally specific values, teachings, and protocols were noted as evidence of Indigenous law and governance embedded within the context and binding terms of the agreements.

Data Collection and Analysis

The FCRSAs were first accessed through the Government of British Columbia's website. They were cataloged in a database and then sorted according to the Indigenous community that entered into the agreement. After cataloging the agreements, communities whose FCRSAs were either unavailable due to improper posting on the government website or because the community was engaged in a different forestry consultation process that did not involve a FCRSA were excluded from the analysis.

Once the FCRSAs were gathered, a systematic analysis of the 123 applicable agreements was conducted to extract relevant data. The extracted data included the date the agreements were signed, the presence of any amendments or extensions, the nature of the signing authority (elected chief and council versus a hereditary governance body), the first installment amount of shared revenue, the amount of capacity funding provided (if any), the term of the agreement, the percentage of forestry revenue shared, the language within the "Cooperation and Support Against Protest" section, the presence of Indigenous law and governance through direct mentions in English, the presence and use of Indigenous language, and any additional notes capturing unique features or errors.

For the qualitative analysis, a textual coding process was applied to identify whether there were explicit references to Indigenous law and governance and whether Indigenous language was present. Each document was coded as either "yes" or "no" to indicate the presence of at least one these elements in the FCRSA documents, therefore providing evidence of Indigenous law and governance influence within the agreement.

In analyzing the "Cooperation and Support Against Protest" sections (typically labeled as Section 8 or Article 11 in the agreements), each provision was extracted and cataloged across the 123 agreements. The content was then categorized based on its tone and strength, reflecting the level of cooperation expected between the community and the Government of British Columbia. This stage involved subjective judgment, with sections coded as either compliant, compliant/cooperative, cooperative, or considerate, depending on the community's perceived willingness to support provincial actions against interference in forestry activities by community members. The tonal differences were coded on a language-based scale: on one end of the scale, 'compliant' indicates an agreement to provincial terms without negotiation, while on the other end of the scale, 'considerate' reflects an approach focused more on community needs

and values along with a mutually respectful partnership. For example, the Ahousaht agreement is categorized as ‘considerate’ due to its empathetic yet non-committing tone and willingness to engage in dialogue, whereas the Leq’á:mel agreement is coded as ‘compliant’ due to its strict alignment with provincial directives.

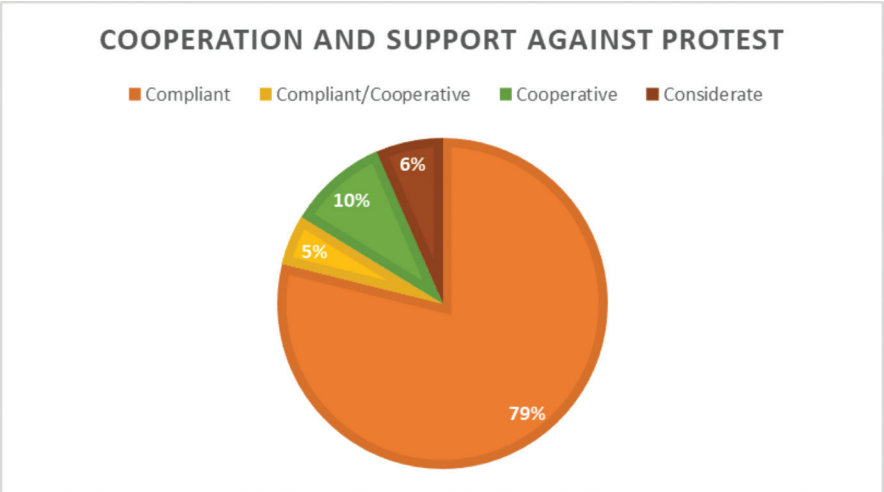
To facilitate quantitative comparison, these categories were assigned numerical values on a scale from one to four, with one being compliant and four being cooperative, allowing for averaging and comparative analysis across the agreements. This analysis was then cross-referenced with the year of signing, the average first installment amounts, and financial metrics including the capacity funding amount to determine any correlations with agreements that were marked “yes” regarding the presence of Indigenous law and governance elements.

Results and Analysis

Cooperation and Support Against Protest

Despite appearing under different numbered articles and sections, each of the 123 agreements contains a variation of the Cooperation and Support Against Protest section. Aside from sections detailing numerical differences such as terms, percentages, and first installments, the provisions outlining Cooperation and Support Against Protest are the most adaptable and amendable components of the FCRSA templates. As such, this section reflects not only the perceived negotiation capacity of each community but also the opportunity and subsequent impact for Two-Eyed Seeing to be applied to and influence the agreements.

FIGURE 1
Categorized Language Variance Representing Cooperation and Support Against Protest in 123 FCRSAs



Note. From Is Revenue Sharing Real Reconciliation? Recognizing the Role of Indigenous Law and Governance in British Columbia Crown Forestry Agreements, by T. D. Atleo, 2023, University of Waterloo (http://hdl.handle.net/10012/19637).

Figure 1 illustrates the varying levels of willingness and responsiveness among Indigenous communities in addressing and reacting to members protesting forestry activities covered by their agreements. The examples below highlight two communities who have Indigenous law and governance values in their agreements but differing approaches to cooperation and support against protests. Here is the relevant excerpt from the Leq'á:mel First Nation agreement, which is categorized as compliant:

> Leq'á:mel First Nation Forest Consultation and Revenue Sharing Agreement - 2022:
>
> Article 11 - Assistance
>
> 11.1 Non-Interference. Leq'á:mel First Nation agrees it will not support or participate in any acts that in anyways interfere with provincially authorized forest activities.
>
> 11.2 Cooperation and Support. Leq'á:mel First Nation will cooperate with and provide its support to British Columbia in seeking to resolve any action that might be taken by a member of First Nation that is inconsistent with this Agreement. (BCMIRR, 2022b)

The terms from Article 11 in the Leq'á:mel First Nation agreement fully comply to the needs and demands of the Government of British Columbia as they pertain to this agreement. There are no terms that speak to Leq'á:mel needs or community process that may be engaged to address community interference in forestry activities.

Compare this to the language in the Ahousaht First Nation agreement, which is categorized as considerate:

> Ahousaht Forest Consultation and Revenue Sharing Agreement - 2014:
>
> 8.0 Stability for Land and Resource Use
>
> 8.1 Ahousaht will respond to any discussions sought by British Columbia in relation to any acts of intentional interference with provincially authorized forest and/or range activities and will work co-operatively with British Columbia to assist in resolving any such matters. (British Columbia Ministry of Aboriginal Relations and Reconciliation [BCMARR], 2014)

The contrast in wording within the two communities' Cooperation and Support Against Protest terms highlights a tension between Indigenous law and governance, which emphasizes a collective or community approach to decision-making, and the Western legal framework that often centers on individual authority. The more compliant terms such as "will not support" and "resolve any action", as in the Leq'á:mel example, may conflict with Indigenous governance values, even in agreements that strive to reflect them. The more considerate terms such as "will respond to any discussions sought" and "assist in resolving", as in the Ahousaht example, demonstrates a more community-focused and thoughtful approach to addressing issues of conflict. From a Two-Eyed

Seeing perspective, aligning these systems would require language supporting collective approaches and community-based dispute resolution. Communities that negotiated less rigid terms demonstrate Two-Eyed Seeing in practice, balancing cultural values within the constraints of the FCRSA legal template.

Evidence of Indigenous Law and Governance

Indigenous law and governance within the FCRSAs was assessed using three key criteria: direct references to Indigenous law and governance specific to the community, the use of Indigenous language within the agreements, and the representation of hereditary or cultural leadership as decision-makers and signatories. If agreements met at least one criterion, they were considered to be inclusive of Indigenous law and governance. Of the 123 agreements analyzed, nine met at least one criterion, as outlined in Table 1.

TABLE 1
Nine Communities with FCRAs Inclusive of Indigenous Law and Governance

Community	**Governance Type**
Ahousaht First Nation	Hereditary Leadership
Gitanyow Hereditary Chiefs	Hereditary Leadership
Gitwangak First Nation	Hereditary Leadership
Cheam First Nation	Elected Chief and Council
Leq'á:mel First Nation	Elected Chief and Council
Lower Similkameen Indian Band	Elected Chief and Council
Penticton Indian Band	Elected Chief and Council
Sumas First Nation	Elected Chief and Council
Xaxli'p First Nation	Elected Chief and Council

In the case of Ahousaht, Gitanyow, and Gitwangak First Nations, the agreements included explicit references to Indigenous law and governance, fulfilling the criteria through hereditary leadership representation and the use of Indigenous language. The other six First Nations—Cheam, Leq'á:mel, Lower Similkameen, Penticton, Sumas,

and Xaxli'p—were represented by elected leadership structures. For these communities, Indigenous law and governance was evidenced within the agreements through the direct use of Indigenous language and the explicit inclusion of governance values.

The use of Indigenous language is consistently recognized as a foundational element in operationalizing Indigenous law and governance, fostering opportunities for mutual learning and the co-creation of knowledge within the Two-Eyed Seeing framework (Atleo, 2023). The following examples illustrate the five distinct language groups found within the nine communities and highlight the communities' commitment to centring their respective languages as a key component in their land-based decision-making.

- ***St'at'imc language – Xaxli'p First Nation***

The Xaxli'p First Nation demonstrates the deep interconnection between language, land and their law and governance through the use and revitalization of the St'at'imc language. Their guiding principles reflect a stewardship approach to natural resource management grounded in reciprocity and respect:

In the St'at'imc language, the name for "land" is Tmicw, the name for the "people of the land" is Ucwalmicw, and the name of the "language" is Ucwalmicts. These three words are closely related in the language of the St'at'imc people and show how the land, the people and the language are all powerfully tied together. What happens to one happens to the others is the guiding principle of Xaxli'p attitudes toward land use. This means that when you damage one part of the three (land, people, language) you damage all. (Xaxli'p First Nation, 2017)

- ***Gitxsan language – Gitanyow Hereditary Chiefs and Gitwangak First Nation***

The Gitxsan Development Corporation is an example of the assertion of Indigenous law and governance through a corporation focused on economic development. The corporation's structure is designed to uphold hereditary leadership and prioritize cultural stewardship while providing sustainable economic opportunities to Gitxsan communities:

> The Gitxsan Development Corporation (GDC) is unique, melding the traditional governance of the Gitxsan with the contemporary needs of business, yet remaining faithful to the principles of the Gitxsan Ayookw (laws). Every Gitxsan person, who is a member of a wilp (house group), has a stake in GDC.
> GDC is governed by a working Board of Directors who make business decisions, taking into consideration the Gitxsan Ayook and the overarching cultural values of the Gitxsan people. The Lax Yip Society and Lipgyet Trust are the shareholders of GDC, on behalf of the Hereditary Chiefs. (Gitxsan Development Corporation, 2021).

- ***Nuu-chah-nulth language – Ahousaht (ʕaḥuusʔatḥ) First Nation***

Like the Gitxsan Development Corporation, the hereditary leadership of the Ahousaht First Nation developed a corporate model that guides economic and natural resource decision-making within their territories under the guidance of Indigenous law and governance and cultural mandate:

> The Maaqutusiis Hahoulthee Stewardship Society (MHSS) Board of Directors is comprised of representatives from the three principal houses of the ʕaḥuusʔatḥ Nation. They are supported and advised by the ʕaḥuusʔatḥ muscim, Chief Councillor & Council representatives, together with other members of the ʕaḥuusʔatḥ traditional governance structure, legal counsel and technical consultants. The role of MHSS is to exercise and invest in stewardship and the sustainable management of the resources of ʕaḥuusʔatḥ haḥuułii in such a manner so as to balance Ahousaht cultural values, ecological integrity, and the social and economic wellbeing of the ʕaḥuusʔatḥ people. (Maaqutusiis Hahoulthee Stewardship Society, 2022)

- ***Halq'emeylem language – Cheam First Nation, Leq'á:mel First Nation, Sumas First Nation.***

For The Cheam, Leq'á:mel and Sumas First Nations, the Halq'emeylem language embodies a living connection of these communities to the land. Language revitalization for Halq'emeylem is not only important to the culture, but is also an important legal and political tool that reinforces Indigenous law:

> Our Halq'emeylem language was born of the land; this knowledge serves to strengthen our land claims, our claims to S'olh Temexw. By learning Halq'emeylem and its intricacies, our leaders will be able to advocate for what we need to maintain our unique Sto:lo identity embedded in our Halq'emeylem Riverworld view aesthetic. By reviving our Halq'emeylem language, we serve to strengthen the individual Sto:lo, our families and communities, and society in general. Atylexw te Sto:lo Shxweli (The Spirit of the Stolo Lives). (Gardner, 2004)

- ***Nsyilxcən language – Penticton Indian Band, Lower Similkameen Indian Band.***

For the Penticton and Lower Similkameen Indian Bands, revitalization of the Nsyilxcən language is an expression of sovereignty and cultural identify. The language serves as a foundation for land-based knowledge, and helps to demonstrate the Syilx holistic approach to stewardship rooted in their law and governance:

> As Syilx people, located within the Syilx Nation, learning Nsyilxčn is our act of reconciliation and resistance. Our language strengthens our families, the health of our communities, our youth, Syilx Nation, land-based knowledge, and expresses our title and rights. (Syilx Language House, 2022)
>
> The Syilx Okanagan Nation is governed by the Chiefs Executive Council (CEC), a leadership body of the Syilx Okanagan Nation established under Syilx law, and comprised of the yilmixwm of the affiliated communities, and the xa?tus, the elected leader of the Syilx Okanagan Nation. The mandate of the CEC is to advance, assert, support and preserve Syilx Okanagan Nation sovereignty. The yilmixwm of the affiliated communities also serve as directors of the Okanagan Nation Alliance, a society that serves the Syilx Okanagan Nation and its people, carrying out work directed by the CEC. (Okanagan Nation Alliance, 2017)

The above examples highlight how these communities are actively integrating Indigenous law and governance with contemporary natural resource management practices. Through language revitalization and innovative governance models, they embody the principles of Two-Eyed Seeing, bridging Indigenous knowledge systems and Western frameworks to create more inclusive, adaptive, and sustainable approaches.

Capacity Funding

Over the 11-year span from 2011 to 2022, FCRSAs consistently allocated $35,000 for capacity funding to support these agreements' negotiation process, with no deviations in this amount. However, due to inflation and rising wages—the minimum wage in British Columbia increased by 78.85% over this time—the real value of this funding decreased, limiting Indigenous communities' ability to engage in negotiations and relationship-building that would impact these agreements' outcomes. Despite British Columbia's ongoing reconciliation efforts, the stagnation of capacity funding has placed Indigenous communities at a disadvantage. Some agreements, including those with the Haisla Nation, omit capacity funding without explanation. In agreements where it is included, the funding serves as a minimum payment, even when forestry revenue sharing falls below $35,000. Of the 123 agreements analyzed, nine list $35,000 as the first installment, indicating their revenue sharing is at or below this threshold. This suggests these communities are less affected by fluctuations in forestry activity compared to those with higher revenue-sharing amounts. Additionally, these agreements do not overlap with the nine agreements that meet at least one of the three criteria for Indigenous law and governance.

Operationalizing Two-Eyed Seeing in Natural Resource Management

Cultural evolution within Indigenous communities emphasizes learning from all available knowledge systems while remaining rooted in core cultural values (Atleo, 2023). The word 'tradition' is often viewed as the preservation of longstanding customs and beliefs, yet tradition is inherently dynamic, shaped by evolving cultural contexts and societal needs. In many Indigenous communities in British Columbia, the natural progression of cultural practices was severely disrupted by colonial policies, including the *Indian Act,* residential schools, and restrictions on cultural ceremonies such as the Potlatch (Galley, 2016; Sewid & Spradley, 1995; Truth and Reconciliation Commission of Canada, 2015). These policies created generational gaps in knowledge transmission, leading to intergenerational trauma and an erosion of cultural knowledge practices.

E.R. Atleo (2004, 2011) argues against the perception that Indigenous cultures lose authenticity when they adapt or change. Instead, he stresses that cultural evolution is a necessary response to ongoing challenges, allowing communities to maintain their identity while engaging with modern realities. In today's context, understanding what constitutes 'traditional' knowledge and governance is complex. The impacts of language loss, external influences, and shifting community values mean that Indigenous law and governance must continuously adapt. This evolution is particularly relevant in the face of contemporary challenges in natural resource management, where the need to honour cultural principles must be balanced with modern economic and environmental demands.

Economic participation in capitalist markets has become essential for many Indigenous communities as part of that evolution, particularly in British Columbia, due to limited authority within territories and access to resources. As Trosper (2009) notes, Indigenous governance systems have long incorporated principles of resilience, reciprocity, and sustainability, allowing communities to navigate complex relationships between people, land, and resources. These principles are crucial in addressing the environmental and economic challenges communities face today. Two-Eyed Seeing offers a way to harmonize cultural principles with contemporary resource management needs. Integrating Indigenous governance systems and worldviews into modern natural resource management can provide more balanced and sustainable approaches, offering insights and learning that Crown governments and industry have often been resistant to—but would benefit from—incorporating.

Within this analysis of the FCRSAs, Two-Eyed Seeing is most effectively demonstrated when agreements incorporate explicit references to Indigenous governance practices, the use of Indigenous language, and the inclusion of hereditary leadership structures. For instance, the agreements with Ahousaht, Gitanyow, and Gitwangak First Nations embody the principles of Two-Eyed Seeing by blending cultural Indigenous governance with Western legal frameworks. These examples illustrate how Indigenous communities navigate and integrate both knowledge systems, leveraging their cultural governance structures while engaging with colonial systems to assert their rights and responsibilities in natural resource management.

Indigenous Culture and Economic Prosperity

Empowering Indigenous communities through self-governance that aligns with cultural mandates strengthens opportunities for economic success. The following example showcases the inclusion of Indigenous law and governance within the Cheam First Nation FCRSA. With this statement, Cheam First Nation is asserting that the territorial boundaries being discussed are part of their land and they are responsible for its care:

Further to the previous recital, British Columbia also recognizes that the Cheam First Nation asserts that:

> S'olh temexw te ikw'elo. Xyolhmet te mekw' stam it kwelat.
> This is our land. We have to take care of everything that belongs to us.
> This declaration is based on our Sxwoxwiyam, our Sqwelqwel and our connection through our Shxweli to S'olh Temexw.
> We make this declaration to protect our Sxoxomes (our gifts), including all the resources from the water, the land and the mountains including Xoletsa (Frozen Lakes) and Mometes.
> We make this declaration to preserve the teachings and to protect S'olh Temexw for our Tomiyeqw (seven generations past and future).
> (BCMARR, 2015, "Whereas")

The concept of 'cultural match' offered by Cornell and Kalt (2000, 2003, 2006) reiterates this alignment between governance structures, policies, and leadership and Indigenous communities' cultural mandates. Their research findings indicate that Indigenous communities with governance systems rooted in cultural mandates experience greater economic success compared to those governed by external governance influences, such as from federally required election processes under the Canadian *Indian Act*. From a Two-Eyed Seeing perspective, this alignment not only respects Indigenous cultural mandates but also integrates them with Western governance frameworks, creating more sustainable and equitable management practices. The nine FCRSAs that evidence Indigenous law and governance exemplify this approach, demonstrating how aligning cultural values with economic strategies can yield benefits for both Indigenous communities and broader systems.

Indigenous Law and Governance in Stewardship

Indigenous law and governance represent long-standing systems, deeply intertwined with the cultural practices and stewardship that have guided Indigenous communities for generations. These systems extend beyond colonial influence and are enacted through cultural governance structures that have historically mandated stewardship practices. The examples from communities like the Ahousaht and Xaxli'p First Nations demonstrate how Indigenous law remains central to resource management practices, even when intersecting with colonial legal systems and navigating through management processes that were imposed in territories without consent and do not align with culturally mandated stewardship practices:

> Xaxlip has developed their Traditional Use Study ("Ntsuwa7lhkalha Tlakmen") and an Ecosystem-based Management Plan for their Traditional Territory and Shared Area, currently used as the management plan for their Community Forest Agreement. (BCMIRR, 2021a)
>
> The Maaqutusiis Hahoulthee Stewardship Society (MHSS) Board of Directors is comprised of representatives from the three principal houses of the ʕaḥuusʔatḥ Nation. They are supported and advised by the ʕaḥuusʔatḥ musčim, Chief Councilor & Council representatives, together with other members of the ʕaḥuusʔat ḥ traditional governance structure, legal counsel and technical consultants. The role of MHSS is to exercise and invest in stewardship and the sustainable management of the resources of ʕaḥuusʔatḥ ha ḥuuɬii in such a manner so as to balance Ahousaht cultural values, ecological integrity, and the social and economic wellbeing of the ʕaḥ uusʔatḥ people. (Maaqutusiis Hahoulthee Stewardship Society, 2022)

Likewise, the case of the Gitwangak First Nation, where hereditary leadership drives resource negotiations, highlights the importance of and opportunities for cultural alignment in achieving community-driven outcomes that are both economically and ecologically sustainable: "'Gitxsen Ayuukw' means Gitxsen laws and traditions founded on the knowledge, experience and practice of the Gitxsen people since time immemorial which are reaffirmed and updated at the Li'ligit (formal public gatherings/ feasts) and encompass all aspects of Gitwangak society" (BCMIRR , 2021b).

The evidence gathered from this analysis highlights communities' efforts to incorporate Indigenous law and governance into FCRSA agreements. The inclusion of Indigenous language, culturally specific protocols, and governance structures demonstrates opportunities for greater alignment between Indigenous and Western approaches. Through the lens of Two-Eyed Seeing, these agreements integrate the strengths of both knowledge systems by honoring cultural governance while navigating the practical requirements of formal agreements. This approach not only strengthens the agreements themselves but also paves the way for more inclusive, equitable, and sustainable frameworks in the future.

Conclusion

The empowerment of Indigenous law and governance in British Columbia's natural resource management is essential for fostering sustainability, revitalizing culturally informed stewardship, and advancing economic prosperity (Marshall, 2021; Nelson et al., 2019; Nikolakis, 2019; O'Regan, 2019; Cornell & Kalt, 2003). Through the lens of Two-Eyed Seeing, this article explores how Indigenous governance can influence Western approaches to resource management, highlighting the continued lack of inclusion in binding terms and decision-making roles within FCRSAs.

Despite these shortcomings, when Indigenous governance structures are meaningfully included, resource management practices become more aligned with community values and better serve future generations. The concept of cultural match underscores the link between cultural governance and improved socioeconomic outcomes. Future revisions to FCRSAs should explicitly prioritize cultural leadership and Indigenous language, ensuring agreements reflect community mandates while enhancing outcomes.

This research demonstrates the tangible benefits of Two-Eyed Seeing, bridging theoretical insights with practical applications to offer a replicable framework for other sectors. Respecting Indigenous law and governance while aligning resource management with stewardship principles creates opportunities for outcomes that benefit both the land and its people.

Operationalizing Two-Eyed Seeing in policy frameworks has far-reaching implications that extend beyond natural resource management. By centering Indigenous governance and fostering mutual learning between knowledge systems, Two-Eyed Seeing offers a model for rethinking policy in a way that addresses systemic inequities, enhances ecological integrity, and empowers communities to lead in land-based decision-making. The principles of Two-Eyed Seeing can guide the development of policies that are not only more inclusive but also more resilient and effective in addressing complex, interconnected challenges.

As recognition of Indigenous governance in resource management evolves, policy development must prioritize flexibility, cultural responsiveness, and inclusivity. Empowering communities to assert their governance ensures natural resource management honours the deep connections between culture, law, and the land while safeguarding opportunities for future generations. By operationalizing Two-Eyed Seeing, resource agreements can achieve equitable and sustainable governance, preserving cultural stewardship and ecological integrity for generations to come.

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Accountability frameworks for Indigenous financial institutions in Australia, Canada, and New Zealand

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ABSTRACT

Indigenous peoples around the world share a history of colonization and poverty, including the loss of land, language, and the cultural foundations of their societies and communities. An increasing number of Indigenous peoples are actively rebuilding and revitalizing their cultures through economic endeavour. This paper presents case studies from Australia, Canada, and New Zealand, highlighting applicable models of collaborative co-governance employed by Indigenous finance entities, as well as the accountability frameworks that have emerged from this renaissance. We found evidence of commonalities based on the cultural values and traditional knowledge systems of Indigenous peoples in their respective countries. The literature informs our analyses, as it originates from our organizations and communities of interest. We discovered that, despite the social, cultural, and economic differences, the exciting and innovative strategies developed by Indigenous peoples in all three countries are not only similar and relevant to one another but also applicable to non-Indigenous financial

and investment institutions and their accountability frameworks. The integration of Indigenous philosophies and values into the governance of Indigenous financial and investment entities has fostered a multi-dimensional approach that considers both Western and Indigenous practices. The necessity of meeting both Indigenous and non-Indigenous accountability requirements creates an interlocking circle of values and codes of conduct, providing Indigenous financial and investment entities with a double layer of protection.

KEYWORDS: Indigenous financial institutions, Indigenous finance and nvestment, sustainable investment, accountability frameworks, collaborative governance.

Indigenous financial institutions and economic governance models play a critical role in fostering self-determination, economic resilience, and sustainable development among Indigenous communities in Australia, Canada, and New Zealand. Despite the diverse cultural, historical, and geographic contexts of Indigenous Peoples in these three countries, their shared experiences of colonial dispossession, forced assimilation, and economic marginalization have shaped their contemporary financial and governance structures. The need for culturally embedded financial institutions arises from the historical exclusion of Indigenous Peoples from mainstream financial systems, coupled with the need to balance economic development with cultural preservation and collective governance.

Historically, colonial policies systematically undermined Indigenous economic systems. In Australia, the doctrine of terra nullius dispossessed Aboriginal and Torres Strait Islander Peoples of their lands, disrupting traditional trade networks and economic sustainability. In Canada, the *Indian Act* of 1876 imposed state control over Indigenous financial and land management, severely restricting their economic agency. Similarly, in New Zealand, the Treaty of Waitangi (1840), while intended to protect Māori land and economic interests, was manipulated to justify land alienation and economic disenfranchisement. Across these contexts, Indigenous economies were forcibly reshaped by colonial governments, who limited access to capital, land, and financial institutions.

These structural inequalities necessitated the development of Indigenous-controlled financial institutions that provide capital, investment strategies, and governance structures tailored to Indigenous worldviews. These institutions are not merely financial entities: they are instruments of economic sovereignty, supporting Indigenous communities in reclaiming financial agency, strengthening local economies, and ensuring long-term sustainability. These institutions' importance is increasingly recognized within the broader financial sector, evidenced by initiatives like the Central Bank Network for Indigenous Inclusion, formed in 2021 by the Reserve Bank of New Zealand, the Bank of Canada, and the Reserve Bank of Australia. This network aims to raise awareness, promote equitable policy change, and amplify Indigenous economic issues within financial services.

Understanding the unique accountability frameworks developed by Indigenous Peoples is vital for designing financial systems that respect Indigenous governance,

enhance economic participation, and address historical injustices. This paper examines the institutions, investment strategies, and accountability mechanisms shaping Indigenous financial governance in Australia, Canada, and New Zealand. Each case study highlights how Indigenous communities navigate contemporary financial landscapes while integrating cultural, social, and environmental responsibilities.

This cross-cultural analysis provides insights for policymakers, financial professionals, Indigenous governments, and community members, offering a deeper understanding of the complex interplay between Indigenous financial institutions, economic resilience, and self-determination. By documenting Indigenous-led financial governance models, this exploratory study contributes to the broader discourse on economic decolonization and financial justice for Indigenous Peoples.

Australia

Colonial Dispossession and Economic Marginalization

The economic exclusion of Indigenous Australians began with the British declaration of terra nullius in 1788, which denied Indigenous land ownership and facilitated the large-scale appropriation of land for pastoralism, mining, and settlement. This legal doctrine disrupted Indigenous economies, which were deeply connected to land, mobility, and reciprocal exchange. By disrupting Indigenous communities' access to traditional economic resources, this displacement initiated a cycle of poverty and dependence.

In the 19th and early 20th centuries, government policies further entrenched Indigenous economic marginalization through the reserve system and restrictive labour laws. Under state protectionist policies, Indigenous Australians were relocated to missions and reserves where they were denied economic autonomy. Many Indigenous workers were paid in rations instead of wages, and, in some cases, wages were withheld or placed in state-controlled trust funds, leading to the "Stolen Wages" scandal. These policies not only deprived Indigenous communities of wealth accumulation and economic participation but also fostered deep structural inequalities that persist today.

The civil rights movement of the 1960s and 1970s brought increased recognition of Indigenous rights, culminating in legislative reforms such as the Aboriginal Land Rights (Northern Territory) Act 1976 and the 1992 Mabo decision, which overturned terra nullius and recognized Native Title. However, legal recognition of land ownership did not necessarily translate into economic self-determination, as economic control over land and resources remained largely restricted by state and corporate interests.

Indigenous Corporations and Economic Justice

A response to both historical and ongoing economic exclusion, Indigenous corporations have emerged as key institutions for economic self-determination and wealth generation. Under the Corporations (Aboriginal and Torres Strait Islander) Act 2006 (CATSI Act), Indigenous corporations are designed to facilitate economic development while maintaining community control and cultural governance. These entities play a critical role in land management, employment creation, financial independence, and political advocacy.

A primary function of Indigenous corporations is land ownership and resource management. Many Native Title groups establish corporations to manage communal lands, negotiate resource extraction agreements, and reinvest profits into community projects. For instance, Indigenous land councils in the Northern Territory oversee negotiations with mining companies to ensure revenue-sharing arrangements benefit local communities. Similarly, the Indigenous Land and Sea Corporation supports economic initiatives that integrate environmental sustainability with Indigenous cultural knowledge.

Indigenous corporations also serve as vehicles for employment and enterprise development. Many operate within industries such as cultural tourism, agriculture, and construction, providing job opportunities tailored to Indigenous skills and local economic needs. Unlike mainstream financial institutions, Indigenous corporations prioritize social and cultural outcomes over profit maximization, ensuring economic activities align with community values and long-term sustainability.

Furthermore, Indigenous financial institutions play a critical role in reconciliation and structural reform. By increasing Indigenous representation in financial decision-making, these corporations challenge the historical exclusion of Indigenous Peoples from financial governance. However, challenges remain, including regulatory barriers, limited access to capital, and the dominance of state-controlled economic frameworks. Many Indigenous corporations struggle to secure mainstream financial backing due to their inability to use communally owned land as loan collateral, underscoring the need for policy reforms that enhance Indigenous economic sovereignty.

Aboriginal and Torres Strait Islander Corporations in Australia

The governance and accountability frameworks for Aboriginal and Torres Strait Islander corporations in Australia operate within a complex legal and socio-economic landscape. As mentioned, the CATSI Act provides a distinct regulatory framework for Indigenous corporations, administered by the Office of the Registrar of Indigenous Corporations (ORIC). While the CATSI Act was designed to offer greater flexibility and cultural alignment than the mainstream Corporations Act 2001, it has also faced challenges related to governance, reporting obligations, and economic sustainability.

As of June 2019, the CATSI Act had 3,198 Indigenous corporations registered under it. These corporations play a critical role in delivering services such as land management, health, education, cultural preservation, and economic development (Hunt & Smith, 2006). Despite their diversity, these organizations share common governance challenges shaped by historical and contemporary factors.

The National Indigenous Australians Agency's 2020 CATSI Act Review Final Report highlights both the strengths and limitations of this regulatory framework.

Strengths

- Cultural and Community Alignment – The CATSI Act accommodates Indigenous customs and decision-making structures, allowing corporations to integrate Elders' Councils and other traditional governance mechanisms.
- Capacity Building and Regulatory Support – ORIC provides legal, financial, and governance support, including the development of tailored rule books that reflect Indigenous decision-making processes.
- Special Administration and Oversight – Unique regulatory provisions, such as special administration, allow for intervention when corporations experience financial or governance difficulties, helping to prevent insolvency.
- Economic and Service Delivery Role – Many Indigenous corporations operate as community-based economic and service hubs, ensuring the continuity of essential services in remote and urban Indigenous communities.

Challenges

- Paternalism and Over-Regulation – Some stakeholders argue that the CATSI Act is overly prescriptive and paternalistic, imposing governance standards that may not align with Indigenous governance traditions.
- Limited Economic Flexibility – The Act's focus on not-for-profit service delivery has been criticized for restricting commercial and investment opportunities, particularly for corporations aiming to engage in for-profit enterprise development.
- Governance and Leadership Gaps – Many corporations struggle with board member skills gaps, as leadership appointments often prioritize cultural seniority over formal business expertise.
- Reporting Burden – While reporting requirements are tiered by corporation size, some stakeholders view them as excessively bureaucratic, particularly for small and remote organizations.

Case Studies: Indigenous Corporate Governance in Practice

Indigenous corporations in Australia operate within a unique intersection of cultural values, economic sustainability, and regulatory compliance, as seen in three case studies: the Yarnteen Aboriginal and Torres Strait Islander Corporation, the Bawinanga Aboriginal Corporation (BAC), and Bunuba Inc. Exploring how these organizations navigate governance, accountability, and economic sustainability shows how the CATSI Act provides a legal framework that allows Indigenous organizations to incorporate traditional governance structures while meeting modern corporate accountability standards. These cases demonstrate both the strengths and challenges of Indigenous financial governance in Australia, highlighting the opportunities and constraints embedded in the CATSI Act framework.

Yarnteen Aboriginal and Torres Strait Islander Corporation. Yarnteen operates a diversified business portfolio, including a grain import/export enterprise, a cultural centre, a car wash, and residential and commercial property holdings. Its success lies in its collective governance model, where related Indigenous corporations operate under a shared accountability framework. Yarnteen demonstrates economic adaptability, effectively balancing self-generated revenue with government funding. Yarnteen's governance model emphasizes shared decision-making and accountability, reflecting Indigenous cultural values. This approach fosters trust and cohesion within the community, ensuring that economic activities align with cultural priorities. By operating across multiple sectors, Yarnteen also mitigates financial risks and ensures stability. This diversification allows the corporation to reinvest profits into community development projects, furthering its social and economic goals. Finally, Yarnteen's focus on leadership development ensures continuity and stability, a critical factor in maintaining long-term governance effectiveness.

However, while Yarnteen generates significant revenue from its commercial operations, it remains reliant on government contracts for key services. This dependence creates vulnerability to policy changes and funding cuts, which could undermine its financial stability. Additionally, the collective governance model, while culturally appropriate, requires high levels of financial literacy and administrative expertise among board members. This complexity can create challenges for organizations operating in remote or resource-constrained communities.

Bawinanga Aboriginal Corporation. BAC, located in Maningrida, Northern Territory, started as a resource centre for returning tribal members and has expanded into sectors such as natural resource management, sanitation, recycling, and household services. A notable feature is its profit reinvestment strategy, where income from commercial operations funds high-risk community development projects. BAC's ability to generate revenue through commercial operations reduces its reliance on external funding, enhancing its financial autonomy. This self-sufficiency allows the corporation to pursue community-driven initiatives without compromising its cultural values. BAC's governance structures are deeply connected with its traditional owners, ensuring that decision-making reflects Indigenous cultural priorities. This integration strengthens community trust and legitimacy, key factors in the corporation's success. Furthermore, by reinvesting profits into high-risk projects, BAC demonstrates a commitment to long-term community development. This approach aligns with Indigenous values of intergenerational stewardship and collective well-being.

However, regulatory barriers often hinder BAC's expansion into new industries, limiting its ability to diversify and grow. These constraints highlight the tension between Indigenous self-determination and external regulatory frameworks. And while BAC's reinvestment strategy supports community development, it also creates financial volatility. High-risk projects require ongoing investment, which can strain the corporation's resources and limit its ability to respond to unforeseen challenges.

Bunuba Inc. Bunuba Inc. operates cattle stations, hotels, and supermarkets, and holds traditional land rights over areas with significant diamond deposits. It exemplifies a hybrid governance model, balancing corporate investment with Indigenous land

stewardship. Bunuba's governance model integrates traditional decision-making structures with modern corporate practices, advocating for Indigenous approaches within commercial enterprises. This hybrid model ensures that cultural values inform its business strategy, enhancing the corporation's legitimacy and community support. Bunuba's deep connection to its traditional lands enables it to manage resources sustainably, aligning economic activities with environmental stewardship. This expertise positions the corporation as a leader in Indigenous land management and conservation. Additionally, by operating across multiple sectors, Bunuba reduces financial risks and enhances its economic resilience. This diversification allows the corporation to reinvest profits into community development, furthering its social and cultural goals.

That said, Bunuba's governance is complicated by legal issues surrounding native title and land rights. These complexities create uncertainty and can hinder the corporation's ability to effectively leverage its assets. As well, the hybrid governance model can create tensions between corporate management and traditional governance structures. Balancing these competing priorities requires careful negotiation and compromise, which can strain organizational cohesion.

Discussion

The case studies of Yarnteen, BAC, and Bunuba illustrate the opportunities and challenges of Indigenous financial governance in Australia. Each corporation demonstrates a commitment to integrating cultural values into governance structures, reflecting the principles of communal accountability outlined by Hunt and Smith (2006). This approach ensures that decision-making aligns with Indigenous priorities, fostering trust and legitimacy within the community. However, a reliance on government funding, as well as the complexities of regulatory compliance, highlight the constraints embedded in the CATSI Act framework. While the Act provides flexibility for Indigenous corporations to incorporate traditional governance practices, it also imposes reporting requirements that can strain resources and create administrative burdens. This tension between cultural autonomy and regulatory compliance underscores the need for ongoing policy reform to better support Indigenous self-determination. Moreover, the case studies reveal the importance of economic diversification and leadership development in ensuring long-term sustainability. Corporations like Yarnteen and Bunuba demonstrate how diversified economic activities can enhance financial resilience, while BAC's reinvestment strategy highlights community-driven initiatives' ability to achieve social and economic goals. However, these successes are tempered by challenges such as financial instability, regulatory constraints, and leadership tensions, which require innovative solutions and ongoing support.

Canada

Introduction to Indigenous Financial Institutions

There are over 1.8 million Indigenous people in Canada and they comprise nearly 5% of Canada's population (Statistics Canada, 2024), and since the 1980s, 58 Indigenous Financial Institutions (IFIs) have been established to serve this population's needs

and help them overcome the challenges imposed by colonization and the *Indian Act*. As described by the National Aboriginal Capital Corporation Association (NACCA), "IFIs were created to provide repayable, interest-bearing loans to Indigenous small- and medium-sized enterprises (SMEs) that were unable to secure loans from highly-regulated conventional lenders due to risk tolerance levels" (2024a).

Other Indigenous financial institutions, independent of the IFI network, exist within Canada as well. For example, the First Nations Bank of Canada and Peace Hills Trust are Indigenous federally chartered financial institutions that play an important role throughout the country by providing financing, investment, and trust services to First Nations. the First Nations Finance Authority (FNFA) is a First Nation government-owned and controlled non-profit institution offering financing, investment, and advisory services to First Nations in Canada. Yet another example is Raven Indigenous Capital Partners, an Indigenous led- and owned social finance intermediary, which supports Indigenous social enterprises in Canada by providing "late seed and early-stage capital to innovative, scalable, purpose driven Indigenous enterprises" (Business Development Canada, 2022). . While these institutions play an important role in supporting the financing and investing needs of First Nations, this paper is primarily focused on NACCA's IFI network and the FNFA's governance and accountability frameworks. These two models illustrate Indigenous financial institutions' efforts to incorporate Indigenous and non-Indigenous ways of governing "in ways that are culturally legitimate and credible with external stakeholders" (Australian Indigenous Governance Institute, n.d.).

Colonization's Impacts on Indigenous Institutions and Accountability Frameworks

Between 1701 and 1921, seven groups of historic treaties were signed by First Nations and European colonizing countries, particularly Great Britian and, later, the Government of Canada (Kayseas et al., 2017). First Nations viewed treaties as sacred agreements that outlined a way for First Nations Peoples and settlers to share the land and its resources, while also providing certain rights to First Nations Peoples in exchange for allowing European settlement in their territories (Anderson et al., 2004; Kayseas et al., 2017). However, Britain and Canada largely viewed the treaties as acknowledging that the First Nations Peoples involved had relinquished all claims to ownership of traditional lands in exchange for specific promises and goods (Kayseas et al., 2017).

Canada's confederation in 1867 introduced additional federal policies and legislation that attempted to deny Indigenous Peoples control over their own nations, institutions, cultures, communities, and accountability frameworks. The *Indian Act* of 1876 was created to establish laws that would manage "Indian" affairs and the reserve lands set aside for their use. These laws impacted governance, land tenure, and land use and restricted economic activity. For example, the government could lease uncultivated reserve lands to non-First Nations if the new leaseholder used the lands for farming or pasture (Joseph, 2016). Likewise, the permit system controlled and restricted First Nations' ability to sell farm products, and the pass system gave Indian agents the authority to grant or deny travel documents to First Nations people wishing to leave

the reserve for business opportunities or to invite people onto the reserve to do business (Carter, 1990; Joseph, 2016; Joseph, 2018; Schneider, 2024).

However, while treaties and amendments to the *Indian Act* continued to further encroach upon Indigenous rights and lands, the early 1900s Indigenous political organizations began to grow, especially at regional and provincial levels. This continued into the 1960s and 1970s, a time of incredible change regarding Indigenous political rights and institutional control in Canada: status First Nations received the right to vote in federal elections without being required to give up their First Nations status in 1960; provinces began granting the right for First Nations to vote between 1949 and 1969; and Inuit people became eligible to vote in territorial and provincial elections in the 1950s, although that right was not realized until ballot boxes were more widely distributed to communities in 1962 (Leslie, 2016).

Furthermore, after the establishment of the National Indian Brotherhood (NIB) in 1967, opposition to the federal government's White Paper, which proposed to eliminate the *Indian Act* and the Department of Indian Affairs and Northern Development[2] and transfer administrative responsibility for Indigenous Peoples to provincial governments, led to a number of new Indigenous provincial associations, the transformation of select existing groups into active political organizations. The White Paper was seen as absolving the federal government's responsibilities towards Indigenous Peoples and encouraging their assimilation into mainstream society: together, the NIB, provincial, and regional groups defeated its adoption. And in 1982, the NIB became the Assembly of First Nations, which today represents 634 First Nations across Canada (Dyck & Sadik, 2020).

Land claims and education were also areas of concern during the 1970s. The federal government began to negotiate land claims after the 1973 Calder decision led the Canadian legal system to acknowledge Aboriginal title, with land claim settlements and economic development opportunities increasing during this time. "Indian control of Indian education" was another major focus, with new education policies promoting Indigenous-controlled education systems. As a result, the injustices of colonization and its systemic inequities were more widely discussed, taught, and written about.

Finally, increased political and economic influence led Indigenous leaders to create their own institutions. IFIs were established in the 1970s and 1980s to create economic opportunities for Indigenous Peoples in Canada and to address the impacts of colonization through new institutional models and accountability frameworks: this ushered in a new era of economic sovereignty and self-determination amongst Indigenous Peoples in Canada. And Indigenous financial institutions continue to be created, establishing new governance and accountability frameworks that have helped to transform Indigenous economies throughout Canada.

Types of Indigenous Financial Institutions

NACCA is a not-for-profit organization incorporated in 1997, established by IFIs wishing to ensure their future autonomy as institutions. Its purpose is to advocate for IFIs and to increase the number of Indigenous entrepreneurs and the opportunities

that support them (NACCA, 2024b). NACCA's board is 100% Indigenous, with board members representing the different geographic regions of Canada.

In Canada, there are three types of IFIs within NACCA's network: Aboriginal Capital Corporations (ACCs), Aboriginal Community Futures Development Corporations (ACFDCs), and Aboriginal Developmental Lenders (ADLs). IFIs are considered "autonomous, Indigenous-controlled, community-based financial organizations" that "provide developmental lending, business financing and support services to First Nations, Métis, and Inuit businesses in all provinces and territories" (NACCA, 2024b). The IFI network's capital and business support services are primarily funded by the federal government's Aboriginal Entrepreneurship Program and delivered through NACCA (NACCA, 2024c). Regional development agencies, funded through Western Economic Diversification Canada, support ACFDCs, while private sector and provincial/territorial funding help support ADLs (NACCA, 2024b).

IFI Governance and Oversight

IFI boards are largely governed by Indigenous people from the communities these institutions serve, although they may appoint independent directors to secure the specialized skills and required capacity to properly oversee the institutions. NACCA notes that "control and oversight by members of the communities served has often been cited as an integral reason for AFI successes in maintaining high repayment efficiency rates" (2015).

ACFDCs are recognized by NACCA as Community Futures Development Centres (CFDC) that are Indigenous controlled, i.e., the majority of directors on the Community Futures board are Indigenous. As of 2024, there are 23 ACFDCs out of a total 267 CFDCs in Canada. According to NACCA, ACFDCs play an important role in Indigenous communities because "very few CFDC products or services appear to be received by Aboriginal people unless a majority of the CFDC Board is Aboriginal" and because "Indian Act restrictions, educational levels, financial literacy, exposure to small business experience" (NACCA, 2015, p. 11) make the needs, management, and governance of ACFDCs quite different from non-Indigenous CFDCs.

The following examples of IFI boards highlight similarities and differences between their board structures and accountability frameworks.

All Nations Trust Company (ANTCO). British Columbia's ANTCO is both an IFI and an Indigenous-owned trust company that is "a provincially regulated financial institution with the fiduciary capacity to provide trust; agent; and administrative services" (ANTCO, 2024a). It serves both Indigenous entrepreneurs and communities. ANTCO has 11 board members and requires all candidates to have at least 10 ANTCO class "A" common shares 30 days prior to each ANTCO AGM. Shareholders are from bands, Tribal Councils, Indigenous organizations, and Métis associations or are status, non-status, and Métis individuals. ANTCO is owned by Indigenous shareholders "comprised of Bands, Tribal Councils, Indigenous Organizations, Métis Associations, Status, Non-Status, and Métis individuals," with at least 75% of shares owned by shareholders

with at least 75% of shares owned by shareholders situated in the Kootenay, Lillooet, Shuswap, Nl'akapxm (Thompson), and Okanagan Tribal areas (ANTCO, 2024b). All share purchases must be approved by the Board.

Beaver River Community Futures Development Corporation (BRCFDC). This corporation serves 46 communities in northwest Saskatchewan. BRCFDC requires board members to "represent a community within the BRCFDC Region," to live and work within that community, and to be in "good standing within their community and experienced in business or community economic development" (2024). BRCFDC currently has three board members representing three First Nations in the BRCFDC region. The other board members are from villages within the region and the city of Meadow Lake.

Dakota Ojibway Community Futures Development Corporation (DOCFDC). The DOCFDC serves nine First Nations in Manitoba. Its board of directors are community members appointed by their respective Chief and Council. A Band Council Resolution confirms the appointment "with a request for consideration of the appointees' geographic area, age, gender, skill set and perspective. The majority of the appointees are councillors who hold the Economic Development Portfolio" (DOCFDC, 2024). There are nine First Nations represented on the Dakota Community Futures Board of Directors. The Articles of Incorporation, the by-laws, and the funding agreement with Western Economic Diversification Canada provide the board with decision-making authority over the corporation.

Rainy Lake Tribal Area Business & Financial Services Corporation. This corporation is governed by a board of directors composed of seven Rainy Lake Tribal Area Chiefs. The board serves 28 Treaty #3 First Nations, as well as other Treaty #3 First Nations entrepreneurs in Ontario. The Chiefs ensure good governance, set policies, and work to fulfill IFIs' vision "to improve the economy and quality of life of the Treaty #3 area First Nations through the development of successful First Nation businesses operated by highly skilled First Nation people" (Rainy Lake Tribal Area Business and Financial Services Corporation, 2024).

Eeyou Economic Group (EEG). Based in Quebec, EEG is a CFDC that considers itself a non-political, community-based organization "managed by skilled professionals" (EEG, 2024). It is guided by solid business practices and Cree principles and values and contributes to business and economic development "to increase wealth, economic growth and quality of life in Eeyou Istchee" (EEG, 2024). The EEG Board is comprised of 10 members, all economic development officers from Cree communities, appointed by the Chief and Council of their respective community through a Band Council Resolution (EEG, 2024).

Ulnooweg Development Group Inc. (UDG). This development group serves Indigenous entrepreneurs and community enterprises throughout Atlantic Canada, seeing itself as an extension of the communities it serves (UDG, 2024). Its board of directors includes six Chiefs and two representatives, one from the Mi'kmaq Grand Council and one from the Atlantic Women's Association.

First Nations Finance Authority

The FNFA is considered a non-profit financial lender to First Nations governments; it provides low-rate loans and issues debentures (a type of bond used to raise funds) secured by qualified existing revenue streams such as tax revenues or other own-source revenues. Under its pooled borrowing model, several loan requests are combined and issued as a debenture to the capital markets to raise capital for First Nations governments (Finance for the Future, 2022). The FNFA provides First Nations with a pathway to raise financing from financial markets. Just as national and provincial governments, major cities, and utilities can raise capital by issuing highly rated government bonds and manage public borrowing through their own institutions, so can First Nations governments, thanks to FNFA's support. FNFA members pool their resources to borrow at the same rates as other investment-grade rated government borrowing authorities. FNFA's financing services support First Nations to build land, social, infrastructure, and economic development projects on their own terms and at the best rates possible (FNFA, 2024a). The FNFA also provides investment and advisory services: as a non-profit, it does not charge fees for its services. As of December 2024, the FNFA closed its 10th debenture and contributed $6,514 billion in national economic output; its 169 borrowing members have accessed 87 loans equal to $3,070 billion and created 32,368 jobs throughout Canada (FNFA, 2024b, p. 3).

To better understand the impact of the FNFA on economic reconciliation in Canada, consider its recent loan of $250 million to the Mi'kmaq Coalition[3] to purchase "Canadian off-shore fishing licenses from Clearwater Seafoods" (Indigenous Watchdog, 2020). Clearwater Seafoods is Atlantic Canada's largest fishing company, and in 2021, it announced that the Mi'kmaq Coalition and Premium Brands Seafoods Corp. had partnered to each acquire 50% ownership in the company (Clearwater Seafoods, n.d.; Doucette & Stack, 2024). This acquisition represents "the single largest investment in the seafood industry by any Indigenous group in Canada" with significant benefits for "Mi'kmaq communities in Nova Scotia and Newfoundland and Labrador for generations to come" (Clearwater Seafoods, n.d.). According to the FNFA's President and CEO Ernie Daniels, "Access to capital is the key ingredient to economic growth for First Nations. FNFA is the only First Nation organization in the world leveraging private capital for a pooled-borrowing model of nations to finance community projects—this is true economic reconciliation in action" (FNFA, 2024b).

The FNFA is 100% First Nations-owned and governed. Its board of directors is composed of two Chiefs and nine Councilors from First Nations who are elected annually from the Chiefs and Councillors of the borrowing membership. The Chiefs and Councilors represent eight provinces throughout Canada: of the two Chiefs, one serves as chairperson and the other as deputy chairperson. The FNFA considers itself separate from the Government of Canada and the Crown; it explicitly states that it "is not an agent of Her Majesty or a Crown corporation and is governed solely by the First Nation communities" (FNFA, 2024c). The board sets its own policies and approves all membership requests: unanimous board approval is also required for every loan. To become a borrowing FNFA member, a First Nations must be scheduled to the

First Nations Fiscal Management Act; 65% of First Nations in Canada have voluntarily become scheduled to the Act, representing all 10 provinces and one territory in Canada (FNFA, 2024a). Once First Nations become scheduled, they are have to work with the First Nations Financial Management Board (FNFMB) in order to have their financial management systems and financial performance certified; certification allows First Nations to access pooled borrowing through the FNFA. If a First Nation intends to borrow from the FNFA using tax revenues, they need to work with both the FNFMB and the First Nations Tax Commission (FNTC) before accessing pooled borrowing through the FNFA. Once these initial steps are complete, a Band Council Resolution must be passed for a First Nation government to request to become an FNFA borrowing member (FNFA, 2024b). The FNFA is governed by directors who represent the Nations the FNFA serves. It works in an integrated manner with the other First Nations Financial Management Act institutions (i.e., the First Nations Financial Management Board, the First Nations Tax Commission, and the First Nations Infrastructure Institute) to "provide a regulatory framework that provides assurances of good fiscal and capital planning that enhances private investment on-reserve which in turn supports the growth of First Nations businesses and economies" (Schneider and Saylor Academy, 2024). The FNFA's growth can largely be attributed to working within the framework of its enabling legislation, the First Nations Fiscal Management Act, as well as to the financial market requirements required to uphold its credit rating. The increasing participation of First Nations in equity opportunities, as illustrated by the Mi'kmaq coalition's 50% equity share in Clearwater Seafoods, has also contributed to its growth. The FNFA's success in Canada has led to discussions with the central banks of Australia and New Zealand about adopting a similar model (Finance for the Future, 2022).

Discussion

As these examples illustrate, there are several different governance models in place throughout the country. Each IFI has its own application and selection process for board directors. There is also no uniform measurement framework or dashboard used by all IFIs (M. Dokis, NACCA, personal communication, May 6, 2021). Therefore, accountability frameworks are dependent on the IFI, the communities it serves, and its funding sources.

However, one commonality all IFI boards have is that they are Indigenous-controlled, self-determining institutions governed by board members who know their local economies and are from the communities the IFIs work for. IFIs "have a deep reach into the communities they serve…Many share with the communities a broader perspective on value—as not simply net worth and returns to shareholders, but serving social and environmental objectives as well" (NACCA, 2017). And, as Cooper and the UDG note, community, spirituality, and culture are key to First Nations financial institutions: "If there is no community engagement, spiritual and cultural risks are not considered. This will lead to a lack of understanding of the First Nations context and could lead to a lack of support for the institution" (2010, p. 212).

Indeed, First Nations believe that accountability requires a connection with and embrace of a community's cultural values (Baker & Schneider, 2015). While IFIs and the FNFA provide the formal rules guiding Indigenous financial institutions, they also need to represent the informal norms of the Indigenous communities they serve. To achieve legitimacy, there must be a cultural match within these institutions: there must be a balance between the formal rules and the shared norms of communities (Cornell & Kalt, 2007; Schneider, 2009). As noted by the Australian Indigenous Governance Institute, "Each nation must equip itself with a governing structure, economic system, policies and procedures that fit its contemporary culture" (n.d.).

As the examples demonstrate, the IFI and FNFA boards are largely composed of members from the communities they serve: these members have the knowledge of their local economies, the experience and skills in business and community economic development, and the shared values necessary to realize the cultural match and communal accountability required to achieve legitimacy and success. However, to better understand how traditions and cultures are influencing Indigenous financial institutions and their governance and accountability frameworks, as well as how IFIs are advancing Indigenous interests, we must go beyond this exploratory research to deepen our understanding of these institutions and their governance frameworks.

New Zealand

Māori are the Indigenous people of Aotearoa New Zealand, with a long history of discovery, innovation, and entrepreneurship (Henry et al., 2018). Unlike many Indigenous Peoples, Māori are a comparatively homogenous group, sharing one language and common origin: they are part of the Austronesian diaspora who discovered and populated the South Pacific over the course of 3,000 years, culminating in their arrival to Aotearoa approximately 1,000 years ago (Chambers & Edinur, 2015).

Māori society was tribal and communitarian, with kinship links to eponymous ancestors and the canoes that brought people to Aotearoa (Walker, 1990). They lived in isolation until the arrival of Europeans, the first of whom was Dutch explorer Abel Tasman in 1641, followed by James Cook in 1769. At that time, Māori were engaged in intertribal trade (Coleman et al., 2005), but after Cook's arrival, a growing number of whalers, sealers, and traders landed, and the tribes supplied food, water, and other artefacts to these new visitors. As a result, many Māori adopted new technologies and modes of trade (Frederick & Henry, 2004). For example, Kingi (2013) notes that Māori adapted their traditional agrarian techniques to produce pork and potatoes, which were new to the country. Likewise, by the 1830s, Māori had acquired trading vessels and set up manufacturing hubs to serve international markets: "the rapid expansion of Māori commerce was not simply chance, but had been advanced by deliberate strategies in line with customary practice" (Petrie, 2006, p. 40). Thus, the spirit of entrepreneurship, curiosity, and bravery that underpinned the Māori migration across the Pacific Ocean also shaped the ways they responded to the new arrivals and a political economy founded on capitalist rather than communitarian exchange.

In 1840, after 70 years of relatively harmonious interaction with the British, the Treaty of Waitangi was signed between the British Crown and Māori tribes, formalizing New Zealand's status as a colony. While this study will not delve deeply into the Treaty, as the topic has already been covered by many scholars[4], it is important to note that in its aftermath, acrimony arose between the two parties due to differences in interpretation: the English version of the Treaty ceded absolute sovereignty to the Crown, while the version of the Treaty in Te Tiriti o Waitangi (the Māori language) did not. Increasingly repressive legislation was implemented, first by the British and then by New Zealand,[5] resulting in extensive land confiscations (Boast, 2008). When Māori refused to sell land to the growing number of settlers, warfare ensued (Boast, 2008; Belich, 2013). Though Māori were recognized for their bravery and military acumen (O'Malley, 2016), they were outgunned and outnumbered, with devastating consequences.

In the aftermath of the Land Wars, Māori experienced increasing poverty, disenfranchisement, and trauma (Wirihana & Smith, 2014), a state that continued well into the 20th century. Scrimgeour and Iremonger emphasize how colonization negatively impacted Māori through ongoing and repressive legislation, military action, and the expropriation of land and other resources, which contributed to the "loss of human, social, cultural, and natural capital within the Māori Economy" (2004, p.1). Indeed, the Māori population was nearly extinct by the close of the 19th century, with most of the remaining Māori eking out an existence in isolated tribal homelands.

However, the Māori Renaissance arose in the 1970s, as a vast number of Māori migrated to cities to seek better jobs and opportunities, leaving behind their underutilized tribal homelands (Walker, 1990). A young generation of educated and articulate Mā ori spearheaded a wave of activism and protest that transformed contemporary society (Walker, 1984; Houkamau, 2006). As McNicholas notes, "In the last thirty years Mā ori society has undergone a cultural revival often referred to as the Māori Renaissance. The reclamation and reconstruction of 'authentic' and traditional identities, roles, and relationships became central to a political vision of equality for all Māori" (2009, p.319). During this time, the Government of New Zealand finally acknowledged the Treaty and Māori's associated grievances, creating the Waitangi Tribunal in 1975 and, in 1985, extending its jurisdiction back to 1840 (Stokes, 1992). The Tribunal investigates grievances against the Crown, acknowledging that these grievances often emerge from the different versions of the Treaty. Though it only has the power to make recommendations to governments, the Tribunal embodies a strong moral imperative. From the early 1990s into the 2020s, the Tribunal has seen almost 100 tribes settle claims, with transfers of land, cash and other assets worth billions of dollars.

Treaty settlement claims and the growth of other forms of pan-tribal and commercial business have seen the Māori economy swell to an estimated $NZ68 billion, and the "Te Ōhanga Māori 2018 [report]… showed Māori are increasingly involved in business activities, have a diverse asset base and a growing workforce with more skills" (Gibson, 2021). This economic growth is spurred by the reorganization of Māori tribes and communities to create organizations that govern, manage, and invest on behalf of their constituencies. This economic and cultural revitalization has required Māori to reorient

and retrain for the contemporary business environment (O'Sullivan & Dana, 2008). As noted by McNicholas, "Māori developments in the past two decades have included a desire for Māori to take charge of their own development; an on-going interest in self-determination, autonomy and involvement in policies and programmes that affect them (2009, p.320). McNicholas further highlights Māori accountability, which is diametrically opposed to Western capitalist models and based on taking account of cultural norms and obligations and pursuing self-determination. This is reinforced by Mika et al. (2019), who found that tribes are having to recalibrate their traditional institutions and revitalise entrepreneurship and innovation within their economies to account for a Eurocentric marketplace's requirements, whilst still meeting their cultural obligations and aspirations.

Studies have also shown that the concepts of tikanga (cultural values and practice) and mātauranga (traditional knowledge) are integral to Māori economic practices. In a study of Māori Asset Holding Institutions, Poyser et al. (2020) found that tikanga and m ātauranga underpinned Māori approaches to finance and business. Meanwhile, Craig et al., who studied accountability-reporting objectives in Māori-controlled organizations, found these organizations reflected tikanga as a guiding principle in the following ways: (a) wairuatanga and tikanga (spirituality and customary beliefs), (b) whakapapa (intergenerationalism and restoration), and (c) mana and rangatiratanga (governance, leadership and respect) (2018, p. 435). Craig et al. further highlight how these values reflect Māori worldview and the overarching principles of cooperation, stewardship, and placing equal emphasis on financial and non-financial assets such as "spirituality, collective ownership, connectedness to the land and preservation of the natural and physical environment in honour of past generations and for future generations" (2018, p. 435). They recognize that Māori entities are accountable to their constituencies and kinship groups, or, in the case of pan-tribal urban organizations, to their communities of interest. Finally, they note that an Indigenous model of accountability reporting, founded on cultural values, has much to offer to non-Indigenous finance and investment, as it is predicated on quadruple bottom-line accountability to social, cultural, environmental, and business goals: this balances financial, social, and cultural aspirations alongside an intergenerational view of stewardship and sustainability.

Indeed, even the most conservative economic pundits acknowledge Māori organizations' different accountabilities. For example, one report found that as investors, "iwi typically have limited access to new capital... have constraints on their ability to sell certain assets… tend to have long time horizons, are reluctant to report negative returns (and therefore can have a lower tolerance for risk) and... tend to have a strong home bias in their investment strategies… it should be noted that iwi Trusts have objectives that go beyond maximizing financial returns" (TDB Advisory, 2020, p.7). This suggests the Māori economy and Māori investment organizations are evolving to meet the challenges of national and international marketplaces. That said, these organizations are still in their early stages, struggling to balance the imperatives of a capitalist market founded on individual endeavor, maximizing profits, exploiting resources, and short-term goals with their own aspirations for collective benefit, intergenerational well-being, and a deep and abiding spiritual connection between people and environment.

The following comment from the Reserve Bank Governor, Adrian Orr, can help articulate the underlying lessons from this study:

> The Māori economic asset base is also diversifying, with new investment areas including geothermal, digital, services, education, tourism and housing, moving with the New Zealand economy, and leading in some areas such as brand development...
>
> It's important to not only recognise the value Māori business brings to Aotearoa but to also encourage and protect that contribution. (Orr, 2019)

Discussion

IFIs have played a crucial role in advancing the economic development of Indigenous Peoples in Australia, Canada, and New Zealand. Governed by unique practices and legislation, IFIs blend Indigenous cultural values with western accountability frameworks, shaped by a shared history of colonialism and a reliance on government funding and partnerships.

Indigenous culture significantly influences governance arrangements, particularly through the inclusion of Elders in leadership roles. In Australia and New Zealand, Elders are often elevated to board positions, reflecting their respected status as knowledge holders. This practice, rooted in respect for their wisdom, is a common feature in both countries. In Canada, IFI boards typically consist of Indigenous members with strong community ties, including ties with Elders. Research indicates that Elders contribute to governance through conflict resolution, values-based decision-making, and intergenerational perspectives, as well as embedding sustainability and environmental protection in board decisions. Their presence is seen as an innovative element that aligns with Indigenous, environmental, social, and governance (IESG) principles.

The integration of Traditional Knowledge and community accountability in governance frameworks enhances IFIs' corporate governance practices. This multi-dimensional approach combines western legal requirements with Indigenous philosophies, creating a robust accountability system. Having to meet both Indigenous and non-Indigenous accountability requirements creates an interlocking circle of values and codes of conduct affording IFIs a double layer of protection. Traditional Knowledge emphasizes environmental stewardship, leadership by consensus, and community responsibility, as seen in Indigenous teachings in Canada, Māori concepts in New Zealand, and the Aboriginal Australian principle of community kinship. This cultural match ensures that Indigenous values inform governance and accountability, providing legitimacy to these frameworks.

A shared colonial history and the need for government support are critical factors in the development of IFIs. Colonialism has driven Indigenous Peoples to seek self-determination and autonomy, resisting the wholesale adoption of western governance systems to avoid perpetuating colonial power dynamics. Governments in Canada, Australia, and New Zealand have acknowledged their colonial legacies by providing

redress through asset returns, compensation, and specialized support. This support is vital for sustaining Indigenous accountability systems and furthering the autonomy and self-determination of Indigenous Peoples as IFIs continue to develop.

Indigenous economies have historically been shaped by colonial dispossession, market exclusion, and systemic barriers to capital (Altman, 2004; Anderson et al., 2006). Conventional economic development paradigms, such as modernization theory and dependency theory, have largely failed to account for the unique governance, property rights, and community-based financial models of Indigenous Peoples (Altman, 2004). Instead, emerging institutional economics and hybrid economy frameworks provide more suitable analytical lenses.

The hybrid economy model, as outlined by Altman (2004), demonstrates that Indigenous economies are not solely defined by market-based activity but rather by a three-sector system: the market sector (commercial enterprises); the state sector (government funding and policy influence); and the customary sector (traditional economic activities such as land stewardship and resource management). This model reveals that Indigenous financial institutions do not merely mimic mainstream financial structures but instead integrate customary governance and collective ownership principles. They have a critical role in economic self-determination because they enable communities to access capital without land alienation, a major challenge for Indigenous groups under Western property law (Altman, 2004); develop enterprises that align with cultural and environmental priorities, ensuring long-term sustainability (Anderson et al., 2006); and support Indigenous social entrepreneurship, where business development is linked to community welfare, employment, and intergenerational wealth-building (Anderson et al., 2006). This approach challenges Western economic paradigms, which often assume capital accumulation, private land ownership, and profit maximization as universal development indicators.

Indigenous-controlled financial institutions provide culturally appropriate financial products, such as microloans and revenue-sharing models, which support entrepreneurship without requiring private land collateral. Social enterprises and cooperatives funded by Indigenous financial models generate job opportunities tailored to community needs (Anderson et al., 2006). Collective asset management, such as tribal investment funds, enables long-term financial security while reinvesting profits into social services, education, and infrastructure. Indigenous land and resource governance models allow communities to balance economic growth with environmental stewardship, creating sustainable industries in land management, ecotourism, and renewable energy (Altman, 2004).

Furthermore, Indigenous financial institutions often serve as economic expressions of sovereignty, reinforcing governance structures that prioritize community over individual wealth accumulation. Land restitution cases in Canada, Australia, and New Zealand have demonstrated that economic empowerment is a key driver of political self-determination, with financial institutions playing a pivotal role in treaty settlements and self-governance agreements (Altman, 2002). Likewise, the increased presence of Indigenous professionals in financial governance marks a significant step toward economic reconciliation.

However, challenges remain in ensuring that Indigenous financial institutions are not merely symbolic but have genuine decision-making power. In Canada, the creation of Indigenous-controlled financial institutions, such as the First Nations Bank of Canada, has enabled Indigenous communities to bypass mainstream banking discrimination and access capital for community-driven projects. In Australia, the expansion of Indigenous corporate governance under the CATSI Act has allowed greater community control over investment strategies and land-use decisions (Altman, 2002). And in New Zealand, the Waitangi Treaty settlements have provided Māori iwi with substantial financial assets that have been reinvested into community-driven enterprises, reinforcing economic sovereignty.

Challenges to genuine reconciliation include the fact that Indigenous financial representation in mainstream institutions remains limited, with Indigenous professionals often excluded from high-level policy decisions. Many Indigenous financial institutions still operate within a regulatory environment designed for Western economic models, limiting their ability to implement Indigenous governance and decision-making principles. State-driven reconciliation frameworks often emphasize economic participation without addressing historical injustices, leading to a narrow interpretation of economic self-determination. Reconciliation in the financial sector must move beyond representation and address structural barriers, such as recognizing Indigenous financial governance models as legitimate alternatives to Western financial structures, reforming financial regulations to accommodate Indigenous land tenure systems and communal asset ownership, and strengthening legal mechanisms to ensure equitable revenue-sharing from resource extraction on Indigenous lands.

Conclusion

This paper offers a pioneering effort to synthesize the experiences of Indigenous and Aboriginal Peoples in Australia, Canada, and New Zealand, focusing on accountability structures and mechanisms. In these cases, we found that that financial and investment entities are deeply intertwined with the communities and cultures they originate from. These communities are rebuilding their economies and societies, which have been heavily and negatively impacted by colonization. While their investment entities share some fiduciary responsibilities with their mainstream counterparts, they emphasize relationships, connections, and long-term, intergenerational perspectives. Guided by ancestral cultures and values, they aim to build resilient organizations for future generations. The authors hope this paper spurs further research in similar global contexts, particularly for other Indigenous Peoples.

END NOTES

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[2] The Department of Indian Affairs and Northern Development is now Indigenous Services Canada.

[3] The Mi'kmaq Coalition consists of seven Mi'kmaw development corporations across Nova Scotia and Newfoundland and Labrador.

[4] For additional information, see Walker (1990), Palmer (2008), Tawhai & Gray-Sharp (2011) and Orange (2015).

[5] The New Zealand Constitution Act of 1852 transferred power from the British to settler governments.

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Etuaptmumk/Two-Eyed Seeing as a Framework for Sustainable and Inclusive Tourism Planning and Development

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ABSTRACT

Indigenous voices and philosophies are conspicuously absent from the call to transform tourism planning through regenerative and culturally inclusive approaches. To address this, this work explores collaborative frameworks that can propel the tourism industry forward for all stakeholders in a more inclusive and sustainable way. Examining the role of Traditional Knowledge in Unama'ki Cape Breton Island provides an enhanced understanding of the barriers to and opportunities for Indigenous inclusion in tourism decision-making and can inform a broader world view. Additionally, the philosophy of Etuaptmumk/Two-Eyed Seeing allows for the consideration of two distinct perspectives and could be usefully applied to the tourism industry. Through the lens of reconciliation, Etuaptmumk/Two-Eyed Seeing provides a path for tourism decision-makers to contribute to a shared decision matrix and, ultimately, to contribute to a new framework for tourism development. Challenging established colonial research norms and exploring the complex dynamic between Indigenous and non-Indigenous decision-making will deliver both a theoretical contribution to existing literature as well as a practical contribution to building tourism on more equitable grounds.

KEYWORDS: tourism, Etuaptmumk /Two-Eyed Seeing, traditional knowledge, tourism planning, framework

Applying traditional oral teachings to modern-day planning and problem solving is an increasing area of research (Ermine, 2006; Corbet, 2023), and research methodology bridging Indigenous and non-Indigenous ways of knowing has launched a new era in Indigenous research (Hayward et al., 2021). A broad range of disciplines such as education, medicine, aquaculture, and wildlife conservation have constructed planning frameworks reflecting both Indigenous and Eurocentric perspectives; however, there is a noticeable gap in similar research related to tourism planning, decision-making, and destination development.

We must begin with an understanding of place. Indigenous teachings and Traditional Knowledge are place or land based—although this is not synonymous with environmental or nature-based learning. Instead, Indigenous pedagogies are relational to Mother Earth: land loss affects Indigenous guardians and stewards, impacting their health, well-being, and self-determination. Additionally, tourism relies on human and non-human relationships that are informed by place. Wildcat et al. (2014) provide a robust discussion of the historical undermining of Indigenous land-based pedagogy by Western society and explore the complexities and nuances of Indigenous land-based education in different contexts, places, and methods. Many destination marketing organizations tout tourism as a way to be a good steward to nature, but is this the reality? Where is the inclusion of Indigenous ways of knowing in tourism planning? Do tourism planners think of land as a source of knowledge and understanding, or do they think of land as the key to unlocking economic development? How do our relationships with land inform and order the way we conduct relationships with each other and other-than-human beings? (Wildcat et al., 2014)

Unama'ki Cape Breton Island, and its tourism sector in particular, represents the place or geographical research area for this project. Modern day Unama'ki Cape Breton Island has four dominant cultures: Mi'kmaw, Acadian (the descendants of French colonists), Irish, and Scottish (Brown, 2004). While the Mi'kmaw people have welcomed visitors and immigrants to the Island for centuries, Indigenous tourism and related product development has been slow to progress. That said, Indigenous tourism offerings are included under the broad umbrella of Destination Cape Breton (DCB), the Island's destination marketing organization. Having launched a ten-year strategic plan in 2021, DCB works to ensure Indigenous representation on its volunteer board of directors and works collaboratively with the Nova Scotia Indigenous Enterprise Network.

Tourism is an area of both established and emerging strength for Unama'ki Cape Breton Island. Like many island-based tourism economies, Unama'ki Cape Breton Island faces unique geographical challenges due to its size, location, limited resources, and historical marginalization (Graci & Maher, 2018). Tourism presented an alternative to declining extractive industries such as coal and fish, and the tourism industry was quickly seen as critical to the economy, with early initiatives in Indigenous tourism such as Membertou Trade and Convention Centre and Eskasoni Cultural Journeys helping to shape the cultural narrative of the Island and contributing to community economic development (Graci & Maher, 2018). The Island's tourism sector is primarily rural based and is comprised of 740 mostly small- and medium-sized businesses (Statistics Canada,

n.d.). In 2016, the Island's tourism sector consisted of 5,675 employees, representing 10.56% of the total employment on the Island (Statistics Canada, n.d.); as of 2017, the Province of Nova Scotia estimated the sector's annual value to be $330,000,000. Approximately 462,000 Unama'ki Cape Breton Island room nights were sold in 2017, representing 17.5% of the provincial total (DCB, 2019). This clearly demonstrates the sector's value from an economic development point of view.

However, first-hand observations from workers with more than four decades' experience in the visitor economy, as well as statements from the DCB, indicate that Indigenous tourism roles and Indigenous-led visitor experiences are underrepresented (DCB, 2019). Why are Mi'kmaw influences and teachings not incorporated by those individuals and organizations responsible for tourism planning, policy, and action? This question was the impetus for this research.

The Tourism Planning Context

While Unama'ki Cape Breton Island's tourist industry demonstrated significant growth leading up to 2019, the Covid-19 pandemic harmed its tourism sector. As Unama'ki Cape Breton Island develops its tourism pandemic recovery strategies, industry players have pursued a singular goal—increasing revenue to meet and surpass pre-pandemic performance levels. For Indigenous communities, tourism can be a lever to economic growth, and Indigenous knowledge systems and wider Indigenous-informed approaches can positively contribute to transforming business, health, and education for a more positive global society (Carr, 2020). Studies show that the Covid-19 pandemic can act as a catalytic event in which existing economic and political structures are challenged and reshaped, providing an opportunity to redefine the ecological burdens our activities create (Wells et al., 2020). Thus, as the tourism industry resets, Indigenous voices must be incorporated into post-Covid plans if Indigenous aspirations for community development are to be realised (Hutchison et al., 2021). Whether it takes the form of advancing Indigenous Peoples or collaborating with Western approaches, Indigenous inclusion challenges the status quo and could transform the tourism industry during its post-pandemic journey.

Forming innovative partnerships is not a new strategy for the tourism sector, where packaging and joint promotions are commonplace and extensively covered. However, the rush for results can make it challenging to develop innovative long-term relationships, especially in the case of Traditional Knowledge inclusion, where relationships are built through trusting, listening, believing, and understanding. As a result, the current tourism policy and decision-making processes involve a complicated relationship between federal, provincial, municipal, and First Nations governments, communities, and organizations.

Position Statement

I am a settler researcher with significant tourism industry training and experience: the term settler researcher or settler-ally researcher is often applied to researchers who are negotiating the complexities of traditional Indigenous knowledge systems (Snow,

2018). It is important to acknowledge that I have been shaped by the colonial education system in Canada, the United States, and the United Kingdom: as a result, completing this research required both an unlearning and a relearning before any co-learning would be possible. Awareness and education training gave me a better understanding of traditional knowledge systems and their applicability to tourism planning and policy development and was helpful in navigating cultural protocols.

Since recognizing past wrongs is an important first step in moving forward (Government of Canada, 2022), this work starts with a decolonization of Western methodologies in search for truth, reconciliation, and ReconciliACTION. Decolonizing research creates more empathetic researchers and more active cocreators of knowledge, demonstrating how we can take responsibility for our research and deliver more meaningful and impactful work (Datta, 2018).

ReconciliACTION in Tourism

Canada's Truth and Reconciliation Commission (T&RC) was formed in 2008 and delivered on its mandate in 2015. The goal was to inform all Canadians about the cultural genocide carried out by the federal government through its residential school system. It achieved that goal and more, culminating in 94 Calls to Action. What We Have Learned: Principles of Truth and Reconciliation (2015) was the summary report released by T&RC outlining 10 principles designed to guide reconciliation between Aboriginal and non-Aboriginal Canada. The Canadian government committed atrocities against Aboriginal Peoples for generations, and the Principles of Truth and Reconciliation aim to identify barriers to reconciliation and opportunities for constructive action by all Canadians. These recommendations are not tourism industry-specific, but many are applicable for tourism planning, policy, and development. Indeed, reconciliation has ignited awareness and action in Canada, the US, Australia, and New Zealand, as manifested through land acknowledgements, inclusion of ceremonies, and tourism development partnerships (Wark, 2021).

ReconciliACTION offers one model of enacting these recommendations. A term blending Truth and Reconciliation with the Calls to Action, ReconciliACTION advocates for actions or outcomes, not simply words. The Indigenous Tourism Association of Canada (ITAC) has been at the forefront of incorporating ReconciliACTION in the tourism sector. ITAC is an organization with hundreds of members representing Indigenous businesses and individuals from across the country (ITAC, n.d.), providing the tools, resources, and advocacy necessary to bolster the development and promotion of Indigenous tourism in Canada. The National Centre for Truth and Reconciliation also outlines the steps needed to create a ReconciliACTION plan for organizations, teams, businesses, or those responsible for industry sector decision and policy (National Centre for Truth and Reconciliation, n.d.).

In addition to philosophies encapsulated in ReconciliACTION, it is important to note that Indigenous perspectives towards tourism development are often rooted in the goal of self-determination and extraction from dependent colonial relationships (Colton, 2005). Additional considerations for Indigenous communities include opportunities to

maintain and/or strengthen land-based activities or to gain greater control over natural resources (Notzke, 1999). As settlers relearn history and reckon with the actions of their ancestors, acknowledging these additional considerations will allow opportunities for co-learning, collaboration, and allyship to grow.

Indeed, the development and execution of place-based co-management frameworks are steps forward for both Indigenous and non-Indigenous stakeholders. While the systematic blending of traditional and Eurocentric research approaches is not common, Unama'ki Cape Beton Island is home to two long-standing and successful Indigenous and non-Indigenous practical collaborations containing a research component: the Cape Breton Highlands National Park Management Plan and the Collaborative Environmental Planning Initiative. Both collaborations are based in environmental education, planning, and action, including wildlife conservation and long-term sustainability.

The Cape Breton Highlands National Park Management Plan is a joint management plan developed by Parks Canada and Indigenous Knowledge Keepers for the management of the Cape Breton Highlands National Park (Canadian Broadcasting Corporation, 2022). It is designed to optimize operations through a shared management and conservation plan that engages and collaborates with Indigenous Peoples (Parks Canada, 2022).

The Collaborative Environmental Planning Initiative has been an active partnership since 2003, prioritizing creative partnerships in action (Bras d'Or Lakes, n.d.). This formalized relationship between the five First Nations on Unama'ki Cape Breton Island and municipal jurisdictions was initiated by the five Mi'kmaq Chiefs of Unama'ki with the goal of joint research and decision making around the Bras d'Or Lake.

Likewise, the Nova Scotia Indigenous Tourism Enterprise Network is a provincial Indigenous-led organization advocating and delivering capacity-building projects designed to strengthen economic development in Mi'kmaw communities through tourism. From Mi'kmaw youth culinary camps to education and relationship building with allies, this group represents Indigenous voices at many decision-making tables, including DCB. Ultimately, these examples demonstrate successful collaborative community and land-based policy and planning environments.

Research Goals and Objectives

Research Goals

The purpose of this research is to critically analyse the process of tourism planning by studying the role of Indigenous knowledge in general and the philosophy of Etuaptmumk/Two-Eyed Seeing more specifically.

By conducting a comparative framework analysis of decision-making based on the best components of both Indigenous and Western ways of knowing, an Etuaptmumk/Two-Eyed Seeing approach can lead to a greater understanding of the importance and mutual benefits of Indigenous knowledge inclusion in tourism development, planning, and recovery.

Research Objectives

This report has two main objectives:

1. To explore the theoretical opportunities related to the Etuaptmumk/Two-Eyed Seeing philosophy within the context of tourism planning.
2. To conduct a preliminary analysis of multidisciplinary decision-making frameworks based on Etuaptmumk/Two-Eyed Seeing as a path to reconcile Indigenous and non-Indigenous approaches to tourism planning across Unama'ki Cape Breton Island and beyond.

However, it is important to acknowledge that hesitation towards applying Indigenous knowledge to current tourism industry policy and development strategies exists, as bringing together Indigenous ways of knowing and Western ways of conducting research can be challenging (Lavallée, 2009). A dichotomy exists between two very different peoples with different world views, especially when one group has occupied a dominant role over the other (Clarkson et al., 1992).

Methodology

This research is part of an 'Indigenous renaissance' where both Indigenous and non-Indigenous scholars work toward a common goal (Battiste, 2013). Indigenous epistemologies are not widely taught in academia and, in some venues, may be discouraged. Much work is required to achieve true equity and respect between knowledge production processes (Grimwood et al., 2016). Provincial and federal government leaders have apologized for the history of cultural genocide, but generational trauma and power inequities remain. To ensure the integrity of the research process, research protocols must respect traditional knowledge systems and be designed for knowledge cocreation (Huaman & Martin, 2020). In acknowledgement of this, this study was approved by the Mi'kmaw Ethics Watch, an Indigenous-designed protocol approval process required of any researcher who wishes to study, engage, or survey any Mi'kmaw participant or community. Additionally, this work was part of a doctoral project that received Research Ethics Board approval from Leeds Beckett University in 2024.

This paper explored the three following Indigenous philosophies: ultimately, the decision was made to focus and expand on the Etuaptmumk/Two-Eyed Seeing approach for tourism planning/framework analysis.

Netukulimk

Netukulimk "is an essential concept for Mi'kmaw people as it embeds understandings of how a person should live their life on earth where Spirit guides the heart, mind, and actions" (Mi'kmaw Kina'matnewey, n.d.). Netukulimk weaves together the four core values of respect, responsibility, relationship, and reciprocity (Nova Scotia Department

of Education and Early Childhood Development, n.d.). While not explored in detail here, Netukulimk underpins thinking around stewardship and sustainability in relation to tourism development and decision-making.

Seventh Generation Principle

The Seventh Generation Principle is a core value of the Haudenosaunee people but is commonly applied in teachings across Turtle Island/North America and beyond (Haudenosaunee Confederacy, n.d.). Chiefs and Elders consider how future generations will be impacted by the decisions they make today.

Etuaptmumk/Two-Eyed Seeing

Etuaptmumk is a guiding principle that allows for multiple world views. Developed by Mi'kmaw Elder Dr. Albert Marshall, his wife Murdena Marshall, and Dr. Cheryl Bartlet at Cape Breton University in 1992, Etuaptmumk/Two-Eyed Seeing is considered a gift of multiple perspectives and has been adopted as a guiding principle to bring Western and Indigenous ways of knowing together in a spirit of respect and reciprocity (C. Bartlett, personal communication, 2024). A pedagogical approach originally developed to teach integrative sciences, it weaves Westen and Indigenous knowledge systems together for a collaborative co-learning ontology (Hatcher et al., 2009)

Next, a comprehensive literature review of multidisciplinary decision-making frameworks developed to blend Western and Indigenous research with tourism planning processes and policies was performed, with the decision to focus on examples based in Etuaptmumk/Two-Eyed Seeing. The examples chosen in this paper are from a combination of scholarly and trade-related contexts. Established frameworks were examined from across Canada to gain an understanding of the key components necessary when blending two world views.

I have taken what some colonial-based academics may consider extra steps in developing a defensible and inclusive research protocol, but my priority is to take every action possible to decolonialize the research plan. These steps include:

- Initiating an ongoing dialogue with experienced researchers of Indigenous communities and topics including but not limited to education, business, tourism, community economic development, sustainability, and other disciplines that have explored a Two-Eyed Seeing approach.
- Reviewing the work, purpose, and guidance of the First Nations Governance and Information Centre. As home to the First Nations principles of Ownership, Control, Access, and Possession, they offer an online professional certificate program. This training guided the main tenants of my research plan.
- Familiarizing myself with the work of the Tri-Council Policy Statement on Research Involving the First Nations, Inuit, and Metis Peoples of Canada (2018), which offers a nationally

accepted research protocol and ethics framework for studies involving Aboriginal people both in Canada and outside of Canada. This framework is used in awarding national grants and other government-supported projects. It advocates a research approach based on community and Elder consultation (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2018).

- Exploring and participating in Mi'kmaw Ethics Watch (Cape Breton University, n.d.). Their unique and groundbreaking policy, process, and protocols represent a localized protocol approval process researchers must complete before engaging with Mi'kmaq individuals and/or communities.
- Immersing myself in Indigenous cultural programs, ceremonies, and webinars to gain historical, cultural, and contextual understanding. These activities ranged from volunteering for the North America Indigenous Games in Halifax in 2023, which required three distinct training programs and a considerable amount of volunteer commitment, to participating in numerous Indigenous tourism conferences and both online and in-person training sessions on Indigenous allyship, reconciliation, and Indigenous tourism.

Traditional Knowledge and Tourism

Indigenous knowledge is a growing field of inquiry, both nationally and internationally, particularly for those interested in educational innovation. The question "What is Indigenous knowledge?" is usually asked by Eurocentric scholars seeking to understand a cognitive system that is alien to them. The greatest challenge in answering this question is to find a respectful way to compare Eurocentric and Indigenous ways of knowing and include both into contemporary modern education. (Battiste, 2002, p.3)

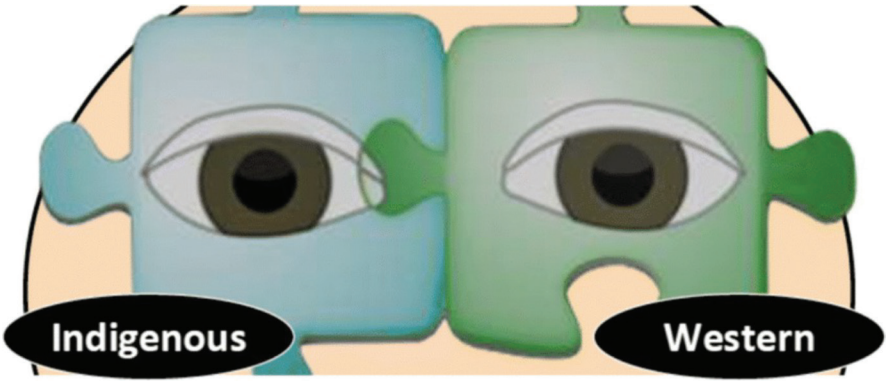
The terms Indigenous Knowledge and Traditional Knowledge are often used interchangeably, depending on the context. Traditional Knowledge is most often shared and explained by Elders and Knowledge Keepers. Elders are acknowledged by their communities as having a lifetime of learned teachings and of earned respect. Knowledge Keepers may not always be considered Elders but carry Traditional Knowledge and expertise in different spiritual and cultural areas (Carleton University, n.d.). Traditional Knowledge can take many forms including skills, practices, oral traditions, ceremony and social values, ethics, and relationships with nature (du Cros & McKercher, 2020). The recognition of diversity of knowledge is a positive indication of change across the research landscape, even though the legacy of colonialism remains (Smith et al., 2023).

Etuaptmumk/Two-Eyed seeing as a Tourism Planning Framework

Almost 20 years ago, on Unama'ki Cape Breton Island, a new concept based in co-learning and collaboration emerged. Etuaptmumk/Two-Eyed Seeing rapidly gained multidisciplinary recognition and adoption. Elder Dr. Albert Marshall has been cited hundreds of times as the founder of the Etuaptmumk/Two-Eyed Seeing principle, yet he has stated publicly that he is not its originator. At a 2019 Global Symposium hosted by the Samuel Centre for Social Connectedness in Toronto, he clarified that he did not develop Etuaptmumk/Two-Eyed Seeing: instead, it is a concept inherent to Indigenous people as a guiding principle of how everyone should coexist (Samuel Centre for Social Connectedness, 2019). Rather, he and his late wife Murdena Marshall, as well as Dr. Cheryl Bartlett, can be credited with the first formal action of Etuaptmumk/Two-Eyed Seeing in Canada via the establishment of an Integrative Science Program at Cape Breton University in 2010 (Bartlett & Marshall, 2017).

Since that time, the Etuaptmumk/Two-Eyed Seeing principle has been researched, applied, cited, and widely shared across disciplines and geographical locations. This principle has been used in research not only within Indigenous communities but in policy and procedures related to wildlife management, health, medicine, education, and diverse other areas (Matthews, 2021)[1]. The proliferation of planning and decision-making frameworks developed to date is evidence of the widespread adoption of Etuaptmumk/Two-Eyed Seeing. For example, the Aboriginal Children's Hurt and Healing Initiative (ACHH) is based in Nova Scotia, Canada, and led by Indigenous communities with the purpose of sharing Indigenous knowledge about the health and wellness of Indigenous youth. They have recognized and embraced an Etuaptmumk/Two-Eyed Seeing perspective that combines both Western and Indigenous worldviews (ACHH, 2021). Likewise, Debbie Martin (2012) wrote about the numerous applications of Indigenous knowledge in the public health, healthcare, and nursing professions. Martin acknowledges that Indigenous perspectives are often ignored or dismissed but that discussions of alternative methods led to a new way of combining diverse viewpoints. These studies apply the Etuaptmumk/Two-Eyed Seeing philosophy to practical issues and problem solving, inviting the government, wider community, and educators to collaborate with Indigenous Elders and communities in a co-learning context that acknowledges Indigenous values, experiential knowledge, and traditions.

FIGURE 1
Etuaptmumk/Two-Eyed Seeing



Note.Two-Eyed Seeing represents an informed vision using both eyes. From Two-Eyed Seeing: An Overview of the Guiding Principle by C. Bartlett & A. Marshall, 2017, Integrative Science, slide 19, (http://www.integrativescience.ca/uploads/files/TwoEyedSeeing_ECC%20Canada_2017.pdf)

These are useful references when developing a similar approach for tourism applications. Current tourism and hospitality management research overlooks how traditional knowledge systems can contribute to policy and planning. Unfortunately, the continued marginalization of Indigenous people in tourism planning and decision making is not helped by academic researchers' indifference to the contribution Indigenous populations can make to the wider community (Jamal & Dredge, 2014). In this light, this study offers a new and innovative approach to a previously colonial process and an important knowledge contribution with widespread applications.

This study first looks at Indigenous and colonial perspectives as the setting for decision-making, followed by an overlay of academic and practical lenses in the context of the current tourism industry. The overall task is to develop a feasible framework for tourism development that will embody the equity and inclusion of all stakeholders to ensure culturally, ecologically, and economically sustainable communities.

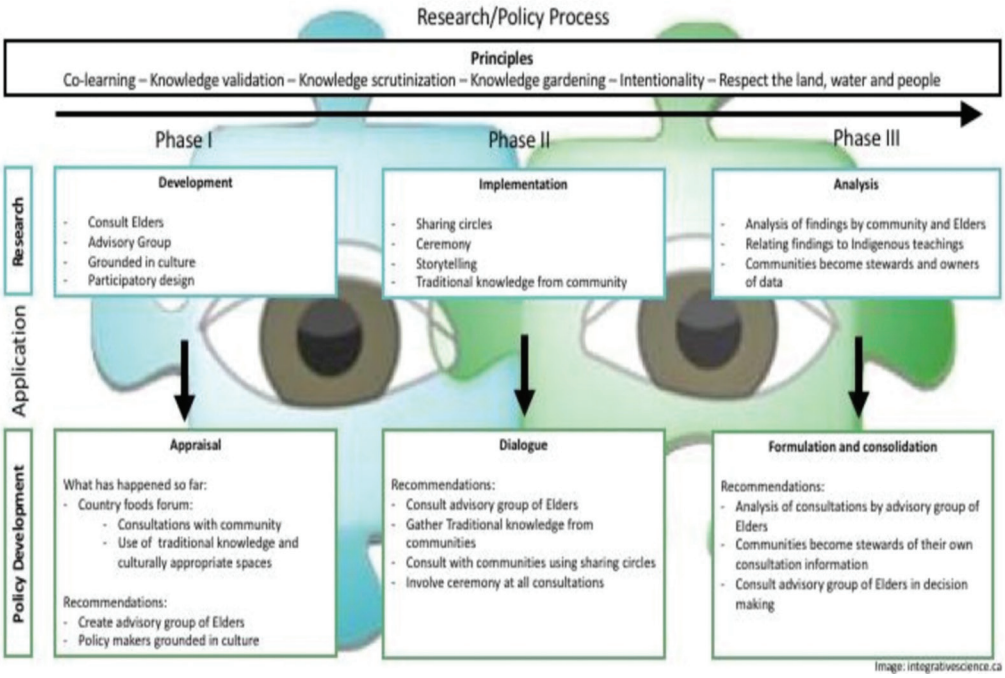
An integrative review of Etuaptmumk/Two-Eyed Seeing undertaken and published in the International Journal of Qualitative Methods describes the systematic literature search and subsequent analysis of 37 published articles: eligibility was based on the requirement that research must be inclusive of interpretations and applications of Etuaptmumk/Two-Eyed Seeing. The analysis noted variances in descriptions of Etuaptmumk/Two-Eyed Seeing, which was variously referred to as a framework, a set of guiding principles, a set of prescriptive guidelines, and a philosophy (Wright et al., 2019). Ultimately, this search and analysis identified the need for researchers seeking authentic relationships with Indigenous people to ensure respectful integration between Indigenous and Western worldviews, drawing on the strengths of each in a holistic way and not simply at steps along the way.

The Opportunity

In a post-Covid world, the future is difficult to map, and the planning environment for Unama'ki Cape Breton Island is complex and crowded, with tourism operators, the Destination Marketing Organization, Parks Canada, Indigenous communities, and federal, provincial, and municipal governments, each of whom formulate their plans in silos, with varying and distinct priorities and resources. As tourism planners plot the way back to pre-pandemic revenue levels, the industry disruption could be reframed as an opportunity to rethink destination strategies with a longer-term view.

Visuals can play an important role in mapping Etuaptmumk/Two-Eyed Seeing onto new industries and contexts. The originating collaborators for Etuaptmumk/Two-Eyed Seeing developed numerous graphics as the late Elder Murdena Marshall was a strong advocate for the importance of visual learning (C. Bartlett, personal communication, 2024). Figure 2 is the image they developed which showcases the essentials of Etuaptmumk/Two-Eyed Seeing, such as co-learning, knowledge scrutinization, and knowledge validation. These categories then flow into each other through a wholistic element that includes cognitive, spiritual, emotional, and physical considerations (Bartlett & Marshall, 2017). Figure 2 depicts the bridging of Western and Indigenous knowledge as a research/policy process could be used to support the creation of research and policy frameworks in any sector or discipline.

FIGURE 2
Etuaptmumk/Two-Eyed Seeing



Note: From Bridging Western and Indigenous Knowledges: Two-Eyed Seeing and the Development of a Country Food Strategy in the Northwest Territories. MacRitchie, S. (2018).

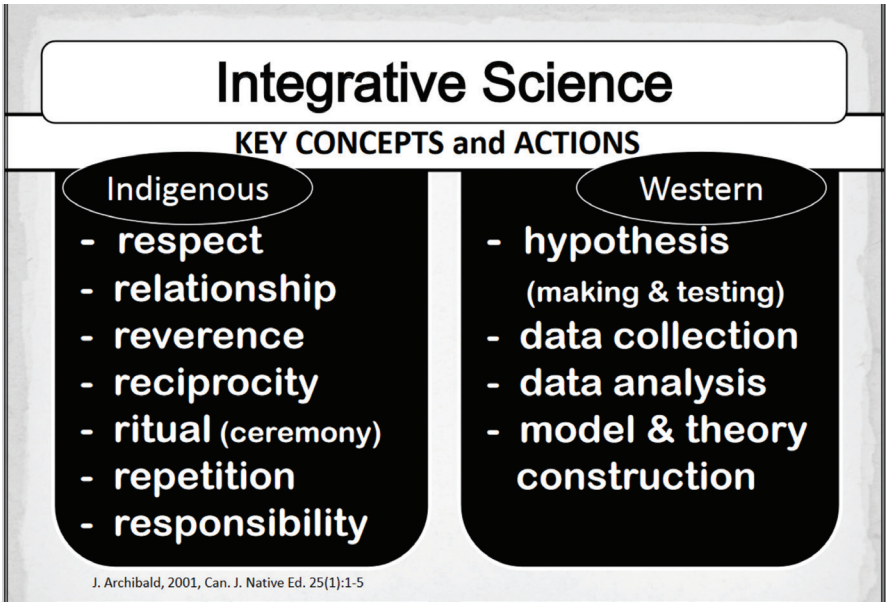
They advocated a phased approach based on mutual respect and incorporating practices such as sharing circles, ceremonies, and storytelling—uncommon practices in the current decision-making landscape. Important concepts included communities becoming stewards and owners of data, participatory design, and knowledge gardening, a term denoting an organic context and nurturing environment (Marshall & Bartlett, 2018).

Since then, many frameworks based on the philosophy of Etuaptmumk/Two-Eyed Seeing at Cape Breton University have been developed, often incorporating visual elements:

- A concept map was generated from the dialogue during an online moderated session of reconciling ways of knowing by land use planners and stakeholders in October 2020. Beginning the dialogue with a prayer demonstrates the inclusion of ceremony and is a sign of respect for Indigenous ceremony and tradition (*Etuaptmumk / Two-Eyed Seeing and Beyond,* n.d.).
- A model for co-advancement was presented via a graphic representation of Etuaptmumk/Two-Eyed Seeing in a summary report from a 2011 Aboriginal Wellness in Canada roundtable in Ottawa. These meetings contained discussions involving two perspectives on Canadian society. The overlay of an Etuaptmumk/ Two-Eyed Seeing approach to dialogue and planning recognized that the colonizer, Canadian society, acts from a history of appropriation and power, while the Indigenous communities are rooted in a history of assimilation. Also important to note is the agreement to come together with respect for, and inclusion of, Indigenous knowledge (Institute of Health Economics, 2011).
- A Two-Eyed Seeing partnership model designed as a stacked diagram demonstrates how the multiple view approach can be applied to a theoretical Indigenous community-based participatory study—in this case a 2021 Developmental Origins of Health and Disease Study in Canada. By including multiple perspectives, the authors recognized the value in building capacity and developed a participatory research process that created a path toward a common purpose. In this example, the goal is to assess a wide variety of health outcomes, but the steps outlined in the process are transferrable to other sectors/disciplines, including tourism (Liberda et al., 2022).

- A proposed Two-Eyed Seeing governance structure was developed to build on and accompany the theoretical Indigenous community-based participatory 2020 Developmental Origins of Health and Disease Study. As with most examples of Etuaptmumk/Two-Eyed Seeing decision and governance frameworks, the components could be considered for adaptation in tourism planning environments (Liberda et al., 2022).
- A Two-Eyed Seeing: The Uproot Model was designed to bring Western and Indigenous ways of knowing together to strengthen the Faculty of Pharmaceutical Sciences at the University of British Columbia in 2023. The goal was to build a decision-making framework that, through its inclusivity, would decolonize and Indigenize pharmacy education. The University of British Columbia has recognized that pharmacy is transactional by nature and rooted in colonial and Western values. This transformational approach to the pharmacy sector and pharmacy education is transferable to the tourism sector (Corbet, 2023).
- A blended approach to delivering Seeking Safety was conceptualized using the Medicine Wheel and discussed in the context of using Two-Eyed Seeing to help those impacted by generational trauma. The Medicine Wheel is a familiar Indigenous symbol with components based on a North-South-East-West configuration and is often used as a framework for guidance, governance, planning, and decision-making, with numerous examples in health, education, and environmental research (Jenkins et al., 2015; Mashford-Pringle & Shawanda, 2023). This approach could be used to help identify critical characteristics for building a tourism framework based in Two-Eyed Seeing (Marsh et al., 2015).
- A framework for decolonizing digital science data that uses a bridge to represent the four Rs of respect, relevance, reciprocity, and reconciliation could act as the foundation for decolonizing climate change research and action. Bridges are often referenced in Indigenous cultures as a path or connector, so it is logical to use a bridge for this visualization because it invokes Integrated Knowledge Translation and co-creation while depicting the way forward through a Two-Eyed Seeing approach toward Indigenous self-determination and governance (Bhawra, 2022).

FIGURE 3
Etuaptmumk/Two-Eyed Seeing Key Concepts and Actions: Indigenous Strengths + Western Strengths



Note: From Integrative Science and Two-Eyed Seeing: Enriching the Canadian fisheries and oceans sectors through cross-cultural collaboration. Institute for Integrative Science & Health, slide 66, (http://www.integrativescience.ca/uploads/articles/2010March-Bartlett-Marshall-Integrative-Science-Two-Eyed-Seeing-traditional-Aboriginal-knowledge-fisheries-species-at-risk-AFSAR.pdf)

Conclusion

In research, as in life, words matter. This was recognized and represented by the Integrative Science Team at Cape Breton University in 2009 when the Etuaptmumk/Two-Eyed Seeing philosophy was being conceived and led to viewing key concepts and actions from two perspectives: the Mi'kmaw approach and the Western approach.

Likewise, a critical analysis of tourism planning through a combined lens of Western and Indigenous views requires an integrated knowledge system approach as well as the application of ethical and cultural protocols. Etuaptmumk/Two-Eyed Seeing offers a meaningful framework to reconcile both Western methods and theory with Indigenous knowledge (Peltier, 2018). An examination of Etuaptmumk/Two-Eyed Seeing in a variety of contexts and across disciplines demonstrated how it could act as a feasible framework for destination tourism planning. As such, this work applies Etuaptmumk/Two-Eyed Seeing to tourism research, an underrepresented topic of study, with the hope of furthering academic and industry discussion of Indigenous roles in key

decision-making processes across tourism and related sectors, making both a practical and theoretical contribution.

For tourism destinations and for Indigenous communities, traditional teachings and knowledge inclusion in the decision-making process holds many economic, social, and cultural benefits. As ReconciliACTION is more visible, destination management and marketing organizations are supporting, developing, and marketing authentic historical and cultural visitor experiences while ensuring that cultural exploitation does not take place.

While it does not necessarily follow that systematic changes in the colonial tourism landscape are taking root, this could change with the creation and adoption of a feasible policy framework based in Etuaptmumk/Two-Eyed Seeing. Exploring the contributions of Indigenous knowledge across multiple destinations allows for a broader world view and an enhanced understanding of the benefits and barriers to Indigenous inclusion in tourism decision-making. Simply put, if an effective framework based on Etuaptmumk/Two-Eyed Seeing can be created and implemented successfully in Unama'ki Cape Breton Island, it could be adapted to other locales.

This work adds to the body of academic tourism research and supports the development of practical lessons for tourism industry practitioners on Unama'ki Cape Breton Island and beyond. While two successful examples of Etuaptmumk/Two-Eyed Seeing in conservation planning were presented earlier—the Cape Breton Highlands National Park Management Plan and the Collaborative Environmental Planning Initiative—the intentional inclusion of Indigenous knowledge and ways of knowing for tourism planning requires a workable framework and this study asserts that Etuaptmumk/Two-Eyed Seeing could provide that model.

This report concludes with the following insights and suggestions:

- Examining the role of Traditional Knowledge in Unama'ki Cape Breton Island demonstrates the potential for a more inclusive decision-making process based in co-learning.
- Applying Etuaptmumk/Two-Eyed Seeing to both Unama'ki Cape Breton Island and the world beyond can lead to an enhanced understanding of barriers and opportunities for Indigenous inclusion in tourism decision-making.
- Employing an Etuaptmumk/Two-Eyed Seeing approach to tourism planning can create a shared vision of ecological stewardship, cultural preservation, and reconciliation.
- Using Etuaptmumk/Two-Eyed Seeing as a collaborative and co-learning based-planning model is a wise move, as it is capable of integrating ethical principles, experiences, reflections, multiple ways of knowing, long-term planning, and cultural understanding.

Further research opportunities in the field of tourism planning, policy, and decision making include examining holistic success indicators such as spiritual, social, and

ecological factors rather than Western-based economic measurements. Research that contributes to practical management practices is also needed to ensure meaningful Indigenous engagement and to enable Indigenous leadership in the development, implementation, and evaluation of tourism policy and planning.

END NOTES

[1] Additional examples of research based on Etuaptmumk/Two-Eyed Seeing include Littlechild and Sutherland's "Enacting and Operationalizing Ethical Space and Two-Eyed Seeing in Indigenous Protected and Conserved Areas and Crown Protected and Conserved Areas" (2021), Reid et al.'s "'Two-Eyed Seeing': An Indigenous Framework to Transform Fisheries Research and Management" (2021), Kutz and Tomaselli's "'Two-Eyed Seeing' Supports Wildlife Health" (2019), Marsh et al.'s "The Impact of Training Indigenous Facilitators for a Two-Eyed Seeing Research Treatment Intervention for Intergenerational Trauma and Addiction" (2020), and Hatcher et al.'s "Two-Eyed Seeing in the Classroom Environment: Concepts, Approaches, and Challenges" (2009).

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Using Two-Eyed Seeing to Codevelop First Nations Housing Policies with Canada

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ABSTRACT

This study explores the use of Two-Eyed Seeing to guide the codevelopment of housing policies between First Nations and Canada, fostering meaningful collaboration and advancing self-determination. It examines historical contexts, challenges, and benefits, using interviews with Kitigan Zibi Anishinabeg, Quebec, and Potlotek, Nova Scotia, as case studies. Key principles for effective policy codevelopment include meaningful engagement, respectful dialogue, shared decision-making, and the recognition of Indigenous rights and sovereignty. The paper contributes to ongoing discourse on Indigenous governance and equitable partnerships.

KEYWORDS: First Nations, housing, self-determination, codevelopment, Two-Eyed Seeing

Housing is integral to the economic, social, and cultural well-being of First Nations communities. Historical colonization and inadequate resources from Canada and the Canadian Mortgage and Housing Corporation have led to persistent housing crises (Persaud & Ross, 2022). Codevelopment of policies is critical for fostering collaboration between First Nations and the Canadian federal government, enhancing Indigenous self-determination and governance. By examining the historical context, challenges, and benefits of First Nations housing, this paper explores the application of Two-Eyed Seeing in codeveloping policies. Through case studies from Kitigan Zibi Anishinabeg (KZ) and Potlotek, it highlights these communities' unique housing challenges and needs.

Historical Context and Challenges of First Nations Housing

Historical Backdrop of Policy Development for First Nations

The relationship between the federal government and First Nations has been shaped by a complex history of impactful policies. The Royal Proclamation of 1763 recognized Indigenous sovereignty and laid the foundation for treaty-making (Reid, 2010). However, assimilation policies in the late 19th and early 20th centuries, including the *Indian Act* of 1876, sought to control First Nations' lives, with Indian residential schools causing profound intergenerational trauma (Timofeev, 2021).

In recent decades, there has been growing recognition of Indigenous rights and self-determination. Section 35 of the *Constitution Act,* 1982 affirmed Aboriginal and treaty rights (Urquhart, 2019). The Truth and Reconciliation Commission's (TRC) 2008 establishment and its 94 Calls to Action highlighted the need for healing (Truth and Reconciliation Commission of Canada, 2015), while the National Inquiry into Missing and Murdered Indigenous Women and Girls issued 231 Calls for Justice, addressing systemic violence and human rights abuses (2019). Additionally, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (2008) was adopted by Canada in 2016 and became law in 2021 (Government of Canada, 2021).

Challenges and Limitations in Traditional Policy-Making Approaches

Despite important developments, many challenges persist. Indigenous Peoples continue to suffer from the impacts of colonial policies that aimed to diminish or eradicate First Nations culture, practices, and economic power (Colbourne et al., 2019). Issues such as poverty, inadequate housing, lack of clean drinking water, and limited access to healthcare and education disproportionately affect First Nations communities (Sheikh & Islam, 2010). Because of this, First Nations leadership and self-governance are crucial in public policy decisions regarding health, economy, politics, and social conditions (Stout & Kipling, 1998). The next section will discuss the severe housing crisis faced by First Nations on-reserve, its social and economic repercussions, the historical and systemic barriers to addressing these issues, and the ongoing efforts needed to promote reconciliation and Indigenous rights.

First Nations Housing Background

First Nations on-reserve housing is in crisis due to severe shortages, mold contamination, overcrowding, and structural deficiencies. Despite audits and mandates, Indigenous Services Canada and the Canada Mortgage and Housing Corporation have made little progress, with 80% of housing needs unmet and funding not prioritized for the most affected communities (Office of the Auditor General of Canada, 2024). Indigenous Peoples in Canada are eight times more likely to be homeless than non-Indigenous people, comprising up to 80% of the urban homeless population (Thistle & Smylie, 2020).

Poor housing quality leads to various social and health issues, affecting education, job prospects, health, and family stability (Olsen, 2016). First Nations face challenges in

land development due to complex regulations, inadequate infrastructure, limited capital access, and socioeconomic barriers rooted in historical inequities (Persaud & Ross, 2022). Funding limitations force the construction of substandard housing unsuitable for climate and cultural practices. Poor conditions on-reserve also contribute to climate change vulnerability, homelessness, and domestic violence (Farha, 2017). And efforts to integrate First Nations into economic development often lead to their separation from communities, resulting in spiritual homelessness (Persaud & Ross, 2022). Despite initiatives inspired by the TRC Calls to Action and UNDRIP, progress remains slow, and First Nations continue to struggle with poverty and insufficient resources, highlighting the need for comprehensive strategies for economic reconciliation and self-determination (National Indigenous Economic Development Board, 2022).

The Concept of Codeveloping Policies and Legislation

Concept of Codevelopment

Codevelopment and comanagement are crucial to forging a new relationship between the Crown and First Nations. The Government of Canada (2023) defines codevelopment as a collaborative and voluntary process where Canada and First Nations work together on a mutually defined issue to achieve a jointly agreed-upon outcome, sharing responsibility for implementation. Codevelopment fulfills the requirements of free, prior, and informed consent while upholding First Nations' jurisdiction and self-determination. Comanagement involves shared authority and decision-making between Canada and First Nations regarding jointly owned processes or assets, ensuring both parties have an equal role in managing resources.

Codevelopment is essential for addressing historical injustices experienced by Indigenous Peoples. It acknowledges the intergenerational impacts of colonialism, assimilation policies, and systemic discrimination and aims to redress these by enabling Indigenous communities to regain control over their resources, revitalize their cultures, and improve socioeconomic outcomes. The Royal Commission on Aboriginal Peoples in 1996 emphasized the need for Canada to establish equitable and lasting coexistence with Indigenous Peoples, highlighting the inadequacy of prevailing approaches and the significant hurdles faced by Indigenous communities engaging with the federal government.

Legal and Policy Frameworks Supporting Codevelopment

Key Supreme Court of Canada cases, such as *Haida Nation v. British Columbia* (2004) and *Tsilhqot'in Nation v. British Columbia* (2014), affirm that Indigenous rights are inherent and require meaningful consultation by the Crown. This legal duty to consult is reinforced by the Cabinet Directive on Regulation, which mandates consultation when regulations may impact Indigenous rights (Government of Canada, 2024).

Internationally, Indigenous rights are recognized through UNDRIP, which Canada adopted in 2007 and implemented into law in 2021. UNDRIP emphasizes the need for free, prior, and informed consent from Indigenous Peoples before implementing legislative or administrative measures affecting them (UNDRIP, 2008).

Implementing UNDRIP involves judicial, policy, and legislative reforms, creating a framework for engagement and addressing historic power imbalances (Borrows et al., 2019). This approach ensures governments uphold international human rights standards, fostering a more equitable and just relationship between Canada and Indigenous Peoples (*Reference Re Public Service Employee Relations Act,* 1987).

Etuaptmumk / Two-Eyed Seeing and Codevelopment

Two-Eyed Seeing is a critical approach integrating the strengths of Indigenous ways of knowing with Western ways of knowing to benefit all. Bartlett et al. (2012) describe it as "seeing from one eye with the strengths of Indigenous ways of knowing, and from the other eye with the strengths of Western ways of knowing and using both together" (p. 335). This approach has been endorsed by Denny and Fanning (2016), who support Indigenous self-governance through comanagement processes, using Two-Eyed Seeing as a design and treaties as a model. They also explore other coexistence models, such as the two-row wampum belt, and delve into Indigenous Knowledge, including Mi'kmaq epistemology. Martin et al. (2017) highlight how Two-Eyed Seeing can reframe questions from an Indigenous perspective and offer solutions that incorporate both Indigenous and Western Knowledge. Martin (2012) emphasizes that "no one perspective is right or wrong; all views contribute something unique and important" (p. 34). This perspective guided my research, allowing me to analyze data through both lenses and ensure a comprehensive understanding that respects and integrates diverse viewpoints. By employing Two-Eyed Seeing, I aim to create research that is inclusive, balanced, and beneficial for all.

Two-Eyed Seeing should be adopted by everyone when working with Indigenous Peoples, ensuring that research respects and incorporates both Indigenous and Western ways of knowing. This approach fosters a more comprehensive and inclusive understanding of issues, leading to better-informed and culturally sensitive outcomes. Furthermore, the government should apply Two-Eyed Seeing during the engagement, consultation, and research phases of codeveloping policies with Indigenous communities. This will ensure that policies are equitable, sustainable, and reflective of stakeholders' diverse perspectives and knowledge systems.

Case Studies: Housing in Kitigan Zibi Anishinabeg and Potlotek

Introduction

These case studies highlight the distinct housing needs and challenges encountered by First Nations communities, providing a critical foundation for the codevelopment of housing policies that are attuned to these communities' specific circumstances and priorities. This section will justify the selection of these communities, outline the methods employed, and provide a comprehensive summary of the cases.

Background and Community Profiles

As an Anishinabekwe (Algonquin) born and raised in the KZ in Quebec, I bring a unique perspective to this research. I have lived and worked in various positions on-reserve. I have also lived, attended school, and worked off-reserve in both federal government and Indigenous organizations. I continually return to my roots, dance at pow wows, and practice traditional ceremonies. It is important for a researcher to conduct pre-research and understand customs, traditions, and historical governance structures before conducting primary research. I chose my nation and a Mi'kmaq nation because I already have a deep connection to them. Married to a Mi'kmaq man from Sipekne'katik and living in Mi'kma'ki (Nova Scotia), with stepchildren from Membertou who are Mi'kmaq and a son who is both Mi'kmaq and Algonquin, my positionality deeply influences my approach and commitment to understanding and respecting the nuances of both cultures.

Kitigan Zibi Anishinabeg, meaning Garden River Peoples, has over 4000 members and is recognized for its leadership in education, particularly in Algonquin language and cultural development (Crown-Indigenous Relations and Northern Affairs Canada, 2025, Kitigan Zibi Anishinabeg, 2021). The community offers a blend of individually owned homes (facilitated through CMHC's Section 95 On-Reserve Non-Profit Housing Program) and social housing comprised of low-income rentals (CMHC, 2018). Additionally, KZ has developed an internal housing approach tailored to its specific needs, enhancing its members' options. Historically, the Algonquin practiced a democratic form of governance where decisions were made collectively with a focus on consensus building (Kitigan Zibi Anishinabeg, 2024). Leaders were selected based on their skills and diplomacy, distributing goods received through trade to the community. This egalitarian system valued community ownership over individualism and was difficult for European settlers to understand (McGregor, 2004; Frenette, 1988). European concepts of wealth and resource ownership clashed with Algonquin traditions, leading to exploitation (McGregor, 2004).

Potlotek, located in Unama'kik (the land of fog), has a smaller population of 829 and its economy is based on commercial fishing, benefiting from various fishing licenses obtained after the Marshall decision in 1999. The community primarily consists of social housing (McDonald, (n.d.). Historically, the Mi'kmaq governance system was also democratic, but it was structured around a Grand Council (Sante' Mawio'mi), which included district Chiefs and a Grand Chief. Leadership was consensus-based, ensuring community participation in decision-making (Paul, 2007). The traditional governance emphasized respect for natural laws and democratic principles, contrasting with the hierarchical structure imposed by the *Indian Act* (J. Battiste, 2010; M. Battiste, 2016).

Methods

The primary research involved semi-structured interviews with seven members each from KZ, Quebec and Potlotek, Nova Scotia. Conducted in Fall 2022 with necessary permissions and ethical approvals, the interviews were incentivized, recorded with

informed consent, and concluded with opportunities for additional comments. Transcriptions were analyzed for thematic content, and the resulting community report's accuracy was confirmed by participants. Themes were identified through a systematic manual review of the transcripts, using an inductive, grounded coding process without software. Responses were organized into tables, and major and minor codes were refined through repeated review, comparison, and synthesis.

Analysis: Interpreting Data and Themes

The data presented in Table 1 are organized into four columns: theme, common perspectives across all participants, specific examples from KZ, and specific examples from Potlotek. The table has eleven rows, each representing a key themes: what is working well, issues with housing, proposed solutions, housing designs and cultural components, climate change and impact, local materials, modernization and energy efficiency, Elders and children, types of housing, process for housing selection and community efforts, and self-determination/autonomy. Each theme is accompanied by a short summary and one or more illustrative quotations drawn directly from participant interviews. This structure was designed to help readers understand shared issues while also seeing how these issues present uniquely in each community.

The analysis highlights similarities to demonstrate common priorities and challenges but also notes points of differentiation. In cases where differences were highly localized or outside the focus of this paper, they were acknowledged but not coded or presented in the table to maintain focus on broader themes and shared findings. This approach supports a clearer comparative analysis while leaving space for future research to explore unique community-specific concerns in more depth.

TABLE 1
Themes From Interviews

Themes	*Common Perspectives*	*Kitigan Zibi Anishinabeg*	*Potlotek*
What Is Working Well	Housing distribution systems are in place, with policies that are regularly updated. Careful consideration of materials, water, and sewer costs ensures sustainable housing development. Own-source revenue and specific funds are accessed to subsidize housing and repair costs. New homes are built to higher standards than the national building code, and skilled workers are employed to improve housing conditions.	Houses are distributed via a lottery system, which is generally considered fair, although some believe families with children should come first.	The community is working on a rapid housing initiative and replacing shingle roofs with metal roofs for storm damage repairs. "Finding money to fix old homes is tough," yet there has been noticeable improvement in health and safety over the years.
Issues With Housing	More funding is needed to build and repair houses, resulting in long waiting lists and overcrowded homes. Overcrowding accelerates wear and tear. Purchasing land on reserves and accessing loans from banks are challenging for community members. There is an increase in community membership due to recent legislation, a shortage of qualified tradespeople, and drug and alcohol addiction issues in both communities. Houses often need repairs and may have mold or insufficient insulation, and bands lack emergency repair funds.	"It is difficult for community members to purchase land on reserve." "Lack of funding results in community members living off-reserve and away from the community and culture."	Many people live off-reserve and want to return. Housing issues extend to land allotment; people can own houses but not the land. "No insulation in these walls, you can feel cold there. It's like being outdoors. I worry about my pipes bursting every winter." "If you don't have a job, you cannot get a mortgage and live off reserve. So, you're stuck living in a house with a bunch of people… it's a trickle effect, like it's sad." "The community was moved from the ocean to inland. We were taken away from the water. Our diet was primarily marine life and that was taken away from us. The water is like our buffalo. Now our diet is high in sugar and our people are suffering from diabetes, heart disease and more."

*Quotation marks are direct quotes from participant interviews.

Themes	Common Perspectives	Kitigan Zibi Anishinabeg	Potlotek
Proposed Solutions	Governments should provide more resources for housing needs. Cultural and community living programs can address issues like addiction. Trade programs in schools can develop local skills. Smaller, affordable homes can address space and cost issues. Economic development opportunities can significantly address housing challenges.	KZ placed a monetary land claim settlement in a trust that generates interest over time. Interest from the trust fund can address housing needs and repairs. A healing lodge with cultural teachings could address addictions. Low-income rental units allow community members to save for homeownership. High schools should implement trade programs. Private-public partnerships could reduce reliance on government.	"Single men and women need to be on their own so they can learn." Economic development opportunities could significantly address housing issues.
Housing Designs and Cultural Components	Housing designs should include cultural components like ceremonial areas and color schemes. Renewable energy solutions, such as solar panels and wind power, should be considered, although they require more funding. Small-scale agricultural solutions can address food security. Housing designs should meet specific family needs, with larger homes for bigger families and smaller homes for smaller families.	"Let us bring the wigwam in the 21st century," suggesting circular homes or units arranged around a playground. Small farms and gardens can address food security. Homes should be more energy-efficient, considering bulk purchases for solar panels and heat pumps.	"Incorporating culture would not be a priority for the Government but it is for us." Cultural considerations include consulting ceremonial and craftspeople and adding elements such as small sweat lodges to housing designs.
Climate Change and Impact Local Materials	Water rises quickly in the spring, causing floods and potential future submersion of the community. The water supply has high mineral and toxicity levels, leading to health issues like cancer and tumors. Warmer fall and spring seasons indicate changing weather patterns. Plants have decreased fruit production.	Moose sightings are rare due to clearcutting or overhunting, impacting food security and cultural practices. The community organized a 'moose camp' to teach Algonquin culture and moose utilization. Traditional artists notice changes in birch for baskets and canoes.	Erosion on Chapel Island is a concern during annual pilgrimages. The water supply turned black, causing concern. The community was significantly impacted by a hurricane, damaging numerous houses.

*Quotation marks are direct quotes from participant interviews.

Themes	Common Perspectives	Kitigan Zibi Anishinabeg	Potlotek
Local Materials	Access to crown land for raw materials like trees is crucial for building and repairing homes. Local trees can be used for construction, and local lumber production can create jobs.	Local rocks can be used for heat storage in solar homes.	"Moderate Livelihood could be utilized on crown land to access wood to build houses."
Modernization and Energy Efficiency	Most houses need repairs, especially for heat preservation. Training individuals to inspect homes and teach insulation practices can help.	"Homes should be modernized for energy efficiency. We are keepers of the land, which means monitoring our carbon footprint."	“Finding money to fix old homes is tough.”
Elders and Children	Elders and children need affordable, safe, and accessible homes. Large families need larger homes, while Elders need smaller, manageable homes. Accessibility features like fewer stairs, special showers, and wheelchair ramps are important. Support during power outages, such as generators, is essential.	"Children need a loving home free from drugs and alcohol."	Efforts to encourage elderly residents to move to smaller homes have been met with reluctance. The community experienced a surge in children born with autism, suggesting the need for fences for safety. Generators are needed so Elders and families can avoid food loss during power outages.
Types of Housing	There is a need for various housing types to accommodate different demographics, including young or single individuals and families. There is an emphasis on transitioning from social housing to homeownership to foster stability and ownership within the community.	KZ is proposing an apartment complex for young or single individuals. In addition, some claim rent-to-own programs for individuals on social assistance can be challenging due to those who have been renting long-term.	The community only receives one house per year from CMHC. Most homes are social housing, but there's an emphasis on encouraging those who can afford their own homes to do so. The community would benefit from options like obtaining homeownership through a certificate of possession.

*Quotation marks are direct quotes from participant interviews.

Themes	Common Perspectives	Kitigan Zibi Anishinabeg	Potlotek
Process for Housing Selection and Community Efforts	Communities face challenges in housing selection and efforts to build or repair homes. Efforts are being made to improve housing conditions through new rentals or renovations.	Housing selection was through a lottery system and considered fair by most. However, recently it went back to old ways and council chooses based on eligibility from complete applications. Some believe KZ should prioritize families with children. KZ is currently building more rental homes.	The Band council evaluates applicants using a point system, considering factors like family composition and spouse status. Housing selection decisions are challenging, raising questions like, “Do you give the house to the 22-year-old with four kids? Or do you give it to the 45-year-old still living in his parent’s basement?”
Self-Determination / Autonomy	Autonomy and cultural incorporation into living spaces are crucial for community development and independence. Safe, sustainable housing is believed to be connected to broader community well-being, including health, education, security, and economic development.	The *Indian Act* has created barriers and a reliance on governments, fostering a poverty mindset. Autonomy is seen as a way to become more independent and self-sufficient, with culture playing a role in repairing past damages. "Everything is connected and can be linked to housing. If community members had a safe, sustainable home, self-determination, and access to culture, then the community would be doing even better regarding health, education, security, and economic development." “For autonomy we need a steady revenue stream to operate, but the challenge is finding one that aligns with our values. While we could pursue resource-based revenue, many in our community oppose activities like forestry, mining, and even overflow dams due to their environmental impact”	The preservation of traditions is facilitated through self-determination and the incorporation of culture into living spaces.

*Quotation marks are direct quotes from participant interviews.

Discussion

The studies conducted in KZ, Quebec, and Potlotek, Nova Scotia, highlight recurring themes related to housing and community development within First Nations communities. These themes reveal challenges, potential solutions, and aspirations concerning housing and autonomy.

Both studies reinforce the critical role of adequate housing in ensuring community well-being. While certain housing aspects, such as distribution through a lottery system and the implementation of housing policies, are effective, significant challenges remain. Common issues include insufficient funding for housing construction and repairs, overcrowding, difficulties accessing land on reserves, and a shortage of qualified tradespeople. These challenges are exacerbated by the historical imposition of confined living spaces, forced policies, and legislation under the *Indian Act*, which does not account for growing populations and results in limited land and resources. It is difficult for members in a nation to obtain land on reserve via certificate position. The federal government has an Additions to Reserve process; however, it is slow.

Governments must respect Indigenous Peoples' rights to self-determination, land, and resources, as outlined in UNDRIP. This includes principles like free, prior, and informed consent and the right to self-governance. Acknowledging these rights can address power imbalances and build trust, ensuring policies align with international human rights standards. However, this respect is often not shown by the government, which continues to impose restrictive policies and slow processes that hinder self-determination and land access. To overcome power imbalances and foster trust, the government should engage in inclusive consultations with First Nations at all policy development stages. For example, the KZ emphasized the need for policies that respect their autonomy and cultural integrity, while Potlotek highlighted the importance of involving community members in decision-making to ensure housing solutions meet their unique needs. The studies advocate for increased government resources to address housing needs, including utilizing interest from trust funds and grants. Enhanced economic opportunities and access to resources would further enable communities to meet housing demands. Suggested solutions include establishing low-income rental units, introducing trade programs in high schools, and forming partnerships with the private sector to tackle housing affordability and space constraints. Integrating cultural elements into housing design, such as ceremonial spaces, traditional materials, and energy-efficient solutions, is also emphasized.

Climate-change impacts, such as rising water levels, changes in plant life, and wildlife decline, are observed in both communities. Efforts to mitigate these effects include incorporating renewable energy sources, raising awareness of government subsidies for renewable energies, and exploring local materials for housing construction. Climate change also affects food security, evidenced by the decline of moose, a staple food source for the Algonquins. The modernization of older homes to improve energy efficiency and the importance of designing homes tailored to the needs of Elders and children are also noted.

Self-determination and cultural preservation are pivotal for achieving successful housing outcomes. However, the *Indian Act* has imposed significant barriers to autonomy, governance, and community-led development, resulting in prolonged dependence on federal and provincial governments. This dependency has fostered a poverty mindset and limited the ability of First Nation communities to make decisions aligned with their values and long-term visions (Kelly, 2023). In this context, self-determination is viewed as a critical path toward increased independence, self-sufficiency, and culturally grounded housing solutions. As noted in the research, "Everything is connected and can be linked to housing. If community members had a safe, sustainable home, self-determination, and access to culture, then the community would be doing even better regarding health, education, security, and economic development."

Despite the ability of Nations to create their own housing policies, they still operate within confined spaces with limited land and resources. Policies impact other areas such as access to capital; Nations can only access what funds the government provides or what they generate through trusts and own-source revenue. This presents a significant barrier to building more homes. The inability to secure adequate capital limits the scale and quality of housing developments, perpetuating the cycle of inadequate housing conditions.

Regarding housing selection, the studies debate the fairness of lottery systems versus points-based systems. Community efforts to secure additional housing through initiatives like the rapid housing program are highlighted. Nations without trusts or economic development opportunities are forced to rely on limited resources provided by Canada. The governance structure imposed by the *Indian Act* and its associated funding create political instability and perpetuate poverty.

These studies stress housing as a crucial component of First Nations community development. They stress the need for increased government support, access to funding and resources, cultural considerations in design, and the integration of self-determination and community empowerment. Addressing these common themes enables First Nations communities to develop successful housing solutions that meet their unique needs while preserving cultural identity and fostering sustainable development.

Recommendations

Recognizing Indigenous Rights and Expertise

Governments must respect Indigenous Peoples' rights to self-determination, land, and resources, as outlined in UNDRIP. This includes principles like free, prior, and informed consent and the right to self-governance. Acknowledging these rights can address power imbalances and build trust, ensuring policies align with international human rights standards.

Meaningful Consultation and Inclusion

To overcome power imbalances and foster trust, the government should engage in inclusive consultations with First Nations at all policy development stages. Actively listening to and incorporating First Nations perspectives into policies and programs

is crucial. It is essential to engage directly with community members to gather their perspectives and insights, as this grassroots involvement ensures that policies are grounded in the actual needs and priorities of the people affected by them. This approach not only validates the experiences and voices of First Nations communities but also promotes more effective and culturally appropriate policy outcomes.

Tailored Housing Solutions

Two-Eyed Seeing recognizes the diversity of Indigenous communities and the need for tailored housing solutions. Housing designs should incorporate cultural components and renewable energy solutions, addressing specific cultural, geographical, and socioeconomic factors. KZ's proposal to modernize traditional housing designs (e.g., circular homes) and Potlotek's focus on incorporating small sweat lodges in housing designs exemplify how culturally appropriate solutions can be integrated.

Empowering Indigenous Communities

This approach empowers Indigenous communities to take an active role in codeveloping housing strategies. Training programs, capacity-building initiatives, and skill-sharing opportunities can enhance their ability to shape and implement housing policies. For instance, KZ's emphasis on developing trade skills within their high schools reflects the community's commitment to building local capacity.

Collaborative Governance Structures

Establishing collaborative governance structures, such as joint committees or boards, can balance power dynamics and foster trust. These structures ensure First Nations communities have a meaningful role in managing their lands, resources, and cultural heritage. For example, Nations would benefit from resources to build homes within their own Nations. This includes having access to sufficient land, increased and more flexible funding, and capacity-building initiatives. Investing in training programs for local tradespeople can ensure that First Nations communities have the skilled workforce needed to build and maintain homes. Furthermore, there must be investment in essential infrastructure such as roads, water, and energy systems, which are critical for sustainable development beyond just housing.

Balancing Traditional and Modern Practices

Two-Eyed Seeing seeks to balance traditional Indigenous approaches with modern housing practices. Indigenous communities can offer insights into sustainable design and energy efficiency while exploring ways to integrate modern technologies. For example, KZ's use of lock rocks for heat storage and Potlotek's interest in renewable energy solutions illustrate how traditional and modern practices can be combined.

Ongoing Collaboration and Learning

Two-Eyed Seeing promotes ongoing collaboration and learning between Indigenous communities and the government. This iterative process requires continuous engagement and knowledge-sharing to ensure the housing strategy remains effective and relevant. Long-term partnerships, joint monitoring, and evaluation processes can facilitate this ongoing collaboration.

Addressing Climate Change

Incorporating climate change considerations is crucial. Indigenous communities have firsthand experience with climate impacts, such as KZ's observations of changing wildlife patterns and Potlotek's erosion issues. Integrating traditional ecological knowledge with contemporary climate strategies can lead to more resilient housing solutions.

Conclusion

This study emphasizes the importance of employing Two-Eyed Seeing to codevelop First Nations housing policies with Canada, highlighting its potential to foster meaningful collaboration and advance self-determination. Through examining the historical context, ongoing challenges, and potential benefits of First Nations housing, we see the imperative for a partnership approach that respects and integrates Indigenous and Western perspectives.

The historical backdrop reveals a legacy of colonial policies that have marginalized First Nations, leading to persistent housing crises. Despite strides toward recognizing Indigenous rights and self-determination, significant barriers remain. Inadequate funding, systemic discrimination, and a lack of culturally appropriate housing solutions continue to plague First Nations communities. The case studies of KZ and Potlotek highlight these challenges, emphasizing the need for tailored, culturally respectful solutions.

Key principles for effective policy codevelopment include meaningful engagement, respectful dialogue, shared decision-making, and recognition of Indigenous rights and sovereignty. Implementing these principles requires a shift from top-down policy-making to a more collaborative, inclusive approach. Two-Eyed Seeing provides a framework for this shift, combining the strengths of Indigenous knowledge systems with Western methodologies to create holistic, sustainable solutions.

The recommendations outlined in this study advocate for recognizing Indigenous rights, engaging in meaningful consultations, tailoring housing solutions to cultural and geographical contexts, empowering Indigenous communities, establishing collaborative governance structures, balancing traditional and modern practices, fostering ongoing collaboration, and addressing climate change impacts. These steps are essential for creating housing policies that not only meet the immediate needs of First Nations communities but also support their long-term goals of autonomy and cultural preservation.

By integrating Two-Eyed Seeing into the policy codevelopment process, we can create a more equitable, just, and sustainable approach to First Nations housing. Ultimately, this study aims to contribute to the ongoing discourse on Indigenous governance and equitable partnerships, offering a pathway toward more effective and respectful collaboration between First Nations and the Canadian government.

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Calculating the Biocapacity of the Saugeen Ojibway Nation Claims of Title and Treaty

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ABSTRACT

This paper explores a land claim case initiated by the Saugeen Ojibway Nation (SON) concerning their traditional territory in Ontario, integrating the principles of the two-eyed seeing approach by bringing the Ecological Footprint and Biocapacity (EFB) methodology into the case as support alongside cultural and Indigenous views. EFB is an environmental indicator used to understand the amount of Earth's resources an area can provide to support human activities. Using geomatics and EFB research, we quantify the regenerative capacity and environmental significance of SON's territory. The analysis reveals that cropland, distinguished by Ontario's high yield factor and fertile soil, possesses the highest Biocapacity within the region, indicating its potential to sustain Indigenous livelihoods. The calculated Biocapacity of SON's traditional territory underscores its ability to support a population of 594,572 people, emphasizing the vast number of ecological resources available within the territory. We look at the juxtaposition of Indigenous knowledge with scientific analysis within this case and how it can help support Indigenous land claims cases. Through this interdisciplinary approach, the paper contributes to the broader discourse on Indigenous land rights and environmental stewardship, advocating for the recognition and preservation of the ecological heritage of Indigenous lands within the framework of the two-eyed seeing approach.

KEYWORDS: Ecological footprint; biocapacity; land claims; geomatics; environmental indicators

Human activity affects the Earth's ability to regenerate resources and sustain ecosystems. This recognition has led to the development of various environmental indicators aimed at quantifying the relationship between human activity and ecologically available resources. Among these, the Ecological Footprint and Biocapacity (EFB) framework has emerged as a widely recognized tool for assessing human demand on nature relative to the planet's ability to provide resources (Rees, 1992; Wackernagel, 1994). The EFB framework measures how much built-up land, grazing land, cropland, forest products, fishing grounds, and terrestrial carbon sequestration area are required to support human consumption: biocapacity quantifies the availability of those ecological assets. These measures have been extensively applied at various levels, ranging from individual households (*Métis-Focused Ecological Footprint Calculator,* 2023) to entire nations (Footprint Data Foundation, n.d.), offering insights into sustainability and environmental management. National Ecological Footprint and Biocapacity Accounts have been produced for all countries and the world as a whole since 1961, with regular updates to its method (Lin et al., 2018).

Despite its utility, EFB has faced criticism for failing to adequately capture the cultural dimensions of land use (Kish & Miller, 2024), creating a barrier to its adoption by localized and Indigenous communities and policymakers. Potential practitioners highlight the importance of integrating cultural, spiritual, and historical considerations into ecological policies and assessments: therefore, there is an increasing need to adapt and refine EFB methodologies to better align and integrate with Indigenous worldviews, with particular opportunities in cases concerning land rights and sovereignty.

A crucial framework for bridging Indigenous and Western knowledge systems is Two-Eyed Seeing (Etuaptmumk), a concept developed by Mi'kmaw Elders Albert and Murdena Marshall. Two-Eyed Seeing encourages seeing the world through both Indigenous and Western perspectives, recognizing the strengths of each, and integrating them to create more holistic understandings of complex problems (Bartlett et al., 2012). By employing Two-Eyed Seeing, our research seeks to balance both knowledge systems. We do so by using biocapacity calculations to demonstrate the land's ecological significance while simultaneously acknowledging the historical and cultural dimensions of the Saugeen Ojibway Nation's (SON) relationship with their territory. This approach helps move beyond purely economic valuations of land, reinforcing Indigenous sovereignty and stewardship in ways that align with both Western and Indigenous frameworks.

This paper also contributes to larger discussions on the use of Biocapacity calculations in legal arguments about Indigenous land claims and its potential role in Indigenous-led economic and ecological stewardship. This research incorporates geospatial analysis of the SON's territory and applies a Two-Eyed Seeing lens. It explores how many multiple knowledge systems can be synthesised to create a holistic framework for ecological assessment when considering land claims.

In this case study, we build on previous applications of EFB, shifting to a localized scale to better capture the environmental significance of SON's disputed territory: our research incorporates geospatial analysis of SON's territory and applies a Two-Eyed Seeing lens, exploring how multiple knowledge systems can be synthesised to

create a holistic framework for ecological assessment when considering land claims. This is especially important because SON's land claims are being actively considered before several courts. The case's legal arguments, which concern Indigenous title alongside treaty claims, highlight the acknowledgement of land and water rights. Biocapacity emerges as a particularly useful metric in this context: using EFB to assess the environmental dynamics of the land and waters in question offers a compelling articulation of the ecological value of SON's territories and their role in sustaining the community. Furthermore, by quantifying the land's contested biocapacity, this paper provides a scientific basis for grasping the ecological value of the SON's territory, along with its potential role in Indigenous-led economic and ecological stewardship. Ultimately, we argue that using biocapacity as a tool to support Indigenous land claims strengthens legal arguments for Indigenous stewardship while expanding the scope of sustainability metrics beyond their conventional quantitative applications. That is, integrating quantitative ecological assessments into Indigenous-led land governance frameworks captures a more holistic understanding of land value, one that moves beyond material attributes alone.

We begin with an overview of the case and the methodological choices that guided our biocapacity calculations. By situating a Western metric like EFB within an Indigenous-specified boundary, we seek to generate a more nuanced understanding of the land's value while also respecting diverse knowledge systems. Adopting a Two-Eyed Seeing approach ensures that our assessment recognizes both the scientific and cultural significance of SON's lands. This synthesis of perspectives not only enriches biocapacity assessments but also aligns with Indigenous principles of land stewardship while advancing ecological research.

Background

SON is made up of two First Nations: the Chippewas of Nawash Unceded First Nation and the Chippewas of Saugeen First Nation. Their traditional territory stretches along the eastern shores of Lake Huron and Georgian Bay, in what is now Ontario, Canada. Spanning over three million hectares of land and water, SON's territory includes the Saugeen (Bruce) Peninsula as well as parts of the mainland. For generations, SON has fought for formal recognition of its land and water rights, emphasizing that these areas are both central to their cultural identity and vital to ecological and economic sustainability.

SON's legal case challenges long-standing legal standards; additionally, it compels the courts to adjudicate on Indigenous title, potentially changing the handling of land and water claims throughout Canada. This particular case, standing as it does at the forefront of a rapidly developing legal discourse and with the potential to establish a truly important precedent, requires a deep examination of Indigenous communities' relationships with their territories, as well as the breadth of government ownership claims over these lands and waters. SON is navigating largely uncharted and often complicated legal territory. The case will affect their community. The SON case's outcome will have significant ramifications for the SON community, as well as for

Indigenous land and water claims across the country, affecting legal frameworks to come and shaping how Indigenous title is acknowledged in environments that are both land and water based.

The Legal Case

SON asserts its claim to 3,036,589 hectares of land and surrounding waters in midwestern Ontario, arguing that the Crown violated *Treaty 45* (1836) and *Treaty 72* (1854) by failing to uphold its promises of protection and stewardship. The Saugeen (Bruce) Peninsula, the land stretching from Goderich to Collingwood, and the waters of Georgian Bay and Lake Huron (Townshend, 2022) are at the heart of this claim.

Treaty 45.5, often referred to as the *Saugeen Tract Agreement,* was signed between SON and the British Crown on August 9, 1836, at Manitoulin Island, Ontario. Lieutenant Governor Sir Francis Bond Head signed on behalf of the Crown, while several SON leaders represented their Nation. The treaty was framed as an exchange: in ceding approximately 1.5 million acres of land in what is now southwestern Ontario, the Crown promised to protect SON's remaining lands, particularly the Saugeen (Bruce) Peninsula, from settler encroachment. However, SON contests the legitimacy of this treaty, arguing that it was signed under coercion and misrepresentation. The British, eager to open fertile lands for settlement, exploited the Nation's vulnerable position, applying pressure amid increasing settler encroachment and economic hardship. Moreover, the treaty may be in direct violation of the Royal Proclamation of 1763, which established a legal precedent requiring Indigenous land cessions to be made with free, informed, and uncoerced consent. SON maintains that the Crown's failure to uphold its duty of protection constitutes a breach of fiduciary responsibility rather than a fair and equitable agreement.

Treaty 72, also known as the *Saugeen Peninsula Treaty,* was signed on October 13, 1854, in Owen Sound, Ontario. The Crown sought further land concessions, this time pushing SON to surrender most of the Saugeen (Bruce) Peninsula, under the premise that SON was unable to effectively defend their lands from increasing settler expansion. The treaty was signed by Crown representatives and SON leaders, who were placed under immense pressure to agree, fearing continued encroachment and economic decline. The terms of *Treaty 72* allowed much of the Saugeen Peninsula to be sold to settlers, with a portion of the proceeds supposedly held in trust for SON. However, SON argues that the treaty was signed under duress and that the Crown misrepresented its intentions, violating the spirit of *Treaty 45.5*. Additionally, SON contends that many parcels of land were sold without their consent or outside the agreed-upon conditions, further undermining their rights.

Legal Implications and Current Litigation

SON's legal claim centers on the argument that these treaties were invalid or breached due to coercion or misrepresentation and failure to uphold fiduciary responsibilities. SON asserts that the Crown's actions directly contravened Section 35 of the Constitution Act, 1982. This Act protects Aboriginal rights, including title to traditional lands and

waters. The case is important as it includes Indigenous title claims to portions of Lake Huron and Georgian Bay, marking a significant precedent in Canadian legal history. In their ongoing litigation, SON seeks a) formal recognition of Aboriginal title over unsold lands and portions of the surrounding waters, b) financial compensation for the wrongful sale of lands and loss of economic opportunities, and c) a declaration affirming that the Crown breached its fiduciary duty by failing to protect SON's lands as promised.

As part of the case, SON has also appealed aspects of more wide-ranging legal matters that include several local authorities. Some disputes have ended: see, for example, SON's agreement with the town of Saugeen Shores that, on February 28, 2022, ceded 1.7 hectares of land and provided financial compensation to SON. However, wider-ranging claims against federal, provincial, and municipal governments remain active (Town of Saugeen Shores, 2022), with SON requesting legal recognition of its rights to unsold lands, along with financial compensation totaling $80 billion in total damages and $10 billion in punitive reparations.

By staking claim to parts of Lake Huron and Georgian Bay, SON seeks legal recognition of their ancestral ties to and rights over the waters, asserting that the Crown breached its promise to safeguard the Saugeen Peninsula indefinitely on behalf of SON (Henderson, 2016; Wagner, 2021). While this claim hinges on the interpretation of treaties, this is also the case for several historical agreements between Indigenous communities and the Crown across Canada. The allegation that the Crown breached its promise underscores these treaties' significance, emphasizing their lasting impact on SON's territorial integrity and the Crown's enduring commitment to care for the land and water if SON are not able to themselves. Together, these dual claims challenge historical injustices and seek legal redress for treaty violations, making it a strong example of the broader struggles faced by Indigenous communities across Canada (Brown et al., 2012; Koggel, 2020; Sandlos & Keeling, 2016). Ultimately, SON's case underscores the complex interplay between historical agreements, dispossession, and the ongoing pursuit of reconciliation.

Indeed, SON's legal pursuit encompasses multiple layers of historical injustice, including the dispossession of traditional lands, the violation of treaty promises, and the Crown's continued use of Indigenous-claimed territory (Farrell et al., 2021; McCrossan & Ladner, 2016; White, 2002). Beyond reclaiming land, this case carries profound significance for SON's identity and intergenerational legacy, shaping the future of a vast geographical territory. Its outcome has far-reaching implications—not only for SON but for Indigenous land claims across Canada—challenging the Crown's treaty obligations, the recognition of Indigenous sovereignty, and the role of legal and environmental frameworks in addressing historical injustices.

By integrating biocapacity calculations into the legal discourse, this paper introduces a novel dimension to the case by illustrating the ecological value of the contested lands. In doing so, it reinforces SON's argument for territorial sovereignty and sustainable stewardship, offering a perspective that extends beyond legal precedent to include ecological well-being.

Court Ruling and Ongoing Dispute

In 2022, Justice Wendy Matheson of the Ontario Superior Court issued a ruling on SON's two distinct claims: the Aboriginal title claim to portions of Lake Huron and Georgian Bay and the Treaty Land claim concerning the Crown's failure to uphold its obligations under *Treaty 45.5* and *Treaty 72.* The court recognized that SON presented substantial evidence of their historical use of these waters, including fishing, ceremonial practices, and established travel routes, all of which demonstrated their deep connection to the region.

However, Justice Matheson ultimately concluded that SON did not meet the Tsilhqot'in Nation Test, a legal standard established in the landmark case *Tsilhqot'in Nation v. British Columbia* (2014 SCC 44), which built upon the precedent set in *Delgamuukw v. British Columbia* (1997 SCC 101). This test requires claimants to demonstrate continuous, substantial, and exclusive occupation of the territory prior to Crown sovereignty in 1763, using evidence of land use and control that aligns with Indigenous law and customs (Olthuis Kleer Townshend LLP, 2022). The ruling underscores the rigid application of this legal benchmark, which remains a standard in Indigenous land claims cases within Canada.

Justice Matheson did, however, rule in favor of SON in recognizing that the Crown failed to uphold its treaty commitments (Olthuis Kleer Townshend LLP, 2022; Saugeen Shores, 2022). The ruling determined that *Treaty 45.5* and *Treaty 72* were breached, affirming that the Crown had a duty to protect SON's interests but then failed to do so. Despite this acknowledgment, the court ended up ruling that the Crown's actions did not constitute a breach of fiduciary duty, as SON had argued. Justice Matheson explained that while the Crown did not act in SON's best interest, the legal criteria for fiduciary duty, which required an obligation to prioritize the other party's welfare, were insufficiently met.

This ruling concluded the first phase of the legal process, although it is now being reviewed by the Ontario Court of Appeal. After the adjudication of appeals, the second phase will address compensation and restitution, focusing on obtaining judicial declarations regarding treaty violations. The broader claim will include SON's claims over unsold Crown lands and municipal-controlled areas such as roads and shorelines, although the municipalities have contested their inclusion in these claims, arguing they should be exempt from treaty-based restitution.

As the case moves forward, it represents a critical moment for SON. The ruling highlights the evolving interpretation of treaty obligations and the stringent, and often difficult, requirements placed on Indigenous nations to prove ongoing and historical territorial occupation. This study seeks to reinforce SON's case by quantifying the ecological productivity of the disputed lands, demonstrating the long-term economic and environmental value provided to those who own and occupy them. This serves as both a comparative measure for assessing compensation and as further validation of the territory's essential role in sustaining SON's cultural and economic livelihoods.

Methods

Geospatial Analysis and Boundary Mapping

To calculate the biocapacity of SON's traditional territory, we employed a systematic methodology using Geographic Information Systems (GIS) technology. The boundaries of the claimed land were mapped using ArcGIS and QGIS, utilizing available cartographic data, historical records, and existing land use studies. Because SON does not provide publicly available shapefiles for the territory, we estimated the boundary based on historical treaty descriptions and land claim documents. This step is acknowledged as a limitation of the study, as the estimated boundaries may not perfectly align with SON's understanding of their territory.

The first step in the mapping process was defining the southern boundary of the land claim area using documented treaty descriptions. From there, the US-Canada border to the west was incorporated, creating an estimated polygon overlaying the disputed territory. This polygon was digitized into QGIS to create a functional shapefile that could be used in biocapacity calculations. While this method allows for a systematic and replicable approach to mapping, it does not replace the necessity for Indigenous-defined spatial data, which remains a key consideration in land claims research.

Two-Eyed Seeing in the Methodology

Although this study did not involve direct collaboration with Indigenous partners, we applied a Two-Eyed Seeing framework by integrating Indigenous perspectives into our methodological approach. As previously mentioned, Two-Eyed Seeing is a guiding principle that encourages the integration of Indigenous and Western knowledge systems to create more holistic and contextually appropriate understandings of environmental and land-based research (Bartlett et al., 2012; Reid et al., 2021). This methodology does not merely place Indigenous perspectives alongside Western science but seeks to braid them together in a way that acknowledges the validity of both worldviews (Reid et al., 2021; McGregor, 2018).

In this study, we incorporated Indigenous perspectives by framing land not as a passive commodity but as a relational entity with intrinsic ecological and cultural significance (Simpson, 2017; Kimmerer, 2013). Indigenous knowledge systems recognize land as kin, with reciprocal responsibilities guiding land stewardship: this perspective is fundamentally different from conventional Western ecological models that often prioritize extractive and economic value (Whyte, 2018; Atleo, 2011). This approach aligns with the SON's historical and contemporary governance structures, which emphasize intergenerational land management, biodiversity conservation, and sustainable harvesting practices (Borrows, 2010). By recognizing these Indigenous governance traditions within our biocapacity assessment, we ensured that our analysis moved beyond a purely quantitative ecological framework to one that acknowledges the deeper cultural and legal relationships embedded within SON's land claims (McGregor, 2009).

Further, our methodology acknowledges that mapping itself is an act of power—a tool that has historically been used to erase Indigenous territories and impose a colonial

spatial logic that does not reflect Indigenous conceptions of land and place (Johnson et al., 2006; Bryan, 2011). Western cartography is rooted in static territorial delineations, whereas Indigenous knowledge systems often conceptualize land through fluid, relational, and seasonal spatial understandings (Tuck & Yang, 2012). In response, we approached GIS-based biocapacity mapping not as a definitive claim over SON's land but as an approximation that recognizes the limitations of Western spatial data in fully capturing Indigenous land relationships (Cajete, 2000). This aligns with Indigenous critiques of environmental management that argue for a shift from state-controlled mapping processes toward participatory, Indigenous-led GIS that centers Indigenous land tenure, traditional land use, and governance priorities (Rundstrom, 1995; Louis et al., 2012).

By embedding Two-Eyed Seeing into our methodological approach, this study challenges the dominance of Western scientific frameworks in land assessment and demonstrates that Indigenous perspectives on land use, sustainability, and governance must be included in environmental valuation methodologies (McGregor, 2018; Simpson, 2017). While we recognize the limitations of not directly collaborating with Indigenous partners, our approach provides a critical entry point for integrating Indigenous conceptualizations of land stewardship into biocapacity analysis. Future research should aim to deepen this integration through codeveloped methodologies that foreground Indigenous decision-making and governance structures (Latulippe & Klenk, 2020).

Mapping the Land

Once the boundaries were mapped and established, we qualified the environment's landscape elements within these boundaries. We used the *Southern Ontario Land Resource Information Systems (SOLRIS)* for this purpose, as it represents the Crown's current method of classifying land and thus provides a standardized basis for classification. After each landscape element was qualified, it was then related to the biocapacity framework (see Table 1 for the classification of the biocapacity elements). We also used the Ontario Land Cover Compilation (OLCC), accessed through the *Ontario GeoHub,* a repository managed by the Ontario Ministry of Natural Resources and Forestry (2014). The OLCC dataset provided comprehensive coverage and thus provides essential information on land cover types for biocapacity calculations. Unfortunately, there was no available spatial data estimating landscape composition in 1854. As a result, we cannot be sure what portion of the lands were forested versus cropped historically: we can only calculate contemporary measures.

TABLE 1
Definitions of the Six Components of Biocapacity

Component	Definition
Carbon	Amount of forest land required to sequester CO_2 emissions (primarily from burning fossil fuels, international trade, and land use practices) after accounting for CO_2 uptake by oceans.
Forest	Area of forest required to support annual harvets of fuel wood, pulp, and timber products.
Cropland	Area required to grow all crops needed for human consumption (food and fibre) and to grow livestock feed, fish meal, oil crops, and rubber.
Grazing Land	Area of grassland used (in addition to feed crops) to raise livestock for meat, dairy, hide, and wool products.
Fishing Grounds	Area of marine and inland waters required to generate annual primary productions to support catches of aquatic species (fish and seafood) and aquaculture.
Built-Up Land	Area of land covered by human infrastructure such as transportation, housing, industrial structures, and resevoirs for hydroelectric power generation.

To align the OLCC data with SON's land claim boundaries, the Clip Raster by Mask Layer function in QGIS was utilized. This function facilitated the precise cropping of the OLCC data to match the size and shape of the newly created boundary's shapefile, resulting in a subset of OLCC data within SON's traditional territories. This subset was processed in QGIS using its Raster Layer Unique Values Report to sum the area of distinct classes of lands and water. This report was exported to Microsoft Excel to relate each attribute to a biocapacity class. As seen in Table 2, This attribution followed the concordance used in a provincially-scaled assessment of Ontario's Ecological Footprint and biocapacity (Ontario Biodiversity Council, 2021) . Next, the global hectares of productivity were calculated using the parameters detailed in the *Ontario Provincial Report on Ecological Footprint and Biocapacity,* which include the Ontario Relative Net Primary Production (rNPP) for Mixedwood Plains (an Ontario ecozone), the

relative yield of an average hectare in Ontario, the Canadian Yield Factor, the Global Inter-Temporal Yield Factor, and the Global Equivalence Factor (Ontario Biodiversity Council, 2021) (Table 2).

After using the *Ontario Provincial Report*'s productivity calculations for each land cover type, the next step involved comparing the *SOLRIS* classes to the biocapacity classes and converting the numbers to hectares and ultimately global hectares. In cases where land cover type comprised a varied percentage of biocapacity classifications, the overall percentages were factored into the area. This involved multiplying the percentage by the number of hectares to determine the area covered by each classification. This calculated area was multiplied by the productivity in global hectares to obtain the total conversion for each land cover type.

Results

The data for these calculations primarily originated from the *Ontario Land Cover Complication* v 2.0 (OLCC), a comprehensive database encompassing the land cover of the entire province of Ontario. The database amalgamates information from three different land cover databases: the *Provincial Land Cover Database* (2000 Edition), the *SOLRIS* Version 1.2, and the *Far North Land Cover* Version 1.4 (Ontario Ministry of Natural Resources and Forestry, 2014). The biocapacity classifications for specific land cover types, including Alvar, Open Tallgrass Prairie, and Tallgrass Savannahs, were also included in the *Ontario Report* (Ontario Biodiversity Council, 2021) and thus were sourced from *SOLRIS* v. 3.0 and OLCC v. 2.0. The utilization of diverse and comprehensive datasets enhanced the reliability and precision of the calculated biocapacity values in Table 2.

TABLE 2
Biocapacity Derived From Area Categorized by SOLRIS Within the SON Claim's Estimated Boundary

OLCC (*SOLRIS* class	Area Within Boundary (ha)	Related Biocapacity Class and Weighting	Hectares	Biocapacity (ha)	Conversion Ratio (Gha/ha)	Biocapacity (gha)	Percent of Total
Clear Open Water	15581193300	100% Freshwater	1,558,119	1,558,119	0.80	1,251,014	29.97%
Marsh	166329225	100% Wetlands: Other	16,633	16,633	0.35	5,761	0.14%
Swamp	1935451800	30% Forest: Sparse	193,545	58,064	0.66	38,046	0.91%
		+ 70% Wetlands: Other		135,482	0.35	46,923	1.12%
Fen	4294575	100% Wetlands: Peat Fens	429	429	0.39	169	0.00%

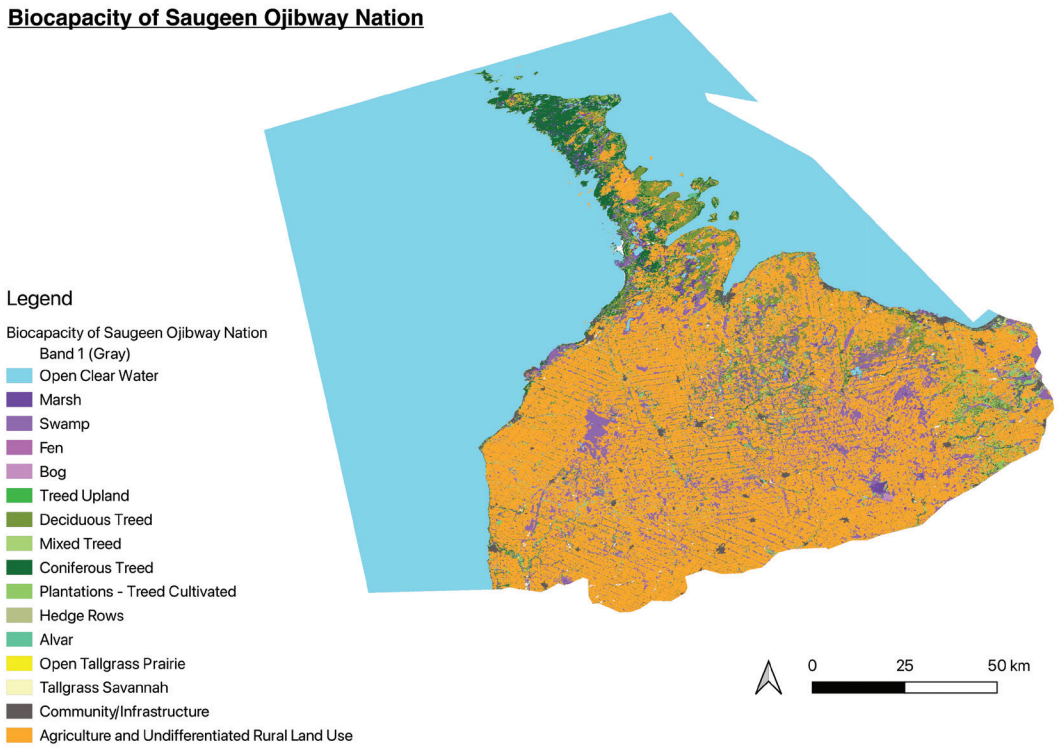
Bog	7018875	100% Wetlands: Peat Bogs	702	702	0.61	427	0.01%
Treed Upland	57215250	100% Forest: Dense	5,722	5,722	1.04	5,945	0.14%
Deciduous Treed	1046786625	100% Forest: Dense	104,679	104,679	1.04	108,764	2.61%
Mixed Treed	464957775	100% Forest: Dense	46,496	46,496	1.04	48,311	1.16%
Coniferous Treed	764718075	100% Forest: Dense	76,472	76,472	1.04	79,457	1.90%
Plantations - Treed Cultivated	184151250	100% Forest: Dense	18,415	18,415	1.04	19,134	0.46%
Hedge Rows	87761250	100% Forest: Dense	8,776	8,776	1.04	9,119	0.22%

Alvar	8630100	60% Low Biocapacity	863	518			
		40% Forest: Sparse		345	0.66	226	0.01%
Sand Barren and Dune	79875	100% Extraction	8	8	0		
Open Tallgrass Prairie	355950	90% Grassland	36	32	0.98	31	0.00%
		+ 10% Forest: Sparse		4	0.66	2	0.00%
Tallgrass Savannah	1411200	65% Low Biocapacity	141	92			
		+ 35% Forest: Sparse		49	0.66	32	0.00%
Sand/Gravel/Mine Tailings/Extraction	31892625	100% Extraction	3,189	3,189			

Community/Infrastructure	551564550	100% Built Up	55,156	55,156	5.60	308,785	7.40%
Agriculture and Undifferentiated Rural Land Use	9472082175	30% Cropland	947,208	284,162	5.60	1,590,842	38.11%
		22% Grazing land		208,386	0.98	214,099	5.13%
		+ 48% Grassland		454,660	0.98	446,814	10.70%
TOTALS			**3,036,589**	**3,036,589**		**4173902**	**100.00%**

Figure 1 depicts a comprehensive map crafted using QGIS to offer a visual representation of the estimated claimed area and to process the diverse land classifications in line with biocapacity categories.

FIGURE 1
Map of SON's Estimated Boundary and Biocapacity



Note. Map Produced Using Data from *OLCC* v. 2.0 on QGIS.

Figure 2 shows the biocapacity within SON's traditional territory, providing insights into its resource significance and capacity to support life within the context of the land claim case and broader ecological discourse. SON's territory is estimated to span about 3,036,589.448 hectares, encompassing a wide range of ecosystems and habitats. This area is estimated to provide biocapacity of 4,173,901 global hectares, accounting for six distinct biocapacity types, including forests, wetlands, grazing lands, built-up land, croplands, and freshwater. Forested areas provided 309,035 global hectares of biocapacity and are predominantly characterized as mixed sparse and dense forests. Wetlands contribute 53,279 global hectares and are crucial in maintaining biodiversity, water filtration, and flood mitigation. Grazing land provides 660,944 global hectares used for livestock grazing and agricultural purposes. Built-up land, including urban and developed areas, makes up 308,785 global hectares. Finally, the two highest biocapacity

components are cropland, totalling 1,590,842 global hectares, and freshwater, totalling 1,251,014 global hectares. Cropland and freshwater are essential for food production, water supply, and ecosystem health. Taken as a whole, the area's total biocapacity could support the lives 600,000 Ontarians, which is greater than the population of all major cities close to SON Territory: this demonstrates the significance of the SON region's biocapacity.

FIGURE 2
Biocapacity of the SON Claim's Boundaries, by Type, in gha

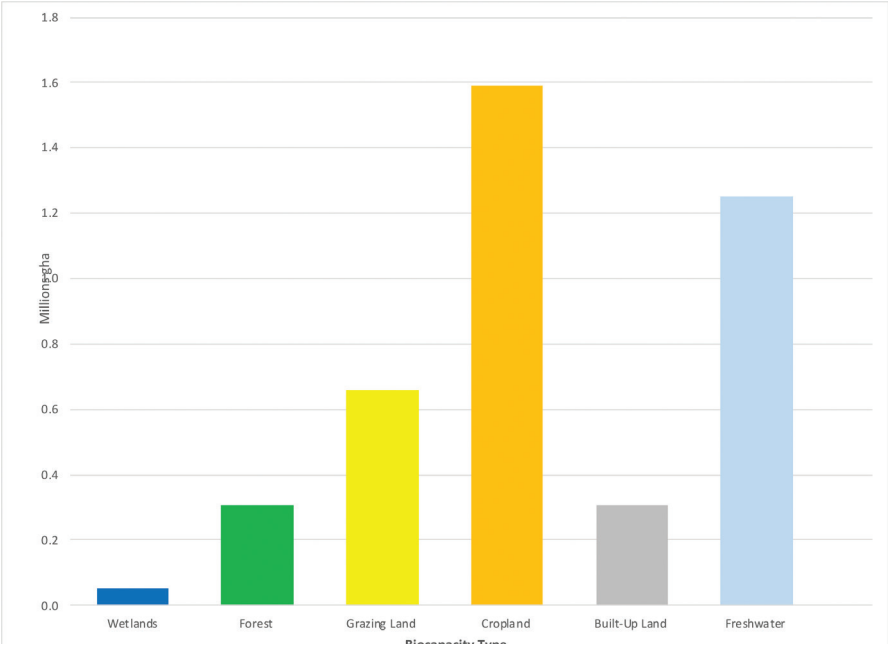


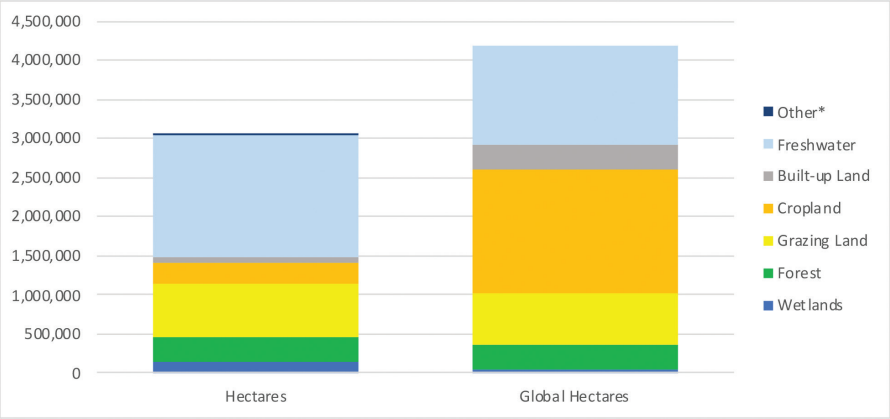
Table 3 shows the biocapacity within SON's boundaries by type in global hectares. For context, the total biocapacity of Iceland is 5,010,029 global hectares, as compared to SON's 4,173,901 global hectares.

TABLE 3
SON Estimated Biocapacity by Type in Hectares and Global Hectares

	Hectares (ha)	Global Hectares (gha)
Wetlands	153,246	53,280
Forest	319,021	309,036
Grazing Land	663,078	660,944
Cropland	284,162	1,590,842
Built-up Land	55,156	308,785
Freshwater	1,558,119	1,251,014
Other	3,807	-
Total	3,036,590	4,173,902

Finally, Figure 3 compares the total number of hectares within the SON boundary to the corresponding number of global hectares in the region. This highlights the difference between physical land area and its ecological productivity measured as biocapacity, which emphasizes the need to consider both environmental and land claim assessments.

FIGURE 3
SON Land Claim Boundaries Measured in Hectares vs. Global Hectares



Discussion

The SON legal claim case is an important moment in Canadian land claim history as it has significant implications for environmental jurisprudence. Utilizing a methodological approach applying geomatics to derive biocapacity, this case study offers a quantifiable assessment of the regenerative ecological capabilities of SON's traditional territorial lands, delineating its environmental valuation. Calculating the biocapacity helped create a quantitative delineation of SON's land productivity—namely, that cropland within SON territory provides more biocapacity per unit of area than the world average. This is consistent with Ontario cropland more generally, which produces more crops per unit area compared to global averages and is known for its high productivity (Hendry, 2023).

This increased productivity is important for the land claim, highlighting the land's potential to support SON. The biocapacity of SON's traditional territory is estimated to sustain a population of 594,572 people, where 7.02 global hectares is the estimated per capita Ecological Footprint of Ontarians (Ontario Biodiversity Council, 2021). Some might say that this undermines SON's claim, given that SON would not require the total disputed area to sustain its own population's Ecological Footprint. From a different perspective, though, this can be seen as supporting SON's claim to the land as it highlights the importance of the Crown honouring its treaty to protect the lands traditionally stewarded by SON: these territories need to be preserved for future generations. In this light, the Crown's failure to honour its duty of stewardship has significant consequences given the area's high biocapacity.

SON's claim to its traditional waters is also important. While SON maintained sole usage of multiple portions of Lake Huron and Georgian Bay, their claim was found to lack sufficient evidence. Nonetheless, these waters' biocapacity is essential for understanding the overall ecological productivity of the space: this analysis offers key understandings into the areas' readily available resources. Additionally, SON has meaningful cultural links to freshwater. As Anishinaabe Peoples, water is more than just a resource: it is a sacred entity with spiritual meaning, representing ancestral memories and playing many roles in cultural practices (McGregor, 2023).

Exploring the land within a historical context and considering both the undeveloped and developed areas helps to shed light on the effects of colonialism and development on SON's traditional territories and their ownership over resources. The biocapacity calculations post-dispossession reveal the ecological and cultural losses sustained by SON and the inadequacies of historical treaties and agreements in safeguarding ecologically significant lands for Indigenous Peoples. This oversight has had lasting repercussions on the ecological integrity of SON's traditional territories. The SON land claim case is not merely a legal dispute but a clarion call for a shift in how land claims are adjudicated and treated in the Canadian legal system. The case demonstrates the necessity of integrating both ecological and cultural considerations into the legal framework, ensuring the adjudication process will fully account for the complex relationships Indigenous communities have with their ancestral lands.

By highlighting the intersection of legal, ecological, and methodological dimensions, our application of biocapacity to the SON land claim offers a complementary perspective to existing legal arguments. Rather than positioning land purely as an economic or geographic entity, this approach recognizes its ecological productivity and regenerative capacity, demonstrating its role in sustaining human and non-human life. While we do not claim to have captured the full cultural and spiritual significance of the land as understood by SON, our methodological framework—guided by Two-Eyed Seeing—suggests that environmental metrics such as biocapacity can contribute to a broader, more holistic argument for land protection and stewardship within legal disputes. This aligns with calls to incorporate ecological valuation into Indigenous land claims as a means of reinforcing arguments for self-governance and stewardship rights (Costanza et al., 2014). Future research should extend this work by collaborating with Indigenous communities to integrate Indigenous-led ecological indicators alongside biocapacity measures, ensuring that land valuation reflects Indigenous knowledge systems, governance principles, and relational responsibilities rather than being limited to Western ecological frameworks.

The outcomes of the case study are significant. The integration of biocapacity into legal proceedings would mark a significant advancement in environmental jurisprudence, advocating for a more informed and science-based approach to land claims, which is required for sustainable outcomes (Boyle & Freestone, 1999). The application of biocapacity is also advocated for in literature on sustainable development environmental planning, as metrics play a crucial role in informing policy decisions (Bell & Morse, 2008). The case also emphasizes the necessity of recognizing Indigenous relationships with their ancestral land within legal processes, as the land

provides greater ecological benefit to the people than simply acreage; such an approach is consistent with international calls for the protection of Indigenous lands, territories, and resources (United Nations, 2007).

Most significantly, there is a growing need in land management for the integration of cultural values and ecological science: an interdisciplinary approach is required to holistically and ethically respond to complex challenges. Combining Indigenous wisdom with scientific knowledge is useful for ecological sustainability (Kimmerer, 2013) and encourages a Two-Eyed Seeing approach. This paper adopts the Two-Eyed Seeing lens by proposing that biocapacity should be used to complement the cultural argument for the importance of SON land.

Limitations

This study has several limitations that should be acknowledged to ensure a transparent interpretation of its findings. The first major limitation is that the statistics rely on estimated boundaries for SON's traditional territory. Due to the absence of publicly available shapefiles, the territorial boundaries were constructed using historical treaty descriptions, cartographic projections, and legal land claim documents. While these estimations follow standard GIS methodologies, they may not reflect SON's own spatial understandings of their territory. This limitation reinforces the need for Indigenous-led GIS methodologies in future research.

Secondly, while the study applied a Two-Eyed Seeing framework, it did so without direct collaboration with SON representatives. Two-Eyed Seeing encourages the braiding of Indigenous and Western knowledge systems, which includes meaningful engagement with Indigenous communities. The absence of this engagement means that while the study incorporates Indigenous methodological perspectives, it does not claim to represent SON's cultural or governance perspectives. Future research will aim to codevelop methodologies with Indigenous partners to ensure that biocapacity assessments integrate Indigenous-led ecological knowledge and land stewardship principles more authentically.

Finally, this study is based within the Canadian legal framework for land claims and, therefore, does not account for the evolving legal dynamics surrounding SON's ongoing case. While biocapacity analysis is a complementary tool for understanding land value, it is ultimately one component of a larger political discourse. The conclusions drawn here should, therefore, be interpreted within the broader legal and policy context that governs Indigenous land rights in Canada.

Given these limitations, our future work will focus on codeveloped methodologies that incorporate Indigenous-led data sovereignty, traditional ecological knowledge, and governance principles. Additionally, further research should explore how environmental valuation tools like biocapacity can be adapted to better align with Indigenous knowledge systems, ensuring that sustainability metrics reflect Indigenous worldviews rather than solely Western ecological paradigms.

Conclusion

Applying biocapacity to the SON land claim case presents a new approach to understanding land disputes by bringing together Indigenous knowledge with scientific methods. This approach highlights the ecological value of the land, which can be used alongside arguments related to the deep connection Indigenous communities have with their ancestral territories. By considering both the environmental and cultural significance of the land, this case study sets an important precedent for additional material scholars can use to demonstrate just how ecologically diverse, productive, and significant a People's land is. By demonstrating how much ecological productivity is derived from the traditional territories of Indigenous Peoples, biocapacity models a respectful and inclusive way of evaluating land claims that acknowledges the importance of both Indigenous traditions and scientific analysis.

The method employed in this case study has the potential to inform policy deliberations and legal adjudications concerning land management and what might be owed to the people of a specific territory. This method has the potential to look at historical biocapacity compared to post-dispossession biocapacity and measure how much was lost due to colonization over time and, thus, the amount of biocapacity an Indigenous nation irreversibly lost. It could also extrapolate the economic worth of ecosystem services within the lands, adding a numeric value that could be important for some discussions. For SON's case, the methodology's outcomes provide evidence of the land's ecological significance and reinforce the argument that SON's traditional territory is culturally important and plays a critical role in sustaining biodiversity and supporting ecosystem services. The quantitative data derived from our biocapacity assessments can inform the scale and nature of reparations owed to Indigenous communities and provide a tangible measure of the loss incurred.

By applying this method, our case study has the potential to contribute to more informed and equitable resolutions of land claims while also promoting a broader understanding of land's intrinsic value. We argue that there needs to be a shift in perspective to recognizing land as a source of life and sustenance whose value cannot be fully captured by economic metrics or by use of the land alone. Doing so would lead to a more sustainable and just approach to land governance, where decisions are made with consideration of both ecological and cultural significance.

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Introduction

Warren Weir

This special issue of JAED is dedicated to an enhanced understanding of two-eyed seeing. More specifically, it focuses on the ways in which Indigenous individuals can "see" not only from their Indigenous, spiritual, decolonized, communalist mindset, but also from a Western, scientific, colonial, capitalist, neo-liberal ideology. The two-eyed perspective suggests that this dual ability will allow individuals to learn about, then consciously and actively participate in both the Indigenous as well as the Western worlds—standing with one proverbial foot in each.

In line with the theme of this issue, the following is a review of two books by Robin Kimmerer, written 11 years apart in 2013 and 2024. This collaborative review, articulated by three scholars—academic leaders who are actively examining the evolving field of Indigenous economics, business, and economic development locally, nationally, and internationally—covers two key areas of interest, the first of which is clarifying how Kimmerer combines an understanding of Indigenous knowledge with Western science to support a natural collaborative way in the world. Second, they consider how lessons provided in Kimmerer's first book support the thesis presented in her second book that the underutilized natural eco-system metaphor can be useful when contemplating contemporary alternatives to a flawed Western capitalist approach. This consideration culminates in ideas on how individuals might collectively "see" Indigenous economic development in a different and enhanced light from two perspectives.

Whenever I read or hear about management decision-making, organizational problem-solving, or the contemplation of unique and transformational community development projects utilizing parable or allegory, I get excited! Why? Because in the early 1990s, while looking for materials to use in my initial delivery of a university course called *Introduction to Organizational Behaviour,* I stumbled upon a useful text called *Images of Organization* by Gareth Morgan (1997). For me, given my interest in Indigenous organizations, it was a game-changer.

According to Morgan, all theories—in his case, those of organization and management—are based on implicit images or metaphors that lead us to see, understand, and act in distinctive yet partial ways. In other words, the use of metaphor implies a way of thinking and a way of seeing. Further, metaphor, such as the ones Kimmerer utilizes, can assist individuals and

community development officers and leaders, in finding appropriate ways of seeing, understanding, and shaping the situations with which they have to deal. Perfect.

Therefore, when addressing the ideas presented by Kimmerer, and those suggested by those espousing the theory of two-eyed seeing, each metaphor, or eye, sees in focused yet limited ways. An eye on Western ways, take for example capitalism, privileges the concepts of the invisible hand of the market economy, individualism, linearity, competition, and the quest for modernity. On the flip side, it renders invisible, for the most part, the significance of political interference, the collective value of communal enterprise, and collective holistic development. Or take, for example, neo-liberal researchers and the discovery of new knowledge by exploring through experimentation via environmental control, expert testimony, and the quest for objectivity via tested and written "truths", yet missing out on the benefits of qualitative research methodology, diversity of views on the meaning of truth, and the social construction of reality let alone alternative cultural views of the meaning of life. Buddhists, for example, liken community development to the blossoming of the lotus flower, which requires spiritual guidance and a foundation of "mud".

Morgan suggests that there are at least eight images or metaphors at play when attempting to understand the ways in which organizations (and communities) operate, including the organization as: machine, brains, organisms (Kimmerer), cultures, psychic prisons, systems of politics, transformation, and tools of domination. In summation, these organizational images represent the cognitive reactions and associations of customers, investors, and potential applicants, serving as a template to categorize, store, and recall information.

The ability to see an organization with these eight eyes provides managers with a catalogue of strengths and weaknesses, which provides the tools required of master managers that broaden their thinking and action. Morgan argues that the insights of one metaphor can often help us overcome the limitations of another which, in turn, encourages us to recognize and, indeed, search for the limitations of existing insights. Given this, we can use existing metaphors as springboards for new insight. For Morgan, metaphors lead to new metaphors, creating a "mosaic of competing and complementary insights… one of the most powerful qualities of the approach."

Morgan's approach allowed me to springboard to the development of an enhanced understanding of "The Organization as Indigenous". And it all started 40 years ago when I was set out to research the emerging "modern" Indigenous organization, asking two questions: are you an Indigenous organization? and, if yes, how? What makes your organization Indigenous?

Without going into too much detail, after nearly 40 years of research involving hundreds of leaders and managers of Indigenous organizations in Canada, I suggest that there are at least five aspects of this additional metaphor. These include: 1) the employment of a significant number of Indigenous managers and employees, 2) an intimate connection to the Indigenous community from which the organization was birthed, 3) the integration of Indigenous cultural ways into the operationalization of organizational problem-solving and decision-making, 4) a reimagined understanding of

organizational power, control, and stewardship, and (more recently), 5) the architectural design.

In this way, we can discuss the way in which these organizations help change and build up their own community vision and market, incorporate consensus decision making, and integrate the wisdom of the Elder into the way in which the organization or community operates as well as the importance of ecological knowledge and oral stories. Then, employees of emerging organizations, creatively explore ways to operationalize culture in decision-making, and might take back home new lessons learned; thereby reimagining ways in which these new findings might enhance life at home.

When I read the books by Kimmerer, I saw her approach as an exercise of metaphorical analysis, specifically the Western scientific mechanistic view of organizations (and the community), complete with bureaucracy, specific skills-based training, competition, and the potential for unlimited growth, contrasted with the Indigenous holistic way of seeing the natural workings of the world, informed by values such as reciprocity, gift-giving and sharing, and collaboration. While these two ideological views of the world are fairly independent and mutually exclusive in nature, the eco-systems humanistic metaphor actually emerges as a viable alternative to the Western mechanistic view because of the weaknesses inherent to that view.

In her books, Kimmerer suggests that her organic and gift-giving model, based on assumptions of abundance and reciprocity, can co-exist in those "gaps" or spaces left vacant in the global capitalist economy in which we find ourselves currently. That is, she argues, that the world would be better off if we viewed our current situation with both Indigenous and Western scientific eyes, strengthening our view of our communities and organizations, by weighing the pros and cons of each, allowing room for an Indigenous knowledge-based approach to solving worldly problems where capitalism had failed.

For me, Kimmerer's approach is also reminiscent of Amartya Sen's (1999) belief that, rather than economic growth in terms of income, utility, resources or even happiness, poverty and wellbeing should be considered in terms of the expansion of human capabilities. In the eyes of this Nobel-winning Indian economist and philosopher, development should be seen as an effort to advance the real freedoms that individuals enjoy, rather than indices of development, such as those found in the GDP formula. In other words, justice and freedom.

While metaphor as discussed by Morgan allows the analyst to appreciate the "object" in multiple ways, two-eyed seeing provides an opportunity to not only understand but also to "be" in authentic ways. In other words, the Indigenous eye provides avenues for individuals to "see" and "act" based on historically rooted social, cultural,and spiritual perspectives gained over time via traumatic colonial, oppressive, and racist experiences. This includes the way in which individuals see the world currently, in an attempt to understand the meaning of reconciliation in action, sometimes referred to in an overly generalized and fairly simplistic way as "ReconciliAction". But that is fair, knowing that metaphor, like ideology (and its purposefully misguiding offspring political ideology), is in actuality a way to make the complex simple and more palatable in similar ways stories such as parables do.

The individual who develops an ability to see with two eyes is enabled, potentially, to understand and benefit from an interweaving of both the Indigenous and Western world views. Therefore, the Indigenous eye sees the world and experience based not only through the lens of traumatization and pain, but also provides an enhanced perception of emerging global themes including that of a reimagined resilience, strengthened ways of survival, community redevelopment, spiritual reconnection, an emergence of cultural consciousness, and the valuation of entrepreneurial strength.

The other eye, then, counters these realities "seeing" the alternative reality as bundles of commodities (some valued, others not so much) remembering that through a Western lens, it is often difficult to see how Western capitalist ways are, at the same time, creating wealth inequality, environmental destruction, and all the 'evil' that comes with greed. What this eye does not "see" clearly, however, is a world supported by science and technology, which ultimately supports capitalist democratic objectives, in a socially constructed and controlled economic system based on supply and demand, where monopolies and oligopolies control the amount supplied, and manipulate the way we value and therefore demand, goods and services, for the betterment of all, based on a wishful belief that when the economic waters of capitalism rise, all boats rise equally. In other words, one eye sees humans as the center of the universe, while the other views humans as merely one of many different beings, each inhering a spiritually endowed purpose in the world, where each and every participant—ancestrally grounded and supported—is valued equally by the universe.

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Book Review: Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants and The serviceberry: Abundance and reciprocity in the natural world

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Overview

What can a Saskatoon Berry teach us about engaging in economic relationships and decision-making? In this book review, we review two books together in light of this issue's theme: two-eyed seeing. We read Robin Wall Kimmerer's new book *The serviceberry: Abundance and reciprocity in the natural world* (2024), which offers readers a unique opportunity to reflect on foundational questions raised in her groundbreaking book *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants* (2013). Working in economic development, it is easy for many of us to be caught up in the urgent day-to-day choices we must make. Rarely do we have the opportunity to reflect on how our cultural teachings and traditional economic relationships with the natural world can offer guidance to building an economy we are proud to be part of.

Kimmerer's books embed two-eyed seeing by incorporating lessons from Western science and Indigenous knowledge. In both books, Kimmerer explores the reciprocal relationship between humans and the natural world to reflect on modern economic life and an ethical way of being. She weaves together her personal experiences, knowledge of plants as a botanist, and traditional teachings as a citizen of the Potawatomi Nation to advocate for a more sustainable and respectful relationship with the environment in a way that may also transform the economy. Kimmerer uses storytelling and personal reflection to bridge knowledge systems and generate her arguments. In the latter half of *Braiding Sweetgrass* and at the heart of *Serviceberry,* Kimmerer explains that the modern operation of the economy is built on a principle of scarcity rather than reciprocity to which she attributes rising tensions for thinking across worldviews. Kimmerer observes how the principle of reciprocity can be found everywhere in thriving ecosystems, and finds that it fits well with an approach to economics focusing on local exchange networks that she argues may be critical for making choices for a more sustainable economic future.

Kimmerer uses storytelling not just to share knowledge but also as a method of inquiry—one that challenges assumptions about how we relate to the land and one another. Rather than only presenting abstract arguments, she turns to lived experiences, her knowledge of plants, and traditional narratives to illustrate how economies of reciprocity already exist in the natural world. These stories invite readers to reconsider what it means to take, to give, and to sustain in a good way, offering lessons that contrast with dominant economic models built on competition and scarcity. Through each story, Kimmerer provides an entry point for reflection, asking how we might learn from the land's own patterns of generosity and balance.

An Invitation to Be Curious

In *Braiding Sweetgrass,* each chapter draws the reader in as if one is listening to a talk or lecture by Kimmerer. Rather than write to present an argument, Kimmerer invites the reader to share in her experiences and contemplate the questions that emerge while she navigates a world that is both simple and complex, informed by Indigenous knowledge from the land, her family and community, as well as by Western knowledge through her training in ethnobotany. Each chapter emerges from a lesson learned from selected

medicines and stories that have shaped some of the most impactful memories of her life. Kimmerer uses those lessons to ask difficult questions about how and why we face the insurmountable challenges that we have today, such as food insecurity, climate change, and economic inequality. *Braiding Sweetgrass* explores the reciprocal relationship between people and the land, which is first introduced through the teachings present in the story of Skywoman. Skywoman is the central figure in the Haudenosanee creation story whose fall from the Skyworld and subsequent rescue by the animals below marks the beginning of life on Turtle Island. As she descends from the skies, Skywoman is caught by geese through an act of profound kindness and is brought to rest on the back of a giant turtle. Skywoman plants what she brought from her home world before her fall to earth, sharing her gifts with the animals that saved her. This story reflects a worldview built on reciprocity and mutual care, inviting readers to question whether such generosity still exists in today's globalized world. The theme of the relationship between people and the land continues to echo throughout Kimmerer's storytelling as she examines the values that shape modern society.

Sweetgrass is the second teacher offering lessons on carefully balancing the acts of giving and taking. In line with many of the land's gifts, if sweetgrass is gathered with care, it thrives; if overharvested, it disappears. This lesson raises the question: is sustainability truly about limiting what we take, or is it more about *how* we take, and ensuring that what we take does not come at the expense of future abundance? For example, a comparison is made when waiting for wild strawberries—if they are taken while they are still white, we see an act of impatience and even greed. But to wait until they ripen, to accept them as the intended gift rather than a commodity, is to engage a different kind of economy - one built on gratitude rather than extraction.

The third teachers are The Three Sisters, who encourage us to ask how we are able to support favourable conditions for gifts to be received, and if we did so in our current economy, would more gifts emerge? Kimmerer discusses the Three Sisters—corn, beans, and squash—and explains how they grow together, each offering something that the others need. Each plant plays a distinct role: corn provides a structure for the beans to climb, beans fix nitrogen to nourish the soil, and squash shades the ground to keep it moist and to prevent weeds from growing. They are three distinct beings thriving together, not in competition but in support of one another. Kimmerer tells us that this way of growing has implications beyond food production. It embodies a collective mindset and asks us if we can create conditions for gifts to be received. Readers might question if a better approach to cooperation between humans and more-than-humans would significantly improve our communities and societal relationships, and it challenges us to reflect on how we might support one another and the world around us.

Finally, Kimmerer shares lessons from a fourth teacher, the maple tree, to demonstrate *when* to engage with the gifts of the land. In the process of tapping maple trees, sap flows only when the conditions are right—when the temperature fluctuates just enough for the sap to run. This teaches patience, as it is not about demanding the gift but waiting for the right moment to receive it. The timing of the sap's flow reflects a deep understanding of the natural cycles, reminding us that the gift economy requires

not only intention and care but also attunement to the rhythms of the land. It challenges the notion of immediate gratification, urging us to recognize when it is time to take, rather than forcing the land to give when it suits the needs of humans.

In *Serviceberry,* published 11 years after *Braiding Sweetgrass,* Kimmerer engages in many-eyed seeing and reaches beyond her expertise to explore and understand ecology, ecological economics, mainstream economics, and Indigenous knowledge. Kimmerer introduces the key principles of the book—abundance and reciprocity—by way of the feelings that she experiences when she receives gifts from Mother Earth. She starts with the feeling of happiness and gratitude when she is eating serviceberries and finds that this feeling is shared with others like birds who also feast on the gifts of Mother Earth. While Kimmerer shares her feelings, she also reflects on how starkly the experience is contrasted with the abundance and excesses of the modern world such as visiting a grocery store where abundance is ever-present and not driven by seasonal rhythms. By sharing her insights into the real-time moment of enjoying Earth's gifts, Kimmerer opens a dialogue into some critical challenges that she and many others are worried about in today's current landscape of global economics and her concerns about the damage and permanence that extractive capitalism causes to the wellbeing of what she refers to as the natural economy.

The relationship between serviceberries and the rest of the natural world is a further example of the generosity that is shown by the land in how it offers fruit freely to birds, animals, and humans. This act of abundance is part of a larger cycle in which consumption is not merely extractive but contributes to ecological renewal. As animals and birds consume the berries, they inadvertently assist in dispersing the seeds, thus enabling the serviceberry to regenerate and spread. The land, through this reciprocal act, gives not only for immediate sustenance but also for long-term vitality. The serviceberry's generosity is not a simple exchange of resources. Rather, it is an essential part of a dynamic system of care where consumption is intertwined with renewal. This relationship reinforces the interconnectedness of all beings, reminding us that taking from the land is not an isolated act but that it contributes to the cycle of life where giving and receiving are inextricably linked.

In the weaving of Kimmerer's teachings shared in *Braiding Sweetgrass* and *Serviceberry,* the story of Wiindigo stands as a striking final reflection of capitalism and an insatiable hunger for more, often at the expense of balance and sustainability. Wiindigo, a rapacious monster with its endless craving and over-consumption, symbolizes a self-destructive cycle that mirrors the overconsumption and exploitation sometimes seen in today's economic systems. But when Wiindigo is "emptied" and begins to relearn the stories—particularly the creation story of Skywoman—we see a shift. If Wiindigo were to internalize the knowledge of the story of Skywoman, how would this monster be transformed? If the modern economy internalized the knowledge of reciprocity that emerges from stories and the land itself, would we see transformative change? By embracing the wisdom of Skywoman, Wiindigo's transformation could catalyze into a regenerative economy—one where growth is measured not only in accumulation but in vitality, health, and shared prosperity.

The knowledge shared by Robin Wall Kimmerer offers readers the opportunity to analyze today's world through a multitude of lenses. Through reflection of Skywoman's descent, the patience of strawberries, the interdependence of the Three Sisters, and the generosity of the serviceberry, Kimmerer reveals a world where reciprocity is not just a practice but a way of being—one that invites the reader to listen, give, analyze, and better understand our place within the cycles of the land.

An Offering About Indigenous Economic Development

For readers engaged in the understanding and practice of economic development, we see Kimmerer as offering a simple, but perhaps crucial message amidst the technical and complex things involved with economic development: do not forget the knowledge that Mother Earth has to offer. She makes a compelling case to ensure that we do not leave it behind because that knowledge shapes not only what we do and how we do it, but it also carries forward reminders of why ancestral knowledge is critical for building ancestral futures.

Reading Kimmerer's books raise many questions for readers that are both theoretical/conceptual and pragmatic. We discuss a few here. One conceptional question that arose for us as readers came from her critique of capitalism. Specifically, she suggests that "the capitalist system" creates artificial scarcity that could be alleviated by living according to the principles contained in traditional teachings and the lessons from plants. Yet, one could question whether scarcity, in principle, is harmful. It is hardly unnatural. Scarcity is a fundamental reality in many environments. It may galvanize the need for community connections, an individual sense of purpose, or a shared sense of meaning in ways that a feeling of abundance might not, especially if you have difficulty seeing your role in creating it. Are the modern challenges that Kimmerer identifies around inequality and environmental degradation best understood as a product of "artificial" scarcity? Or is it better conceived as "artificial abundance"? Specifically, modern markets often do not recognize the environmental constraints that exist on economic activity. Rather than eliminating scarcity, perhaps the more pertinent question is: *How do we build institutions that help us live well within it?* Market economies do not exist in a vacuum. They exist under the constraints of government policies and laws and our individual choices within them.

This raises perhaps one of the major missing components of Kimmerer's reflections: the role of governing institutions around markets including the nature of property rights and land regulation, jurisdiction, environmental regulations, competition regulation, and what goods are publicly provided and which are provided by the market. The pure "capitalist" economy arguably does not exist anywhere, so rather than seeing current social challenges as the product of unchecked markets, perhaps the question is how government actions and structures have contributed to the issues highlighted by Kimmerer, such as environmental degradation. One might also consider exploring how those with political power may have influenced such actions and regulatory structures to their personal benefit without consideration of the social costs.

In our reading of Kimmerer's works, we see her as offering at least two pragmatic suggestions of individuals acting in an economy and wanting to build one that aligns with ethical principles of reciprocity, generosity, and moderation. The first is living your personal life in alignment with these principles. The second is "scaling down" and focusing on building more interconnected local economies. As readers, we see the clear potential benefits of both suggestions but suggest more caution when addressing the latter. While "storing one's wealth in the belly of my brother" is very appealing to all of us, assuming the best brother to store your wealth with is the one next door can come with its dangers. What happens when an entire community faces disaster? Many geographically diverse trading partners can act as forms of insurance by offering resources and support beyond local networks. Diverse trading partners also offer opportunities that local ones may not. While we have questioned whether scarcity is truly so detrimental to the human condition, we would be amiss to deny the creative power of sharing with people globally that is potentially facilitated by market transactions. We would also be wrong to deny the suffering and loss of life that can occur with extreme scarcity that markets may be able to prevent if organized correctly. Perhaps we must ask ourselves how we create dense networks of both kinds: can we "store our wealth in the belly of our brother" locally while engaging in broader systems that ensure collective resilience?

For economic development practitioners, this reflection is more than theoretical. Economic decisions often involve weighing competing worldviews and values and knowing when we are facing choices that require us to apply the lessons from various teachings. Ultimately, we see Kimmerer's work as reminding us that different knowledge systems offer valuable teachings that can guide economic development in thoughtful and holistic ways. The challenge for economic development practitioners, communities, and policymakers is simultaneously holding multiple lenses and making choices that honour immediate needs, long-term stewardship, and our values.

Adapting to changing systems: Moving between Theory and Practice at JAED

Mary Beth Doucette
Penelope C. Sanz

Penelope (Penny) Sanz, managing editor of the *Journal of Aboriginal Economic Development,* spoke with Mary Beth Doucette regarding her insights from editing and curating the journal's special issue on Two-Eyed Seeing. Mary Beth has Mi'kmaw and settler Canadian heritage. She currently holds the position of the Purdy Crawford Chair in Aboriginal Business Studies within the Shannon School of Business (SSOB) at Cape Breton University (CBU) in Sydney, Nova Scotia. Originally an industrial engineer, she later earned a Master of Business Administration in Community Economic Development and a Ph.D. in Management from St. Mary's University in Halifax, Nova Scotia.

Penny: Thank you, Mary Beth, for taking some time to talk and reflect on guest editing JAED's Spring 2025 special issue on Two-Eyed Seeing and economic development. Can you tell us more about yourself? Background?

Mary Beth: Unama'ki, Cape Breton, is my home. I have lived here for most of my life. I only left for a bit to study industrial engineering at St. Francis Xavier University then [at] Dalhousie University. I worked in Toronto for a couple of years as [a] project manager at Canadian Tire Corporation. That's when I decided to do my MBA in Community Economic Development here at CBU, which allowed me to focus on Economic Development in First Nations communities, like Membertou. Then, I worked at Membertou for a few years before I was asked to work at CBU with the Purdy Crawford Chair, which eventually led to my Ph.D. and my current role as a faculty member at CBU.

Penny: What made you return to Cape Breton and enter the academe when you could have stayed in the corporate world?

Mary Beth: I missed the ocean. I remember having a conversation with a co-worker in the Toronto office after I went back to attend a wedding in Newfoundland. I was talking about having gone sea kayaking. He replied that you can go kayaking in Northern Ontario. I said, "yeah, but you have to drive two hours in traffic just to get out of the city." It's not the same as living on an island in the Atlantic Ocean.

Penny: I hear you. I used to live along the coastline back in the Philippines. Saskatoon is in the prairies and landlocked. I think I lasted this long here because I live near the river. Did you complete your MBA at CBU?

Mary Beth: All of my closest friends in Toronto were from the Maritimes. They all said, "I would move home if only I could get a job there." It was the same story I grew up hearing, there's not enough good jobs in the Maritimes. But the problem with that logic is that if there's no jobs, and everyone keeps leaving, you have brain drain, right? I thought, "Well, you're an engineer. You can get a job anywhere you want."

I decided to pursue an MBA because I am curious about the nature of community economic development. I am also a band member of Membertou. They supported me in my undergraduate education and also in my MBA. I knew that Membertou was making significant progress in economic development in Sydney, despite the common belief that there are no opportunities in Cape Breton. So, how do you reconcile the fact that the most "historically" impoverished part of the community is doing all of these amazing things, and nobody else in the region seems to think that it's possible? So, I ended up spending a lot of time doing research in Membertou and then studying and working there. That's how I landed back here at CBU.

Penny: Would you mind telling us what the Purdy Crawford Chair is all about?

Mary Beth: The office is named in honour of the late Purdy Crawford, who held a Master of Laws degree from Harvard Law School and was conferred with an Honorary Doctorate of Laws from Cape Breton University. He was a very involved member of the Shannon School of Business Advisory Board, along with Chief Terry Paul. I've been told that it's their conversations that sparked the idea of establishing a Research Chair to focus on Indigenous business. The goals are to foster entrepreneurship and investment in corporate skills training to Indigenous students so they have the tools to shape their futures. The research we do focuses on Indigenous business models, best practices in Indigenous economic development, case studies profiling Indigenous businesses, and national and international comparative analysis.

Penny: That's wonderful. I did my dissertation on the impacts of Canadian mining on an Indigenous community back home. One of the gaps I saw was that Indigenous communities desire economic development, and that is why they allow mining on their land. But when they receive their mining royalties in [the] millions, they have inadequate financial management, investment skills, and know-how to sustain their

economic gains while mining continues. This is just one aspect, as I am aware that they have their own business practices; however, we are constrained by a very colonial educational system and traditional methods of conducting business. To have something like the Purdy Crawford Chair back home would be beneficial to us, too. So, how did you become the chair and executive director?

Mary Beth: I'd been working in Membertou for a couple of years already when Dr. Keith Brown, my MBA supervisor for the Applied Research Project, asked me if I would be interested in coming back to CBU and working with him. CBU has worked with Indigenous leaders to develop the Purdy Crawford Chair in Aboriginal Business Studies. Chief Terry Paul, who has been chief of Membertou First Nation for 40 years, is supportive of it. They wanted to get it started. But Keith won't do it unless he had a co-chair from the community. He thought it would be inappropriate since he is of white settler heritage, but he is genuinely interested in community development in the Mi'kmaw community. He would rather not be the Purdy Crawford Chair without support from the community. So, in conversations with Chief Terry, Keith, and the rest of the School of Business Advisory Board, said that Mary Beth will be part of the Crawford Chair.

Penny: So, what was that like?

Mary Beth: At first, I was just working 20% of my time here, and 80% of my time was at Membertou. Then we got a big grant contribution from the federal government. It was not from SSHRC [Social Sciences and Humanities Research Council] or CIHR [Canadian Institute for Health Research]. The Federal Government promised to provide us with $1 million annually for five years to run the In.Business Mentorship Program across the country. But they, INAC (Indigenous and Northern Affairs Canada), were unclear about the conditions of the award and it was unclear to CBU what the administrative process would be. INAC had placed a matching condition to it; it was like you had to raise $100 to get $100. So, about three years into the Crawford Chair project, Chief Terry said, "Mary Beth, Keith wants to second you to work at CBU and help them figure out how to get the money."

Penny: That must be disappointing. Did you get the grant eventually?

Mary Beth: After five years, we were able to access about 70% of the promised $5,000,000. We were able to match by sourcing out the funds on our own, which either went into the endowment or [were] used to fund "ineligible" expenses. But there was a lot of back-and-forth process. Not only did we have to raise a dollar before we could access a dollar, we also had to maintain a budget of $1,000,000. If we didn't spend $1,000,000 within the fiscal year, we had to send it back.

One of the SSOB advisory members said it was the most ridiculous administrative process he'd ever encountered after a lifetime in business. But these are the strategies the government use[s].

Penny: At that time, what project were you already doing for Membertou?

Mary Beth: The project that I was working on for my applied research project was part of my MBA. It's like the capstone project. The focus was on Membertou Heritage Park, a project that had not yet undergone development. It was in the project planning stage. So, it was unique, at least as a local project, because they have established an Elders Advisory Group to advise the development of the project in terms of what it would look like and what the building would be. It was a very engaged group.

The Elders Advisory Group visited a variety "heritage spaces" to consider what they wanted theirs to look like — a museum, a heritage park, or a community centre. They got Membertou to fund them to go to Ottawa and look at some of the national and local museums and heritage centres. Here they went to the Fortress of Louisburg, and the Bell Museum.

At the time, the Elders had expressed concerns that Membertou [was] doing too much development but without community involvement. My research aimed to understand how they balanced the socio-cultural expectations for the Heritage Park with the economic expectations of the heritage product. So, how do you balance the two worlds?

Penny: Right, you've mentioned earlier that Membertou has already been doing outstanding things. What were those wonderful things?

Mary Beth: They built the Trade and Convention Centre. They had built, at the time, a gas station, bingo hall, and commercial enterprises. The critique from the community was that they were doing all of these things without considering the value that it adds back to the community. Consequently, the Elders became actively involved. The land that had been donated was just next to the Trade and Convention Centre.

They said what they wanted to be in it, how they wanted it to look, and what they wanted [it] to look like. The main thing that the Elders said was they didn't want it to cost Membertou anything. They wanted culture. They wanted it to be a community space. They wanted it to be a place where we talk about Membertou's history and to be like a gathering space. But they didn't want it to end up costing a lot of money. They wanted to break even at the very least. And so that was the first project that I was involved in.

When I started working at Membertou full time, I was first working at the Trade and Convention Centre, which was one of these situations where we were losing money. It wasn't really making money. As a result, there was significant turnover among the administration staff. The chief and council were often there criticizing the management. I came in to help clean the house a little bit and get things back on track. Thereafter, I started working as the director of quality assurance for Membertou. They have an ISO quality assurance program that the majority of the departments use. I was part of a team with two other people, working to ensure that we maintained the ISO certification for the quality assurance program.

Penny: It is so fascinating to hear about the community engagement you are involved in at Membertou and CBU, as well as with the wider community. I think what is most challenging and meaningful is how you balance the two worlds. We are focusing on Two-Eyed Seeing in this special issue. I know that this edition is a spin-off of a conference that you organized in 2023. Can you tell me more about Two-Eyed Seeing and its application in business and the Indigenous economy?

Mary Beth: Two-Eyed Seeing is the foundational concept of what this journal's special issue is building on. Etuaptmumk/Two-Eyed Seeing was developed in the early 2000s, even the late 1990s, as part of the collaborative co-learning program, the integrative sciences program at CBU. The integrative science [program] does not exist anymore. However, upon its establishment, it was a brand-new program.

It was Elder Murdena Marshall, who was working here at CBU as a Mi'kmaq language teacher, and Dr. Cheryl Bartlett, who was a biology professor, who developed the concept. They had been talking, and Cheryl pointed out that we have a substantial Mi'kmaq population here at CBU relative to other distinctive groups. We always have around 500 Mi'kmaq students a year graduating from CBU, which ends up being a tenth of our population. It's a consistent amount. We have been doing a lot as an institution in terms of relationship-building with the Mi'kmaq community for decades. So, we have a number of students that are here going through the Mi'kmaq studies program, learning about politics, policy, and language, Indigenous Mi'kmaq culture and history, and whatnot. A lot of people were graduating to go into education or they were going into legal studies. They weren't really going into science or business, either. So, it was kind of a general arts degree leading into other careers that were primarily arts-based, like law, education, and public policy.

Cheryl Bartlett had asked Murdena over a coffee in the cafeteria, "What can we do to encourage more Mi'kmaq students to think about going into other science-based programs like biology?" That prompted a bigger conversation around teaching science in a particular way and how it dismisses all of the things that we already know about, such as Mi'kmaq perspectives of science and biology. Therefore, creating this absolute dichotomy invalidates Indigenous understandings of science and the environment.

We weren't feeling welcome in that space. Their conversations led to the development of the integrative sciences program. It had Indigenous perspectives of science as a core part of land-based learningThe Western scientific lens was also part of the core programming. So, it was trying to see science from both worldviews.

In the process of that program developing, evolving, and becoming, Elder Albert Marshall became involved as a guest speaker. He was working at Eskasoni Fish and Wildlife at that time with another Elder, Charlie Joe Dennis, who has since passed away. Murdena has also passed away since. But they were looking at these things and saying, "How do we explain this?" The words that they were using, and continue to use, are collaborative co-learning. We need to spend time together in space, discussing and conversing about what we observe from both Mi'kmaq and mainstream perspectives, while learning from each other and appreciating the diversity of viewpoints.

At some point they use many different visuals. They use various visuals, including images of trees holding hands (their roots in the ground), teachings, and diagrams. They did a lot. Cheryl ended up applying for and receiving Tier 2 research program funding and then a Tier 1 research program from CIHR. They developed a lot of programming assets, and, eventually, Elder Albert called it Two-Eyed Seeing. So, the icon that we see a lot consists of two puzzle pieces with eyes on them. One is blue. One is green, and then when you put them together, you have a more complete picture. The idea is that covering one eye limits your view and depth. It's the same when you cover the other eye. You also don't get as much stuff. It is when you can look through two eyes or two lenses that you appreciate more. It adds understanding and makes you see better. Teaching Two-Eyed Seeing would enable one to move back and forth between spaces and see things from different lenses.

It was because of Cheryl's Canada Research Chair, which focused on two-eyed seeing. They did a lot of presentations for the Canadian Institute of Health Research. It blew up as a concept nationally and internationally. So, in the world of health sciences, two-eyed seeing is very familiar. In Unama'ki in Cape Breton, we have been discussing and learning about Two-Eyed Seeing and Etuaptmumk for approximately 35 years. This concept and series of teachings are well developed and integral to my understanding of what CBU represents.

When we started the Crawford Chair, we weren't calling it Two-Eyed Seeing. It was the same principle, right? You've got the Business Studies Advisory Board, Chief Terry, and Purdy Crawford were sitting together at school and talking about business studies. Purdy asked Terry how the School of Business could better support Mi'kmaq students and better support Chief Terry's economic development plans. Chief Terry basically said, "Well, I need people to graduate with a business degree and already know about Indigenous business, [and the] issues and the challenges that we face. The way the taxes are different when you're doing business on the reserve and with Indigenous People." At the time, it was like 2004; there was nothing in the business studies curriculum.

Students could graduate from school, generally across the country, and what happens? All the business people hired at Membertou, worked for a multimillion-dollar enterprise, and they didn't know how all the different federal and provincial rules applied. Consequently, Membertou funded extra technical and cultural awareness training for its staff to ensure they were equipped to perform their jobs effectively.

So, that's where the concept evolves for the Purdy Crawford Chair in Aboriginal Business Studies. They were recognizing that when students graduate with a business degree, they should be ready to work in, with, and for Indigenous communities without having to be taught by the Indigenous communities. That's what launched the Crawford Chair concept.

Penny: What a wonderful story that keeps on going. Let us fast forward to 2023. I understand that you organized a conference on Two-Eyed Seeing. Can you tell us about its context and vision?

Mary Beth: Yes, the conference theme was Two-Eyed Seeing: From Vision to Action. [It] was organized and hosted in 2023 by the Bras d'Or Lakes Collaborative Environmental Planning Initiative (CEPI) and the Unama'ki Institute of Natural Resources (UINR), which is a science research institute based in Eskasoni. I am the current co-chair of the Bras d'Or Lakes Collaborative environmental planning initiative. I was appointed as the co-chair in the spring of 2023. That was one of the first things that I was doing. This conference wasn't necessarily my idea. But I was very involved in the evolution of it.

CEPI was established 20 years ago in 2004. Its guiding principle is Two-Eyed Seeing. When the organization was established, the deliberate intention was to foster conversation between all the governments that have some level of jurisdictional authority over the body of water in the middle of Cape Breton Island. It is salt water, which means that the Department of Fisheries and Oceans Canada considers it ocean water and their jurisdictional control. It's also inland. So, there's water around it. There are also tributaries that are freshwater, which means that the Province of Nova Scotia's Department of Lands and Forests is involved in some jurisdictional aspects of the coastline.

There are four of the five First Nations in Unamaki Cape Breton located around the Bras D'Or Lake, and the lake also serves as the dividing line at the centre of Cape Breton Island between four municipalities. So, there are a lot of governments that have their finger in the pot of what happens around the Bras D'Or Lake. It is good that it draws attention to the watershed ecosystem, but bad when they don't get along. When goverments don't talk to one another,it creates a lot of confusion.

Elder Charlie Joe Dennis, the original chair, established CEPI to regularly bring together government departments. This is because their departments create policies that influence the health and wellness of this watershed ecosystem. When they are not talking to one another [then] they get away with creating problems. So, he wanted to see them talking, and he also wanted to know what research was happening, how that was impacting the lake.

There's a whole longer story that I will not get into about how the CEPI came to be. (*CEPI's Journey to Collaboration* was included earlier in the special issue). In essence, it has a 20-year history. The conference on Two-Eyed Seeing was intended to deliberately celebrate Elder Albert Marshall, who is our Elder advisor at UINR and CEPI. The Two-Eyed Seeing is something that we have been practicing for a while. Many times, during our meetings, Elder Albert would say, "I'm tired of talking about the concept of Two-Eyed Seeing as a vision. I want to talk about how you're enacting it. I want people to show us what is changing. Could you please share how that is impacting your job? How is it changing the way you work? How is it changing your relationships?"

This is also because everybody is going to Elder Albert Marshall. I go visit him any given day, and he's got 10 people visiting to ask him about Two-Eyed Seeing. He is the guy, right? And so, at this point, he is saying, I want people to talk about and share with one another what they're doing on the ground and not just share with me. So that was the concept of the conference. It was a call to our network, for instance, people in education, health, government services, who are using this concept. He wants to know

what lessons were learned. How is it working? Is it not working? What are the goods, the bads, and the uglies of all this? How has your relationship changed and evolved over the last five, ten, or 25 years?

Penny: What's the conference turnout then?

Mary Beth: It was awesome. We had over 450 people show up to the conference. It was something they had hoped they would organize in 2020. This was intended as a creative reference to 2020 Vision while also celebrating the International Year of Indigenous Knowledges in 2020. But we're all familiar that 2020 was not a year for organizing in-person conferences. So, we finally held it in 2023.

We had one Mi'kmaw person who attended and said that they had been going to events, but they stopped going. This is because they're so difficult. He said that this CEPI conference was the best one he had ever attended. It's because it's our knowledge. Our people were out front talking, and people were engaged. It was good.

Penny: When our former editor-in-chief Wanda Wuttunee asked you to edit and curate our Spring 2025 special issue, what was your experience like? I have two questions. This is my first question. Based on the article submissions we have received, how, in a variety of ways, is Two-Eyed Seeing being implemented on the ground?

Mary Beth: When we decided to have this special issue, it was partly because of Wanda. I had been working on another project—the A SHARED Future project— with Heather Castleton and Dee Lewis. That project focused on environmental issues and Indigenous-led renewable energy initiatives. Wanda approached them a couple of years ago and asked them if they'd like to be special editors of the journal. We, as a group, had declined. That's because I was the only "economist" and familiar with JAED. The other members of the group are environmental scientists, experts on environmental policy, and feminist geographers. So, it wasn't a tight fit for them, and they didn't have the time to do it. Then, I knew that Wanda had approached them and that she wanted to start having special issues in JAED. So, when the CEPI conference came up, this would be something I could get behind. I hoped that people who participated in the conference would also publish some of their work in the journal.

That was the impetus. That's why I talked to Wanda and said, "Let's do the special issue on this," and she loved it. We basically put in JAED's call for papers based on the CEPI conference's call for papers. The call for papers requested both practical lessons from experience and academic insights. There were a lot of people who I had hoped were going to submit, and they didn't. They had the intention, but they were unable to follow through.

Penny: Off the top of your head, what articles stood out?

Mary Beth: I'm really excited about what we have in the upcoming special issue. We have two articles on lessons from experience. One is [by] Dr. Shelly Denny and her team, who are working together for a healthy and resilient ocean. Shelly Denny did her PhD thesis on this. She's from Eskasoni, and she works at UINR. She finished her PhD two years ahead of me. She wrote about Two-Eyed Seeing and collaborative governance models and what they look like when you're doing government engagement planning around environmental issues and environmental policies.

There is another paper discussing Indigenous social enterprise in the Northwest Territories. It describes the experiences of Indigenous social enterprises in applying Two-Eyed Seeing within economic development contexts. We also have a couple of articles that used the term Two-Eyed Seeing, but they do not necessarily think of it the same way as I do. So, I really love what they wrote.

I would really love to have a conversation with Elder Albert to discuss people's thoughts on Two-Eyed Seeing and how they apply it. People are starting to debate what Two-Eyed Seeing is. There are just a lot of questions around what you can qualify as collaborative co-learning.

Elder Albert is very resistant to putting a box around what Etuaptmumk/Two-Eyed Seeing is. People say they are doing Two-Eyed Seeing; he thinks we should be talking to them about it. I think I'm putting words in his mouth. But he's interested in anybody who's interested in it because it's an opportunity to engage in learning, teaching, and collaborative learning.

Penny: I have read the abstracts on our open journal system. I get the concept of Two-Eyed Seeing, but listening to you talk about it made me see that Two-Eyed Seeing to you as a Mi'kmaq scholar, is like Bras d'Or Lakes in the heart of Cape Breton. I hope I'll be able to come and see you in action in Cape Breton. So, here is my second question. It is more on the operational sense with you as an editor and working towards this issue's publication. How was the dialogue and the back-and-forth between the peer reviewers (and the lack thereof), authors, and you as editor?

Mary Beth: I drew on many people that I know who have been doing research in different disciplines. Some of the reviews we are receiving highlight a topic that I am unsure whether JAED's editorial board has discussed yet, but I expect we will address it soon. What came up during the review process were more questions such as what does it mean to be doing Indigenous-led economic development? Is that what JAED is promoting? Or is it Indigenous economic development? Is there room for Two-Eyed Seeing in economic development that is not led by communities? At what point does this approach qualify as Indigenous economic development?

Penny: Those are excellent questions that point out the unresolved tensions that the previous editors most likely encountered but didn't have the time and space to discuss. We also have to consider that JAED is evolving. Case in point is that you and I are also relatively new to the board. In any case, what are your initial thoughts on how to navigate these conceptual boundaries between Indigenous-led economic development

(grounded in community sovereignty/self-determination) and broader Indigenous economic development frameworks that may include non-Indigenous collaborators? In addition, in terms of practice, such conceptual boundaries are being blurred since in the process of finding solutions to real-life issues. Your thoughts?

Mary Beth: I will draw on a framework I developed for my Ph.D. thesis to answer that question. I referred to Two-Eyed Critical Sensemaking, which builds on and critiques an existing framework from Management and Organizational Studies called Critical Sensemaking (CSM). CSM is primarily concerned with how people in organizations understand and respond to organizational change initiatives. They don't always behave as expected, but they usually do. According to CSM, individuals are impacted by more than just an administrative mandate to change; they also consider official and informal regulations, language employed (e.g., two-eyed seeing or Etuaptmumk/Two-Eyed Seeing), and formative environment. Those who research and write about management and administration, on the other hand, tend to presume that the organization is "Canadian" or "American" or has been schooled to view the world through a Eurocentric lens.

When working for Indigenous-led organizations, such as Cando, the tensions and differences between mainstream and Indigenous community norms and administrative practices become more apparent. We collaborate with communities that have a shared desire for sovereignty and justice. Even if we don't always agree on the strategy we use to get there, we have a shared sense of direction because we understand the past and the link between Canadian governments and their regulations, as well as Indigenous groups and their norms. Because JAED is ultimately a component of Cando, it may have been reasonable to presume that the core audience, Native Development Officers, could tell the difference between what was Indigenous-led and what was not, and understand the articles and case studies were part of a bigger discourse from the previous 25 years.

The tensions raised by this special issue are essentially related to Reconciliation and the TRC. Most Indigenous peoples, particularly those who work in mainstream settings, are well aware of Canada's colonial history and the difficulties with current governing institutions. They know a lot more than most Canadians. So, before they can effect significant change, Canadians must first understand the relationship between past and present colonial structures and laws, as well as local Indigenous histories and current contexts.

Indigenous Economic Development Officers, as well as JAED's editors and authors, are accustomed to weaving and braiding two systems. As Warren describes in the book review's opening, Aboriginal Economic Development navigates two systems in order to effect change. David Newhouse spoke about this history at the conference in 2024. He also mentioned some of the work they conducted at Trent University, where they've changed policies to reflect the differences in expectations between working in the mainstream academic system and working in Indigenous knowledge systems. There is also a middle ground where reconciliation exists, when two-eyed seers are actively striving toward reconciliation. That requires a distinct skill set again.

But, the JAED Board is comprised of a diverse group of individuals representing academics, industry, and grassroots Indigenous-led economic developers. We navigate the tensions that Indigenous Development Officers, Economic Development Officers, and Chiefs face across industries by negotiating and holding spaces for community lessons from experience, so the academic questions are placed alongside the lived experiences of our communities. Economic Development lessons from experience are not consistently showing up in other places, thus I think it is critical that JAED maintains that space. But we can't do it all, and I think we want to do something well. What is that something? What has it been in the past? And where can JAED add the most value in the future? These are the questions and tensions that I think we will be dealing with to in the coming years as people like Wanda Wuttunee, David Newhouse, Warren Weir, and Robert Oppenheimer retire, What is the next iteration of JAED going to look like? How can we best serve Cando and its network?

For submission guidelines visit:
https://jaed.ca/index.php/jaed/about/submissions

NEXT ISSUES

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Volume 16 Issue 2, Fall 2026