

**Promoting Reconciliation and Indigenous Self-Determination  
through Ecosystem-Based Management**

**By**

**Grace Titilayo Akinrinola**

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## **Abstract**

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Sipekne'katik First Nation launched their Mi'kmaw-regulated, rights-based lobster fishery in the fall of 2020. The launch came 21 years after the Supreme Court reaffirmed the Treaty-protected right to fish for a moderate livelihood and was met with harassment, violence, and racism, setting off a nationwide awakening to the issue of Treaty fisheries implementation and reconciliation on the water. At the same time, Fisheries and Oceans Canada (DFO) in the Maritimes Region has been developing an Ecosystem-Based Management (EBM) Framework encompassing Governance, Social/Cultural, Economic, and Ecological objectives to support integrated fisheries management. The extent to which this initiative could support reconciliation is currently unknown. To address this gap, this project studies how the DFO's emerging Ecosystem-Based Management (EBM) Framework could support reconciliation. The study reviews and compares the DFO Maritimes EBM Framework, DFO-Coast Guard Reconciliation Strategy, and an Indigenous-led Reconciliation Framework linked to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) to identify opportunities for the EBM Framework to support reconciliation. Findings identified areas where the EBM Framework could be the vehicle for reconciliation and other areas requiring further development of its pillars and objectives. In cases where these responsibilities extend beyond the mandate of DFO, Canada must address those injustices through other channels. Promoting Reconciliation and Indigenous Self-Governed Fisheries through Ecosystem-Based Management could help promote healing and justice for Indigenous Peoples, ensuring they have a meaningful role in ocean management decision-making and creating a more equitable and sustainable future for all.

*Keywords:* Self-Determination, Ecosystem-Based Management, Reconciliation, Social Equity

## List of Abbreviations

AFS-	Aboriginal Fisheries Strategy
AFG-	Aboriginal Fishery Guardian
ATP-	Allocation Transfer Program
SARA-	<i>Species at Risk Act</i>
AIHP-	Aboriginal Inland Habitat Program
AAROM-	Aboriginal Aquatic Resource and Oceans Management
MRI-	Marshall Response Initiative
AICFI-	Atlantic Integrated Commercial Fisheries Initiative
PICFI-	Pacific Integrated Commercial Fisheries Initiative
EBM-	Ecosystem-Based Management
DFO-	Fisheries and Oceans Canada
UNDRIP-	United Nations Declaration on the Rights of Indigenous Peoples
<i>UNDRIP Act-</i>	United Nations Declaration on the Rights of Indigenous Peoples Act
MAP-	Marine Affairs Program
SES-	Social-Ecological Systems
FSC-	Food, Social, and Ceremonial
IFAs-	Interim Fisheries Agreements
ASMI-	At-Sea Mentoring Initiative
FOMI-	Fisheries Operations Management Initiative
NICFI-	Northern Integrated Commercial Fisheries Initiative
IPR-	Indigenous Program Review
PNCIMA-	Pacific North Coast Integrated Management Area
MaPP-	Marine Plan Partnership
BC-	British Columbia
MAPs-	Marine Protected Areas
IMA-	Inuit Management Authority
CIRNAC-	Crown-Indigenous Relations and Northern Affairs Canada
NEB-	National Energy Board
RFA-	Reconciliation Framework Agreement
LNG-	Liquified Natural Gas
PBAs-	Pipeline Benefits Agreements
BIO-	Bedford Institute of Oceanography
SABS-	St. Andrews Biological Station
EAM-	Ecosystem Approach to Management
CFRN-	Canadian Fisheries Research Network
IFMP-	Integrated Fisheries Management Plan
APC-	Atlantic Policy Congress of the First Nations Chiefs Secretariat

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## **Chapter 1: Introduction**

Canada is a maritime nation geographically surrounded by the Arctic, Atlantic, and Pacific Oceans. Canada has the longest coastline globally, with an Exclusive Economic Zone of approximately 5.75 million square kilometres. Indigenous Peoples constitute 4.9% of the Canadian population and inhabit 683 communities across the country, with some located on the three coastlines of Canada (CIRNAC, 2022; CIRNAC, 2021). They have long-standing connections with their lands, water, and resources essential to their cultures, traditions, and livelihoods (Wien & Williams, 2022). However, colonialism has undermined their rights, including their ability to manage, and led to three types of injustices - political domination, loss of territory (and benefits thereof) and cultural imposition over the years (Wien & Williams, 2022; Silver et al., 2022; Jones et al., 2023; Jones et al, In press). Seven ocean issues in which the Indigenous communities have witnessed injustice include the management of fisheries and marine mammals, integrated ocean management, marine protected areas, species at risk, shipping, oil and gas, and aquaculture (Jones et al, In press).

Recognition of the rights of Indigenous Peoples has recently been understood as a Canadian imperative. The United Nations General Assembly adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in September 2007. However, Canada officially adopted UNDRIP in May 2016, almost a decade later (UNDRIP, 2007; Fontaine, 2016). The *United Nations Declaration on the Rights of Indigenous Peoples Act (UNDRIP Act)* implemented by Canada on 21<sup>st</sup> June, 2021 was a landmark in the pursuit of reconciliation (Department of Justice Canada, 2021). It was founded on the principles of rights recognition,



respect, cooperation, and partnership in Canada (Department of Justice Canada, 2023; UNDRIP, 2008).

The full implementation of the Declaration and the *UNDRIP Act* necessitates a long-term commitment and is essential given that most of the laws and policies of the country are rooted in colonialism and have led to Indigenous Peoples in Canada experiencing injustices. UNDRIP can only be a tool for reconciliation if it is effectively implemented locally, regionally, nationally, and internationally (Assembly of First Nations, 2017). Through regular utilization of UNDRIP, there would be an improved interpretation that would effectively address the needs of First Nations (Assembly of First Nations, 2017).

That the implementation of UNDRIP is necessary is in itself a bit surprising, given that the Canadian Constitution itself already highlights special considerations for Indigenous Peoples. Section 35 of the *Constitution Act*, 1982 provides:

- (1) The existing aboriginal and Treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.
- (2) In this *Act*, “aboriginal peoples of Canada” includes the Indian, Inuit and Métis peoples of Canada.
- (3) For greater certainty, in subsection (1) “Treaty rights” includes rights that now exist by way of land claims agreements or may be so acquired.
- (4) Notwithstanding any other provision of this *Act*, the aboriginal and Treaty rights referred to in subsection (1) are guaranteed equally to male and female persons (The Constitution Act, 1982).

And yet rather than striving for genuine reconciliation, recognizing, and respecting the rights of Indigenous Peoples as in the constitution, the federal, provincial, and territorial governments have undermined their rights and limited the interpretation of Section 35 for four decades (Assembly of First Nations, 2017).

Utilizing UNDRIP in interpreting Section 35 is essential for Canada to build a renewed relationship with the Indigenous Peoples. The former Indigenous Affairs Minister Carolyn Bennett highlighted its relevance in May 2016 when Canada adopted UNDRIP, “By adopting and implementing the Declaration, we are excited that we are breathing life into Section 35 and recognizing it now as a full box of rights for Indigenous Peoples in Canada” (Fontaine, 2016). As a component of its renewed commitment to a nation-to-nation relationship with Indigenous Peoples, Canada has mandated every Minister, including the Minister of Fisheries, Oceans, and the Canadian Coast Guard, to implement UNDRIP (Trudeau, 2021; Trudeau, 2017). The pursuit of reconciliation would have a profound impact on ocean management, leading to significant changes in governance arrangements and access to marine resources, while also addressing the historical impacts of colonization on Indigenous relationships with ocean spaces and resources (Jones et al, In press).

## **1.1 Ecosystem-Based Management**

Environmental problems are often referred to as “wicked problems” because they are complex and persistent with no clear resolution (O’Higgins et al., 2020). These issues encompass ethical decisions that lead to winners and losers, while the ecological and biological components of the

issues are complex and dynamic. Similarly, the social and political elements are constantly changing and do not follow linear patterns (O'Higgins et al., 2020). For example, eutrophication is caused by natural processes, exacerbated by human activities such as wastewater discharge, fertilization, and animal feed. These activities occur at different rates and spatial scales, and their effects can be felt in various locations by diverse users who have varying needs and values.

In the past, the environmental movement focused mainly on human impacts on the environment, but the solutions proposed were often simplistic (Ehrlich & Holdren, 1971; Hardin, 1974). Recent research has led to the concept of Social-Ecological Systems (SES), which recognizes that resource management problems comprise subsystems, including resources, users, institutions, and rules (Östrom, 2009). Aligned with SES is Ecosystem-Based Management (EBM), an interdisciplinary approach that aims to balance ecological, social, and governance principles in a specific geographic area to achieve sustainable resource use (Daly et al., 2020). It considers the dynamic and interconnected nature of ecosystems, their integrity, biodiversity, and associated uncertainties, relying on scientific knowledge and effective monitoring (Daly et al., 2020; O'Higgins et al., 2020).

Despite its potential, EBM has not been widely adopted in large-scale policy (O'Higgins et al., 2020). Expanding on alternative thinking, SES and EBM offer a paradigm shift from the status quo. They move beyond the limitations of past environmental approaches by recognizing the multifaceted nature of environmental challenges (O'Higgins et al., 2020; Long et al., 2015). SES, with its subsystem perspective, emphasizes the interconnectedness of human and ecological elements, promoting a more holistic understanding. Simultaneously, EBM, by integrating

ecological, social, and governance principles provides a comprehensive and adaptive framework for sustainable resource use (Long et al., 2015). Moreover, critically examining the status quo unveils its roots in colonialism and power imbalances (Silver et al., 2022). Traditional environmental management approaches often perpetuate historical injustices, neglecting the perspectives and contributions of Indigenous communities (Silver et al., 2022). Linking EBM to reconciliation involves challenging this status quo and advocating for a more inclusive and equitable approach. By acknowledging and rectifying historical injustices, EBM becomes a pathway to foster collaboration, respect, and understanding among diverse stakeholders. This integration aligns with the broader goal of reconciliation, bridging the gap between contemporary environmental management practices and a more just, inclusive future.

Figure 1 below represents the key concepts of ecosystem-based management.

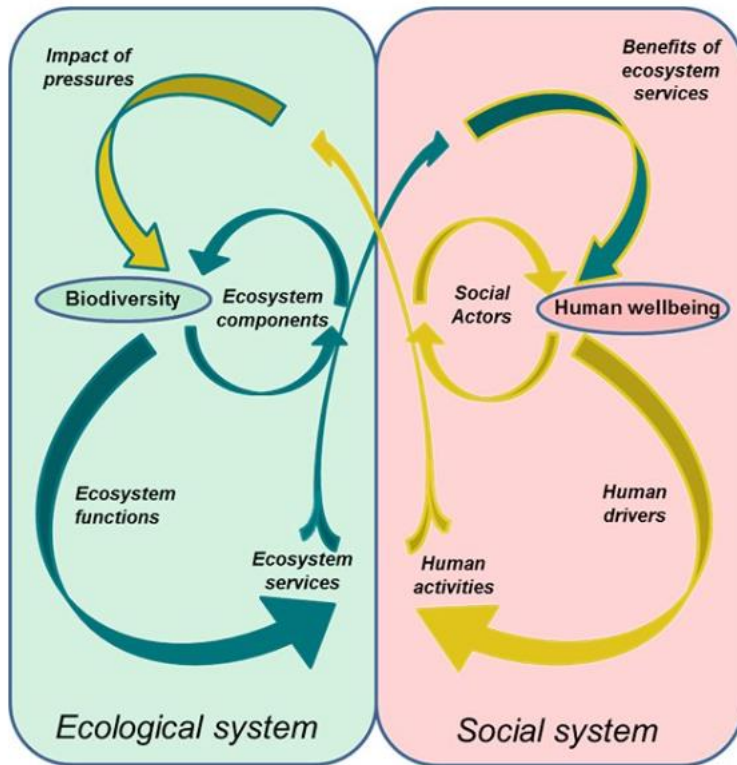


Figure 1: Key concept of ecosystem-based management

Source: O'Higgins et al. (2020)

The importance of EBM lies in its recognition of the interdependence of ecological and social systems and in the development of policies and management strategies that consider the complex interactions between them. The below highlights the importance of an EBM approach in aquatic environments:

1. Holistic approach: EBM considers ecological and social factors, demanding interdisciplinary knowledge and promoting water governance and the relationship between aquatic species and their abiotic environment (O'Higgins et al., 2020). In doing so, it can protect the integrity of aquatic ecosystems to preserve a complementary array of ecosystem services and aquatic biodiversity while acknowledging social-ecological interactions.

2. Multi-functional: EBM departs from conventional approaches by adopting a multi-functional perspective, specifically in the context of policy and ecosystem services. Unlike traditional strategies that often prioritize single services, EBM considers the interplay of various ecosystem functions and benefits. This approach underscores the importance of policies that not only sustain individual services but also recognize the interconnected nature of these services within aquatic ecosystems, seeking to maximize the joint value of all aquatic ecosystem services and abiotic components. (Manning et al., 2018).

By emphasizing a multi-functional focus, EBM promotes policies that aim to balance different domains, acknowledging that ecosystems deliver a suite of services with inherent interdependencies. For instance, a policy designed to protect water quality may contribute to biodiversity conservation and support recreational opportunities. This integrated approach fosters a comprehensive understanding of ecosystems' diverse functions and encourages policies that holistically enhance the overall health and resilience of aquatic environments.

3. Evidence-based: EBM is based on scientific knowledge and traditional knowledge on ecosystem management, factored into decision-making processes. It is intended to be relevant for policy and decision-making, essential for the credibility of social knowledge and the legitimacy of policy decisions (Joa et al., 2018).
4. Mindful of spatial scale: EBM decisions take place at the appropriate level and scale, considering aquatic ecosystem boundaries, complex interlinkages, and adaptive processes. It is closely related to the notion of a meta-ecosystem, providing a theoretical

tool to ascertain emergent properties arising from the spatial coupling of local ecosystems (Loreau et al., 2003). This way, EBM ensures an understanding of complex spatial dynamics.

5. Considers aquatic relationships: EBM considers the complex interactions within social-ecological systems and the relationships between different aquatic realms. This includes considering unknown and unpredictable effects to ensure a comprehensive understanding of the ecosystem. (O'Higgins et al., 2020). By exploring these relationships, EBM provides insights into managing aquatic ecosystems with a focus on preserving biodiversity and ecological balance.
6. Policy coordination: EBM promotes policy coordination through cooperative agreements and collective action. This approach allows different stakeholders and policy domains to share aquatic ecosystem services and pursue multiple policy objectives simultaneously (O'Higgins et al., 2020). By promoting collaborative efforts, EBM fosters a more integrated and harmonized approach to policy-making, ensuring the sustainable use of aquatic resources.
7. Adaptive and dynamic: EBM operates as an adaptive management approach, seeking to build or strengthen adaptation capacities (O'Higgins et al., 2020). By restoring critical aquatic ecosystems and supporting social abilities to respond to potential future scenarios, EBM ensures flexibility in its goals and management approaches. Regular revisitation and monitoring become critical in identifying opportunities or difficulties in advance, contributing to a resilient and dynamic management strategy (Long et al. 2015; O'Higgins et al., 2020).

## **1.2 Management Problem**

Despite international and national calls for reconciliation and implementation of Indigenous rights, there remains a reconciliation gap in Canada, particularly in the implementation of Treaty fisheries. Fisheries continue to be dominated by non-Indigenous participation, and an era of economic rationalization and consolidation remains. DFO Maritimes is currently developing and looking to pilot its own EBM Framework. This research reviewed the framework later in the document. Although not initially designed as a tool for reconciliation, the potential of EBM to be a better match in support of Indigenous rights than single species and economically rationalized management is attractive. Given the holistic and integrated nature of EBM, DFO Maritimes' current work on a framework, and national imperatives around reconciliation, it is prudent to ask: In what ways can EBM be a vehicle for reconciliation and rights-based fisheries implementation?

## **1.3 Research Objective**

The broad objective of the proposed research is to study how the emerging DFO Maritimes Ecosystem-Based Management (EBM) Framework could be inclusive and help promote both healing and justice for Indigenous Peoples as well as accountability from Canada and the Canadian government to Indigenous Peoples. To meet this objective, this study will apply work by Russ Jones of the Haida Nation and other scholars, who mapped UNDRIP articles that relate to injustices in the marine realm to create a framework for reconciliation on the water (Jones et al, In press; Jones et al., 2023). Using the Jones et al. (year) Framework, this research aims to investigate the potential of DFO's Ecosystem-Based Management (EBM) Framework to facilitate a renewed nation-to-nation relationship with Indigenous Peoples in Atlantic Canada,



supporting fisheries self-governance, ensuring sustainable resource use, and promoting equity in ocean management decisions.

#### **1.4 Research Question**

To achieve the research objective, the research will address a main research question:

In what ways can DFO's emerging Ecosystem-Based Management (EBM) Framework support reconciliation and Indigenous self-determination?

#### **1.5 Report Outline**

This graduate project report consists of six (6) chapters, each contributing a vital piece to the comprehensive understanding of the research topic. Chapter 1 serves as an introduction, laying the groundwork for the study's context and significance. In Chapter 2, an exploration of reconciliation and its connection to Canada's fisheries unfolds. Chapter 3 focuses on the research approach and methodology, offering insights into the study's methods and techniques. Chapter 4 presents the analytical results, providing a crucial understanding of the research's core findings. Finally, the concluding chapter, Chapter 5, offers discussions, while Chapter 6 provides conclusions drawn from the study and forward-looking recommendations.

## **Chapter 2: Reconciliation and Fisheries in Canada**

### **2.1 Reconciliation: A Tool for Social Justice**

Indigenous Peoples on the Canadian coasts (the Atlantic, Pacific, and Arctic) have unique cultures, languages and customs deeply rooted in their connection to their land and water (Havemann, 1999). These communities traditionally occupied specific territories and established boundaries to demarcate their lands. However, the arrival of European settlers significantly transformed these separate worlds and resulted in cooperation and conflict among the Indigenous communities (Havemann, 1999). Notably, Indigenous groups played a pivotal role in establishing Canada's boundaries by forming alliances with the British Crown in the Atlantic region, thereby facilitating Britain's dominance over France in what is now Canada and preventing invasion by the United States. Similarly, British colonies sought peaceful relations with Indigenous groups in the Pacific Coast while defining borders with the United States. Historical treaties helped solidify some of the alliances. Additionally, the presence of Inuit has helped strengthen Canada's assertion of Arctic sovereignty, particularly the waters and resources. Treaty-making policy persisted in inland regions of Canada until 1923 but did not extend to coastal areas of British Columbia and the Arctic until the mid-1970s (Jones et al, In press).

Reconciliation between the Crown and the Indigenous communities in Canada holds utmost significance due to the historical injustices perpetrated against the Indigenous Peoples from the era of colonization onwards (Adkins et al., 2020). The former Chief Justice of the Supreme Court of Canada, Right Honourable Justice Beverley McLachlin, described the historic relationship between Canada and the Indigenous Peoples of Canada during a 2015 speech as written below:

“The most glaring blemish on the Canadian historic record relates to our treatment of the First Nations that lived here at the time of colonization. An initial period of cooperative inter-reliance grounded in norms of equality and mutual dependence ... was supplanted in the nineteenth century by the ethos of exclusion and cultural annihilation. Early laws forbade Treaty Indians from leaving allocated reservations. Starvation and disease were rampant. Indians were denied the right to vote. Religious and social traditions, like the Potlach and the Sun Dance, were outlawed. Children were taken from their parents and sent away to residential schools, where they were forbidden to speak their native languages, forced to wear white-man’s clothing, forced to observe Christian religious practices, and not infrequently subjected to sexual abuse. The objective was to “take the Indian out of the child”, and thus to solve what John A. Macdonald referred to as the “Indian problem”. “Indianness” was not to be tolerated; rather it must be eliminated. In the buzz-word of the day, *assimilation*; in the language of the 21st century, *cultural genocide*. We now understand that the policy of assimilation was wrong and that the only way forward is acknowledgement and acceptance of the distinct values, traditions and religions of the descendants of the original inhabitants of the land we call Canada” (McLachlin, 2015, p. 7).

The stages of recovery from the effects of colonization on the Indigenous Peoples vary across the three coasts of Canada. In the past few decades, Indigenous rights have begun to impact ocean management, specifically in establishing marine protected areas, integrated ocean management plans, species-at-risk recovery plans and the assessments of projects ecologically, socially, and economically (Jones et al., 2023; Jones et al, In press; Jones et al., 2010; Jones et al., 2017). Addressing the three forms of injustices (political domination, loss of territory and benefits

thereof and cultural imposition) the Indigenous Peoples have experienced over the years is crucial to achieving reconciliation in ocean management issues (Moore, 2016).

Below are some definitions of reconciliation:

“a process that seeks a genuine, just, and enduring end to the conflict between the parties and transformation of the nature of the relationship between the societies through a course of action involving intertwined political and social changes and which addresses both politically tangible issues such as distribution of power and historical responsibility” (Rouhana, 2011, p. 292).

“Reconciliation ... is meant to be transformative, to create conditions going forward that will prevent recurrence of harm and dysfunctionality but also to promote a constructive relationship, to create a new attitude where Indigenous Peoples and all others work together to advance our joint welfare with mutual respect and understanding, always recognizing that while majorities will sometimes prevail and sometimes not, concerns must always be taken on board, considered and rejected only after informed reflection and for good reason. This is a recognition that in the end, we all must live together and get along in a free and democratic society of mutual respect” (Truth and Reconciliation Commission of Canada, 2015, p. 3).

“Reconciliation as relationship ... is always ... reciprocal, and ... invariably involves sincere acts of mutual respect, tolerance, and goodwill that serve to heal rifts [and includes] facing past evil openly, acknowledging its hurtful legacies, and affirming the common humanity of everyone involved. [It] is about peace between communities divided by conflict, but it is also about

establishing a sense of self-worth or internal peace within those communities” (Coldwater First Nation v. Canada (Attorney General), p. 27, paragraph 50).

Reconciliation is a transformative process that seeks a genuine, just, and enduring resolution to conflicts, fostering a nation-to-nation relationship with Indigenous Peoples (Rouhana, 2011; Truth and Reconciliation Commission of Canada, 2015; Coldwater First Nation v. Canada (Attorney General), 2020). Indigenous Peoples in Canada possess different worldviews on the concept of reconciliation. Through negotiations with various Indigenous Peoples, Canada can consider the multiple view systems (Jones et al, In press). It is imperative to comprehend that there is no singular Indigenous worldview, but there are shared elements. These include a general perception of humans’ position within the world and their cultural and spiritual connections to their lands and the living entities that inhabit them. The ancestors of the Indigenous communities pass on their knowledge and history, with a strong emphasis on preserving these legacies for the benefit of future generations (Sterritt 2016, Kinnear 2007). Prosper et al. (2011) noted that the Mi’kmaw worldview of *Reticulum* perceives the world as an interconnected web and recognizes that humans are only part of the earth and do not have sole dominion over it. Thus, the concept acknowledges nature’s role in providing for individuals and the community’s well-being and the need for humans to manage living resources and resource stewardship (Prosper et al., 2011; Jones et al, In press). “The rituals of giving thanks for taking a plant or killing large game, like moose, were guided by actions and values intended to keep a respectful co-existence and co-dependence between human and animal” (Prosper et al., 2011, p. 5). Six ethics and values define the Haida Nation's worldview and inform their marine planning decisions: respect (*Yahguudang*), responsibility, interconnectedness, balance, seeking wise counsel, and reciprocity

(Jones et al., 2010). These guiding principles were fundamental in the Haida Gwaii Marine Plan (CHN and BC, 2015). The term *Yahguudang* (respect) signifies that “Respect for each other and all living things is rooted in our culture. We take only what we need, we give thanks, and we acknowledge those who behave accordingly” (CHN and BC, 2015, p. 11).

The history of Canada’s relationships with Indigenous Peoples, including assimilation, genocide, racism, and the injustices of political domination, loss of territory and loss of culture, has had profound impacts on the relationship between Indigenous Peoples and the environment, and this remains true in the marine realm. Indigenous Peoples have faced ocean management issues across Canada’s three coasts, though progress toward reconciliation is occurring.

## **2.2 Treaty Rights in Atlantic Canada**

Several decisions made by the Supreme Court of Canada have upheld the Treaty and Aboriginal rights to fish for First Nations across Canada. “Aboriginal rights refer to practices, traditions and customs that distinguish the unique culture of each First Nation and were practiced before European contact. Aboriginal rights are inherent to First Nations people to hunt, fish and carry on their traditional way of life on their ancestral lands” (Standing Senate Committee on Fisheries and Oceans, 2022, p. 15). “Treaty rights are rights that are set out in historic treaties (i.e., those signed by representatives of the British Crown and First Nations between 1701 and 1975) or modern treaties (i.e., those signed since 1975). Treaties define specific rights, benefits and obligations for the signatories that vary from Treaty to Treaty” (Standing Senate Committee on Fisheries and Oceans, 2022, p. 15).

The Peace and Friendship Treaties of 1760 and 1761 were signed between representatives of First Nations communities of the Mi'kmaq, the Wolastoqiyik (Maliseet) and the Peskotomuhkati (Passamaquoddy) and the British Crown affirming the rights (both Aboriginal and Treaty rights) of the First Nations communities to hunt and fish (Standing Senate Committee on Fisheries and Oceans, 2022). The First Nations communities are in Nova Scotia, New Brunswick, Prince Edward Island, southern Newfoundland, the Gaspé region of Quebec, and into Maine (USA). The rights of these communities that reside in Canada were also recognized and affirmed in Section 35 of the *Constitution Act*, 1982 (The Constitution Act, 1982).

Some notable decisions made by the Supreme Court of Canada to uphold Treaty rights include the 1985 Simon decision, the 1990 Sparrow decision, and the 1999 Marshall decision. The Simon decision resulted in the Government's recognition that the peace and friendship treaties did not involve the First Nations surrendering their lands (Simon v. The Queen, 1985; R. v. Sparrow, 1990; R. v. Marshall, 1999; Isaac 1999; Wiber & Milley, 2007). The Sparrow decision recognized the Aboriginal right for all First Nations to fish for food, social, and ceremonial purposes (Wiber & Milley, 2007). The Marshall decision in 1999 was 6 years after Donald Marshall Jr. had been charged for exercising his Treaty fishing rights.

Donald Marshall Jr., a Mi'kmaq member of the Membertou First Nation in Nova Scotia caught and sold eel without a license during the fishery's off-season in August 1993. He was charged under the Federal *Fisheries Act* and the Maritime Provinces Fishery Regulations for his actions and convicted of illegal fishing by Nova Scotia's Provincial Court in 1996. In his defence, he

stated that he had the Treaty right to fish and sell his catch outside of DFO regulations (Fisheries and Oceans Canada, 2021a).

The Nova Scotia Court of Appeal denied Mr. Marshall's appeal and found him guilty, however, the Supreme Court of Canada allowed his appeal and acquitted him of all charges on September 17, 1999. In that decision, the Supreme Court also affirmed the First Nations' Treaty-protected right to fish, hunt, and gather for a moderate livelihood as in the Peace and Friendship Treaties of 1760 and 1761 (Union of Nova Scotia Mi'kmaq, 2021; Fisheries and Oceans Canada, 2022). This was the Marshall I decision. The Supreme Court made the Marshall II decision two months later (November 1999), clarifying that the Treaty right could be limited by conservation concerns and encouraging consultation and negotiation when regulating commercial fishing.

The Marshall decisions affected the 35 Mi'kmaq and Wolastoqiyik First Nations in New Brunswick, Prince Edward Island, Nova Scotia; the Gaspé region of Quebec; and the Peskotomuhkati Nation at Skutik (represented in Figure 2 below).



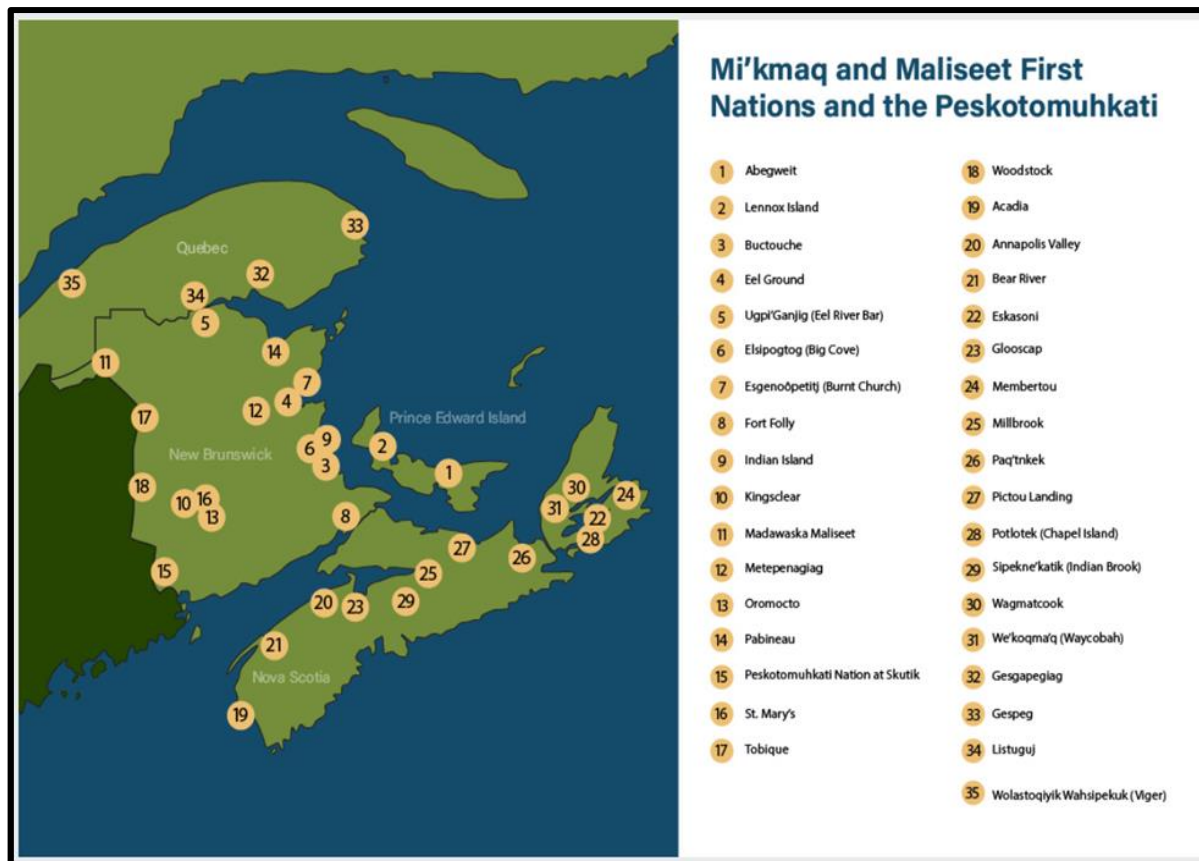


Figure 2: Mi'kmaq and Wolastoqiyik First Nations and the Peskotomuhkati Nation at Skutik

**Source:** Fisheries and Oceans Canada (2022)

Since the Marshall decision in 1999, Fisheries and Oceans Canada has made claims of significant success in accommodating what the court found to be a collective right to acquire a moderate livelihood from hunting, gathering, and fishing, using the Marshall Response Initiative (Fisheries and Oceans Canada, 2021a). However, recent work by the Standing Senate Committee on Fisheries and Oceans has spoken to a lack of progress by DFO on rights implementation (Standing Senate Committee on Fisheries and Oceans, 2022). Below I reviewed the DFO responses to date.

## **2.3 DFO Responses to Treaty Rights**

DFO has provided multiple responses to the Supreme Court of Canada's decisions on Treaty rights which have been in the form of programs and policies since 1992 (See Figure 4). This has led to some level of improved relationship of this Federal Department with the Indigenous communities, however, Indigenous Peoples have only been treated as stakeholders and not rightsholders whose rights are constitutionally protected (Fisheries and Oceans Canada, 2019b; Standing Senate Committee on Fisheries and Oceans, 2022). The DFO's responses to the Supreme Court of Canada's decisions on the rights of the Indigenous Peoples include Aboriginal Fisheries Strategy (AFS), Aboriginal Fishery Guardian (AFG), Allocation Transfer Program (ATP), Indigenous Engagement in *Species at Risk Act* (SARA), Aboriginal Inland Habitat Program (AIHP), Aboriginal Aquatic Resource and Oceans Management (AAROM) Program, Marshall Response Initiative (MRI), Atlantic Integrated Commercial Fisheries Initiative (AICFI), Pacific Integrated Commercial Fisheries Initiative (PICFI), Integrated Aboriginal Policy Framework, Indigenous Programs Renewal and Expansion and DFO-Coast Guard Reconciliation Strategy.

### **2.3.1. Aboriginal Fisheries Strategy (AFS)**

The Aboriginal Fisheries Strategy (AFS, 1992) was established following the 1990 Sparrow decision by the Supreme Court of Canada (Fisheries and Oceans Canada, 2007). In this decision, it was determined that when an Aboriginal group possesses the right to fish for Food, Social, and Ceremonial (FSC) purposes, this right takes precedence over other uses of the resource, provided conservation measures are in place (i.e., FSC is a priority access fishery) (Fisheries and Oceans Canada, 2019b). The main objective of the AFS was to effectively manage Aboriginal fisheries

by the Sparrow decision. Additionally, the AFS was designed to act as an interim arrangement for fisheries matters during the negotiation of comprehensive land claims and self-government agreements (Fisheries and Oceans Canada, 2007). It is important to note that the AFS is applicable in cases where DFO manages the fishery and where land claims settlements have not already established a fisheries management framework. Under the AFS, approximately 250 Aboriginal groups negotiated Fisheries Agreements. Additionally, the AFS provided them with funding for fisheries management and economic opportunities, including some level of commercial fishing opportunities (Fisheries and Oceans Canada, 2019b).

### **2.3.2 Aboriginal Fishery Guardian (AFG)**

The program was launched in 1992, it provided training, employment, equipping, and designation of fishery guardians by the Fisheries Act (Fisheries and Oceans Canada, 2019c; Fisheries and Oceans Canada, 2007). The guardians collaborated with the Conservation and Protection program of DFO in compliance and conservation activities (Fisheries and Oceans Canada, 2007). The AFG program created job opportunities for the Indigenous communities and helped safeguard the environment.

### **2.3.3 Allocation Transfer Program (ATP)**

The Allocation Transfer Program (ATP) enables the voluntary relinquishment of commercial licenses and the issuance of communal licenses to eligible Indigenous groups (Fisheries and Oceans Canada, 2007). The program was introduced in 1994 and it helped provide commercial fisheries access to some Indigenous groups across DFO's management regions, namely the Gulf, Maritimes, Newfoundland and Labrador, Pacific, Central and Arctic, and Québec. ATP provided

employment opportunities and income for the Indigenous groups (Fisheries and Oceans Canada, 2007; Fisheries and Oceans Canada, 2019b).

#### **2.3.4 Indigenous Engagement in *Species at Risk Act* (SARA)**

DFO engaged with Indigenous communities in developing various aspects of SARA. SARA was adopted in 2002 (Environment and Climate Change Canada, 2016). Indigenous Peoples participate in SARA education, the regulatory process for species listing, engagement and consultation, development, and implementation of recovery plans (Fisheries and Oceans Canada, 2007; Fisheries and Oceans Canada, 2019b).

#### **2.3.5 Aboriginal Inland Habitat Program (AIHP)**

AIHP was established by the Department of Fisheries and Oceans (DFO) in October 2003 (Fisheries and Oceans Canada, 2007). Its purpose is to facilitate the involvement of Indigenous Peoples who live in the inland provinces in the regulatory and non-regulatory activities of fish habitat management conducted by the Department (Fisheries and Oceans Canada, 2019b). The AIHP enhanced some collaboration between DFO and the Indigenous communities (Fisheries and Oceans Canada, 2007; Fisheries and Oceans Canada, 2019b).

#### **2.3.6 Aboriginal Aquatic Resource and Oceans Management (AAROM) Program**

DFO implemented the AAROM program with the objective of capacity building and collaborative management with Indigenous Peoples in September 2004 (Fisheries and Oceans Canada, 2019b). This program aimed to promote the participation of Indigenous groups in ecosystem-based planning and management processes (Fisheries and Oceans Canada, 2007). It was applicable in areas where DFO governs the fishery, but land claims have not yet been

resolved, just as in the case of AFS. The program provided funding to Indigenous groups to harness their expertise in aquatic resource and ocean management decision-making processes (Fisheries and Oceans Canada, 2019b). The funding allocated through the AAROM program is utilized for various purposes such as training, commercial fisheries access, and capacity building within the fisheries sector. Furthermore, according to DFO, the AAROM program facilitated Indigenous groups' transition from capacity building to collaborative management (Fisheries and Oceans Canada, 2007; Fisheries and Oceans Canada, 2019b).

### **2.3.7 Marshall Response Initiative (MRI)**

The initial Marshall Response Initiative (MRI) was launched in 2000 and was a one-year program with a singular agenda: To sign Interim Fisheries Agreements (IFAs) that would give First Nations access to the commercial fishery on an immediate basis via communal commercial licences (Fisheries and Oceans Canada, 2021b).

To build upon the IFAs signed under the initial MRI, DFO introduced the longer-term MRI in 2001. This MRI process allowed the First Nations to actively pursue and achieve their vision for their future roles in the commercial fishery through Fisheries Agreements. Between the years 2000 to 2007, DFO gave \$354 million for communal commercial fishing licenses, fishing vessels and gear, and training for 32 First Nations that were affected by the Marshall decision (Fisheries and Oceans Canada, 2021b; Fisheries and Oceans Canada, 2007; Fisheries and Oceans Canada, 2019b).

### **2.3.7.1 At-Sea Mentoring Initiative (ASMI)**

The At-Sea Mentoring Initiative (ASMI) was established in 2004 as part of the MRI to enhance the fishing capabilities of Mi'kmaq and Wolastoqiyik First Nations in various fisheries. Additionally, it was meant to empower Indigenous communities to independently train themselves (Fisheries and Oceans Canada, 2007; Fisheries and Oceans Canada, 2019b).

### **2.3.7.2 Fisheries Operations Management Initiative (FOMI)**

The Fisheries Operations Management Initiative (FOMI) was established in February 2004 to provide Mi'kmaq and Wolastoqiyik First Nations with business and management monitoring and strengthening their community-level fisheries management structures (Fisheries and Oceans Canada, 2007). It was a four-year program that was implemented through the Chiefs and Councils of First Nations and Aboriginal organizations. In addition, FOMI resulted in effective fishery operations management by the First Nations Aboriginal organizations and established regulations for communal-fisheries benefits sharing (Fisheries and Oceans Canada, 2007; Fisheries and Oceans Canada, 2019b).

This initiative was in place before it was later replaced on March 31, 2007, by the Atlantic Integrated Commercial Fisheries Initiative. The newly adopted initiative has since supported increased First Nations' participation in commercial fishery (Fisheries and Oceans Canada, 2021b).

### **2.3.8 Atlantic Integrated Commercial Fisheries Initiative (AICFI)**

The Atlantic Integrated Commercial Fisheries Initiative (AICFI) was initiated after the conclusion of the Marshall Response Initiative in 2007. AICFI was initially a temporary program but was made permanent in 2017 (Fisheries and Oceans Canada, 2021b). AICFI funds the First Nations affected by the Marshall decision to strengthen their communal commercial fishing enterprises (CFEs) and community economic self-sufficiency.

The MRI and AIFCI are responses to the Marshall decision and to date have provided \$530 million for licences, vessels and gear, and training for Indigenous communities to support their participation in commercial fisheries (Fisheries and Oceans Canada, 2021b). Together, these initiatives have increased economic benefits for First Nations communities and Indigenous fishers. There has been an increase in the value of First Nations' communal commercial landings from \$3 million in 1999 to over \$120 million in 2020 (Fisheries and Oceans Canada, 2021b). Despite this growth, it remains a relatively small fraction compared to the broader commercial fisheries of Canada, which amount to \$36.1 billion in fish and seafood products in 2018 (Statistics Canada, 2021).

Despite these commercial gains, however, the MRI was never an adequate response to Marshall as it did not deal with the right to fish for a moderate livelihood. In 2015, Canada and the Nova Scotia Mi'kmaq started exploring a different approach to try to address the DFO vision of a moderate livelihood in the fisheries context. In 2017, Canada obtained a mandate to negotiate Rights Reconciliation Agreements (RRA) with the Mi'kmaq, Maliseet, and Peskotomuhkati across Atlantic Canada and the Gaspé region of Quebec (Fisheries and Oceans Canada, 2021a).

The RRA recognizes the rights and interests of Indigenous communities and advances their vision of self-determination and economic self-reliance for the benefit of their communities and Canada. DFO claims that to reach a compromise with RRAs in the spirit of respect, cooperation, and partnership to identify the First Nation's right to pursue a moderate livelihood, DFO accepted the advice of the Supreme Court from the Marshall decision (Fisheries and Oceans Canada, 2021a). Implementation of the Treaty or moderate livelihood fisheries remains patchy and incomplete across Mi'kma'ki.

### **2.3.9 Pacific Integrated Commercial Fisheries Initiative (PICFI)**

The Pacific Integrated Commercial Fisheries Initiative (PICFI) was launched in 2007 (Fisheries and Oceans Canada, 2021b). PICFI aimed to increase the participation of British Columbia (BC) First Nations in commercial fisheries. This initiative was in support of the BC Treaty process. It encompasses several provisions, including the granting of commercial fisheries access to the Indigenous communities in the form of quota, licences and gear through the voluntary retirement of commercial fisheries licence holders (Fisheries and Oceans Canada, 2021b; Fisheries and Oceans Canada, 2019c). It also resulted in sustainable First Nation-owned and operated fisheries enterprises through the development of businesses and fisheries training (Fisheries and Oceans Canada, 2021b). It enabled the Indigenous Peoples' involvement in fisheries management decision-making processes.

### **2.3.10 Integrated Aboriginal Policy Framework**

The Integrated Aboriginal Policy Framework, 2006-2010 was developed by DFO to promote a respectful relationship between the Indigenous Peoples and the Department (Fisheries and



Oceans Canada, 2007). The framework needed to be developed as the Indigenous Peoples wanted to exercise their Treaty right to fish for the growth of their community and be involved in fisheries management (Fisheries and Oceans Canada, 2007). It guided the Department in the renewal of its Aboriginal policies and program. It serves as a tool for developing guidelines, programs and collaborative work with other federal agencies, provinces, territories, stakeholders and rightsholders (Fisheries and Oceans Canada, 2019b; Fisheries and Oceans Canada, 2007). Some have argued however that there have been mixed results in terms of successful implementation (Reimer et al., 2022).

### **2.3.11 Indigenous Programs Renewal and Expansion**

DFO collaborated with the National Indigenous Fisheries Institute (an Indigenous-led organization) to develop guiding principles for co-development, co-design, and co-delivery of programs to support the Indigenous Peoples in May 2017 (Fisheries and Oceans Canada, 2019c). It also involved the review of exercising DFO programs, and the Northern Integrated Commercial Fisheries Initiative was designed and implemented. Indigenous Program Review (IPR) commenced in October 2017 and had two phases due to the enormity of the work and the significance of the programs to the Indigenous communities (Fisheries and Oceans Canada, 2019c).

Phase one ended on May 22, 2018, with the recommendation that the renewal of Atlantic and Pacific Integrated Commercial Fisheries Initiatives (AICFI and PICFI) and the Aboriginal Aquatic Resources and Oceans Management (AAROM) Programs (Fisheries and Oceans Canada, 2019c). Phase two ended the following year (May 2019) with the recommendation of

the renewal of the Aboriginal Fisheries Strategy (AFS) and Aboriginal Fishery Guardians (AFG) and the Northern Integrated Commercial Fisheries Initiative (NICFI) launch (Fisheries and Oceans Canada, 2019c). Figure 3 highlights the programs that were recommended for renewal and expansion in phases one and two of IPR.

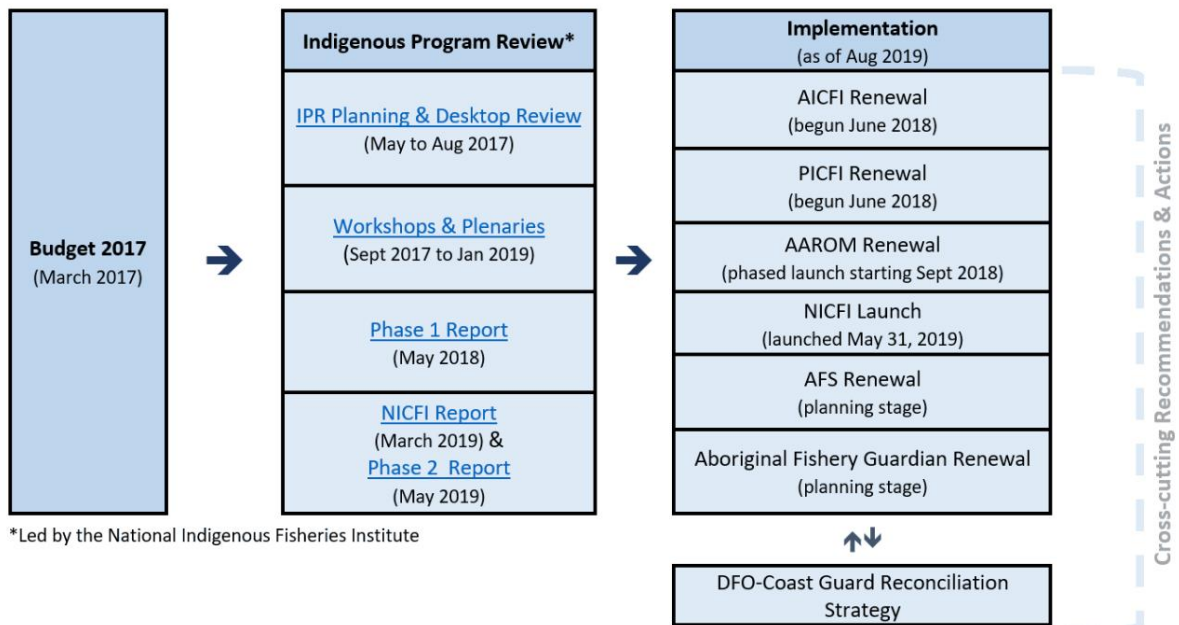


Figure 3: Recommendations of the Indigenous Program Review

**Source:** Fisheries and Oceans Canada, 2019c

The renewal of the AICFI, PICFI, AAROM, AFS and AFG and the launch of NICFI as recommended by IPR was impacted by the COVID-19 pandemic, however, DFO is working on the co-development, co-design, and co-delivery of the programs (Fisheries and Oceans Canada, 2021d; Fisheries and Oceans Canada, 2019c).

### **2.3.12 DFO-Coast Guard Reconciliation Strategy**

The results and recommendations from the IPR process were timely for the DFO-Coast Guard as the Department had that time worked to develop a holistic reconciliation strategy that reflects lessons learned in working with the Indigenous communities over the years and genuine commitment towards reconciliation (Fisheries and Oceans Canada, 2019c). The IPR guided and provided insights for DFO in developing the Reconciliation Strategy. As part of Fisheries and Oceans Canada and the Canadian Coast Guard's commitment to a nation-to-nation relationship with the First Nations, Inuit and Métis peoples, the Fisheries and Oceans Canada and the Canadian Coast Guard Reconciliation Strategy was developed in September 2019 (Fisheries and Oceans Canada, 2019d; Fisheries and Oceans Canada, 2019e).

The five reconciliation strategy actions are:

- Enhancing internal capacity to deliver on reconciliation
- Transforming laws and policies
- Negotiating Treaty and non-Treaty agreements
- Building decision-making and collaborative management processes
- Enhancing economic opportunities and capacity

A representation of the responses of DFO to Treaty rights on a timeline over the years is presented below (Figure 4).

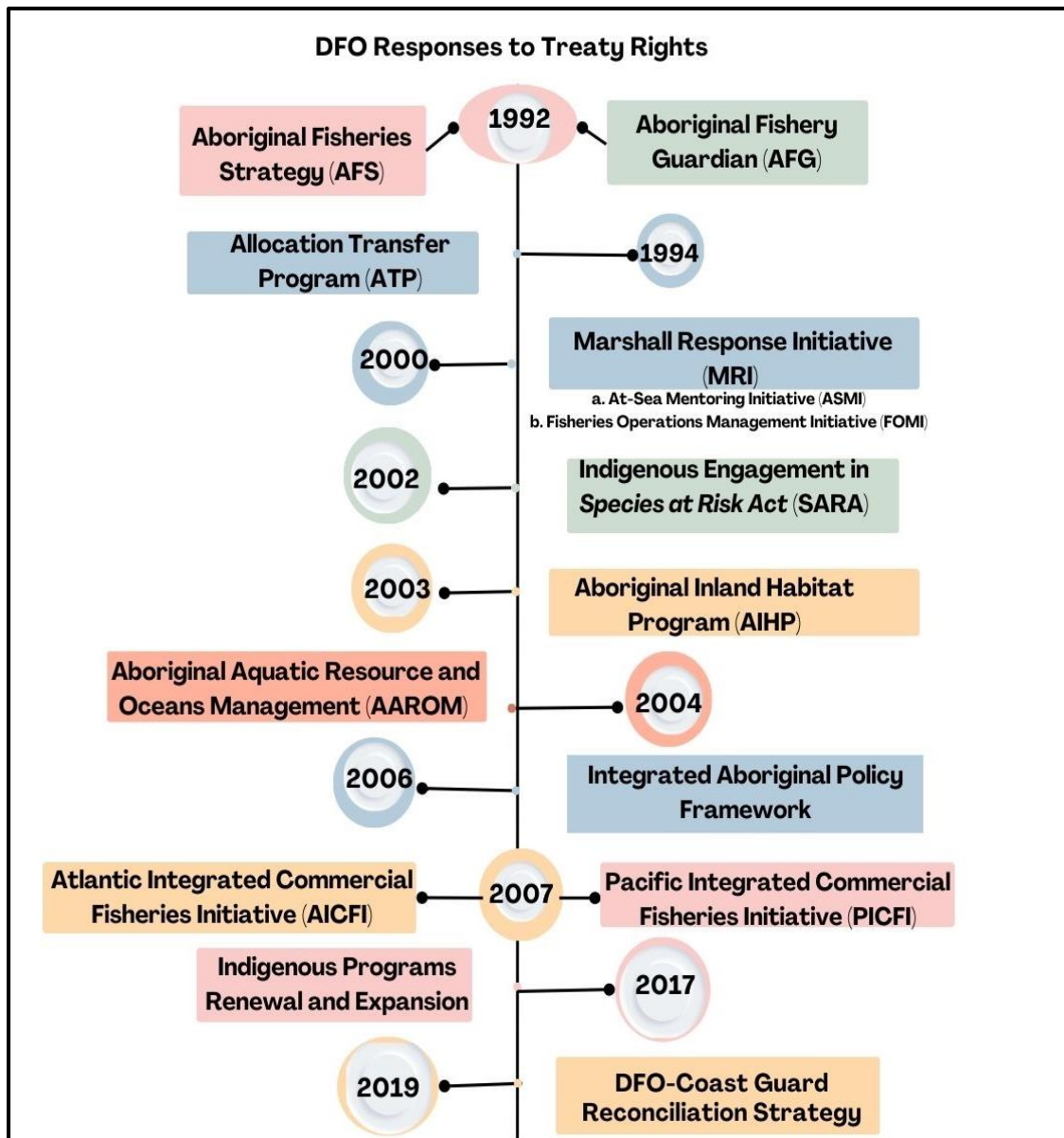


Figure 4: DFO Responses to Treaty Rights

## 2.4 Reconciliation of Treaty Rights in Atlantic Canada

In the fall of 2020, Sipekne'katik First Nation initiated their own Mi'kmaw-regulated, rights-based lobster fishery in the waters off southwest Nova Scotia (Metallic & MacIntosh, 2020; Seguin, 2021; Bailey and Charles, In press). This came 21 years after the Supreme Court reaffirmed the Treaty-protected right to fish for a moderate livelihood. However, the launch was

met with harassment, violence, and racism, sparking a nationwide awakening to the issue of Treaty fisheries implementation. The Sipekne'katik fishery was launched in September, out of Saulnierville in St. Marys Bay, NS. The commercial lobster season in Lobster Fishing Area 34, St. Mary's Bay, typically occurs between November and May (Bailey, 2020). The rights-based lobster fishery, however, was launched outside of this defined period, specifically in mid-September 2020, leading commercial fishermen to raise concerns about conservation (Bailey, 2020, Denny, 2020).

Initially, the livelihood fishery involved 5 Sipekne'katik vessels, each operating 50 traps (Bailey, 2020). It was later reported that the number of vessels increased to 10, using a total of 500 traps. In contrast, the commercial sector operates approximately 1,000 vessels in the same bay, with each vessel permitted to fish 375 traps, totalling approximately 375,000 traps (Bailey, 2020). This striking contrast raises the critical question of which fishery should be of conservation concern, given that the total number of traps of the rights-based lobster fishery is only about 1.43% of that of the commercial industry. There is no evidence suggesting that the Sipekne'katik fishery poses a conservation concern (Bailey, 2020).

DFO has worked under its terms to promote its concept of moderate livelihood fisheries, which the Minister continues to espouse must be done within existing commercial seasons and with DFO licenses in place (Minister of Fisheries, Oceans and the Canadian Coast Guard, 2022). This rhetoric has continued, despite DFO stating their commitment to work with First Nations to implement their constitutionally protected, Supreme Court affirmed right while ensuring that fisheries remain safe, productive, and sustainable for all harvesters. It is no surprise, then, that

frustration abounds that there has been little real progress in implementing the Treaty rights and equity (Fisheries and Oceans Canada, 2021a).

What seems foundational to continued progress in Treaty implementation in Mi'kma'ki is that processes and frameworks implemented by DFO are the right institutional fit for Treaty relations. Reconciliation of Treaty Rights in Atlantic Canada would mean Indigenous Peoples having a meaningful role in fisheries management and stewardship (House of Commons Standing Committee on Fisheries and Oceans, 2021). In the next section, I review reconciliation progress across several marine sectors. While the focus of this project is on fisheries, it is helpful to first take a broad sweep across various sectors. The majority of the section is drawn from the work of Jones et al. (In press).

## **2.5 Integrated Marine Planning in North Pacific Canada**

In Northern British Columbia, collaborative marine planning has been driven by government commitments to integrated management and the need to address Treaty rights in the absence of treaties (Jones et al, In press). Indigenous groups have also played a crucial role in self-organizing for effective planning. A significant milestone was the establishment of the Pacific North Coast Integrated Management Area (PNCIMA) in 2005, which involved negotiations between Canada, the Province of British Columbia (BC), and 17 First Nations to establish principles and governance for planning. (Jones et al, In press).

The pre-planning phase included the development of Indigenous partnerships and governance structures, studies on Indigenous marine traditional knowledge, and funding for Indigenous

capacity in marine planning (Jones et al, In press). The federal government withdrew from initial commitments in 2011 which impacted the progress of the work but the Marine Plan Partnership (MaPP), composed of BC and the initial 17 First Nations, independently developed marine spatial plans for sub-regions (Jones et al, In press). The candidate sites for Marine Protected Areas (MPAs) for the plans were identified and endorsed in 2015 (Jones et al, In press). The Government of Canada, the Province of BC and 15 First Nations officially endorsed the Marine Protected Area Network for the Northern Shelf Bioregion on the 5th of February 2023 (MPA Network of the Northern Shelf Bioregion, 2023).

A high-level PNCIMA plan outlining an ecosystem-based management framework and objective was agreed upon in 2017 (PNCIMA Initiative, 2017). However, it does not address fishing, shipping, and oil and gas development issues (PNCIMA Initiative, 2017; Jones et al, In press).

Reconciliation elements in the PNCIMA and MaPP processes are governance structures and collaborative plans to address political domination and cultural imposition. While progress has been made, some challenges still exist, particularly in addressing specific issues like fisheries management and marine shipping (Jones et al, In press).

## **2.6 Wildlife management and Indigenous protected areas in Arctic Canada**

In Nunavut, the Inuit still struggle for reconciliation 31 years after the Nunavut Land Claims Agreement in 1992 (Jones et al, In press). There has been an ongoing effort toward reconciliation in fisheries, wildlife and ocean management, oil and gas development, and the establishment of

protected areas (Jones et al, In press; Jones et al., 2023). A co-management system was established to ensure active Inuit participation in wildlife decisions, but new challenges persist.

In 2016, the community of Clyde River contested seismic testing for offshore oil and gas exploration in the Supreme Court of Canada due to its potential harm to marine life and Inuit rights. The court ruled in favour of the Inuit, highlighting inadequate consultation and the failure to fulfill the Crown's duty to consult (Jones et al, In press).

Inuit leadership in the Arctic aims to secure alternative models for marine management, particularly in the Pikialasorsuaq (North Water Polynya) region, which has been a vital shared resource for centuries. The Pikialasorsuaq Commission, an Inuit-led body, seeks to address threats posed by climate change, shipping, tourism, and resource exploration by prioritizing Inuit knowledge (Pikialasorsuaq Commission, 2017).

The Commission recommends the establishment of an Inuit Management Authority (IMA), a protected area managed by Inuit, and a free travel zone in the Pikialasorsuaq region, which enhances Inuit self-determination while respecting Inuit priorities and practices (Pikialasorsuaq Commission, 2017). Implementing the recommendations is a pathway toward reconciliation and the recognition of the Inuit rights and territory.

## **2.7 Offshore Oil and Gas Development Conflicts**

Most of the offshore oil and gas development conflict since the 1970s has been related to Indigenous Peoples' rights and the need for reconciliation (Jones et al, In press). For example,



the inquiry on the Mackenzie Valley pipeline development in the Arctic between 1974 and 1977 stated that the project could impact the vulnerable environment and Indigenous cultures of the region (Jones et al, In press; Berger 1977). It recommended postponing pipeline construction until the land claims have been signed. The oil and gas exploration in the Beaufort Sea was also halted. There were several disputes around oil and gas development even after the Land Claims Agreement. The environmental assessments in 2016-2017 recommended collaboration with the Indigenous Peoples as supported by the Land Claims Agreements and a review of the Arctic oil and gas development in 2021 (Jones et al, In press; CIRNAC, 2019).

On the Pacific Coast, Indigenous communities supported a moratorium on offshore oil and gas development in 1972 (Jones et al, In press). Although, attempts to revive discussions around offshore oil and gas development by the Province of British Columbia in 2002 were unsuccessful, attention shifted to pipelines from Alberta's oil sands and northwestern BC gas fields in the mid-2000s (Jones et al, In press). Through the National Energy Board (NEB), Indigenous groups participated in hearings that reviewed the impact of the Enbridge Northern Gateway and Trans Mountain Pipeline projects on the environment (Jones et al, In press). In recent times, several legal cases have arisen about oil and gas development due to inadequate consultation with Indigenous groups leading to the overturning of approvals (Jones et al, In press). It includes the Enbridge Northern Gateway pipeline from Alberta to Kitimat in 2016 and the Trans Mountain oil pipeline from Edmonton to Vancouver (Barrera, 2018; Jones et al, In press). However, the latter was purchased by the government in 2018 stating it was in the interest of the nation (Jones et al, In press).

The pipelines and oil and gas development projects have generated much dispute over the years and only limited progress has been made in reconciling the rights of Indigenous Peoples before and after the commencement of the projects. The new environmental assessment legislation approved in 2019 emphasized engaging with Indigenous Peoples on projects to promote collaboration between the Indigenous communities and the oil and gas industry (Jones et al, In press).

## **2.8 Ports and Shipping in Pacific Canada**

The expansion of ports and shipping has been ongoing since the mid-2000s in Pacific Canada, various projects have been cancelled or delayed in execution due to their impacts on the rights of the Indigenous communities (Jones et al, In press). In 2017, the federal government introduced a comprehensive national Oceans Protection Plan aimed at investing in better infrastructure and fostering cooperation, particularly with Indigenous groups. The Reconciliation Framework Agreement (RFA) was established in 2018 to promote co-governance and co-management in shipping activities (Jones et al, In press). The RFA was negotiated between 14 First Nations in northern BC and five federal agencies, including Transport Canada (Jones et al, In press).

The RFA is in its initial stages of implementation, with the reconciliation process being refined. The agreement promotes collaboration with Indigenous communities, which is different from the litigation approach commonly employed in the Arctic and Atlantic coasts (Jones et al, In press).

The NEB of the Government of Canada approved the Liquefied Natural Gas (LNG) project involving the development of a pipeline from northeastern BC to Kitimat and the redesign of the existing wharf at the Kitimat Port into a marine terminal facility in 2013 (NS Energy, 2023). It

initially issued a 25-year export license and increased it to 40 years in 2016 (NS Energy, 2023). There were thirty-five (35) Natural Gas Pipeline Benefits Agreements (PBAs) between in Government and First Nations in BC which include skills development, environmental stewardship projects with Indigenous communities and equity (Government of British Columbia, 2023). Although there has been limited progress in engagement with Indigenous Peoples, only a few reconciliation criteria have been addressed (Jones et al, In press).

Achieving genuine reconciliation requires acknowledging the truth, understanding historical and ongoing injustices, and fostering a stronger relationship with Indigenous Peoples (Reid et al., 2024). Indigenous Peoples have faced various forms of injustice across marine sectors over the years, and only little progress has been made towards reconciliation (Jones et al. In press). Although DFO has provided several responses to Treaty rights, there has been little or no progress. DFO responses and frameworks can only make significant progress towards reconciliation if they promote Indigenous self-governance of their fisheries (House of Commons Standing Committee on Fisheries and Oceans, 2021).

### **Chapter 3: Research Approach and Methodology**

In this chapter, I outline the research design and methodology employed to assess the EBM Framework and its potential to support marine reconciliation. I do so by using the Marine Reconciliation Framework developed by Jones et al. (In press), to identify reconciliation opportunities for the development of an inclusive Ecosystem-Based Management (EBM) Framework that fosters a renewed nation-to-nation relationship with Indigenous Peoples in Atlantic Canada. The study utilizes a multidisciplinary approach, drawing from literature reviews, meetings, review and mapping EBM and Reconciliation frameworks to gain a comprehensive understanding of the topic.

#### **3.1 Positionality Statement**

I am from the Yoruba ethnic group of Nigeria, one of the many Indigenous communities of Africa. I travelled from my home country with my family in 2022 to begin my Master of Marine Management program at Dalhousie University, located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. I grew up in Lagos, Nigeria, the most populous city in Africa. Throughout my life, I have had connections with water bodies, particularly Lagos Lagoon- a captivating water body between the Atlantic Ocean and Lagos State. It is one of the ten lagoons in Lagos State and the largest in the Gulf of Guinea. My undergraduate and master's research were on this water body. Throughout my applied marine biology work, I continued to witness and develop an interest in the human dimensions of resource use, particularly aspects related to conflict and justice, hence my interest in my current research.

While I may not share the Mi'kmaq ancestry, my heart resonates with the echoes of historical injustices that have touched Indigenous communities across the globe, including my own in Africa. The goal of my research is to contribute to reconciliation and Indigenous self-governed fisheries. Given my over seven years of experience in environmental impact assessment, strategic marine-related research, and administration, I am particularly fascinated by the potential of collaborative and inclusive EBM approaches to bridge reconciliation gaps and advance sustainable marine management practices. My journey is not merely about research and academia; it is a testimony to the power of connection, shared experiences, and a commitment to contributing to a more equitable and sustainable future for all. I am dedicated to learning from the wisdom of those who have stewarded the land and waters for generations and conducting research that supports justice for Indigenous Peoples, ensuring they have a meaningful role in ocean management decision-making.

## **3.2 Case Study**

### **DFO Maritimes Region**

There are seven administrative regions in DFO: the Pacific, Arctic, Ontario and Prairie, Quebec, Gulf, Maritimes, and Newfoundland and Labrador (Fisheries and Oceans Canada, 2021c). The management of the fisheries in the Maritime Provinces is shared between two DFO regions, the Maritimes Region and the Gulf Region. The Maritimes Region is headquartered in Dartmouth, Nova Scotia with the Bedford Institute of Oceanography (BIO) in Dartmouth as its major research facility while the Gulf Region has its headquarters in Moncton, New Brunswick with the St. Andrews Biological Station (SABS) in New Brunswick as the major research facility (Fisheries and Oceans Canada, 2021c). The Maritimes Region, known as the Scotia-Fundy

Fisheries Management Sector, extends from the northern tip of Cape Breton to the New Brunswick-Maine border while the Gulf Region extends from the New Brunswick-Quebec border to the northern tip of Cape Breton as represented in Figure 5 below (Fisheries and Oceans Canada, 2021c).

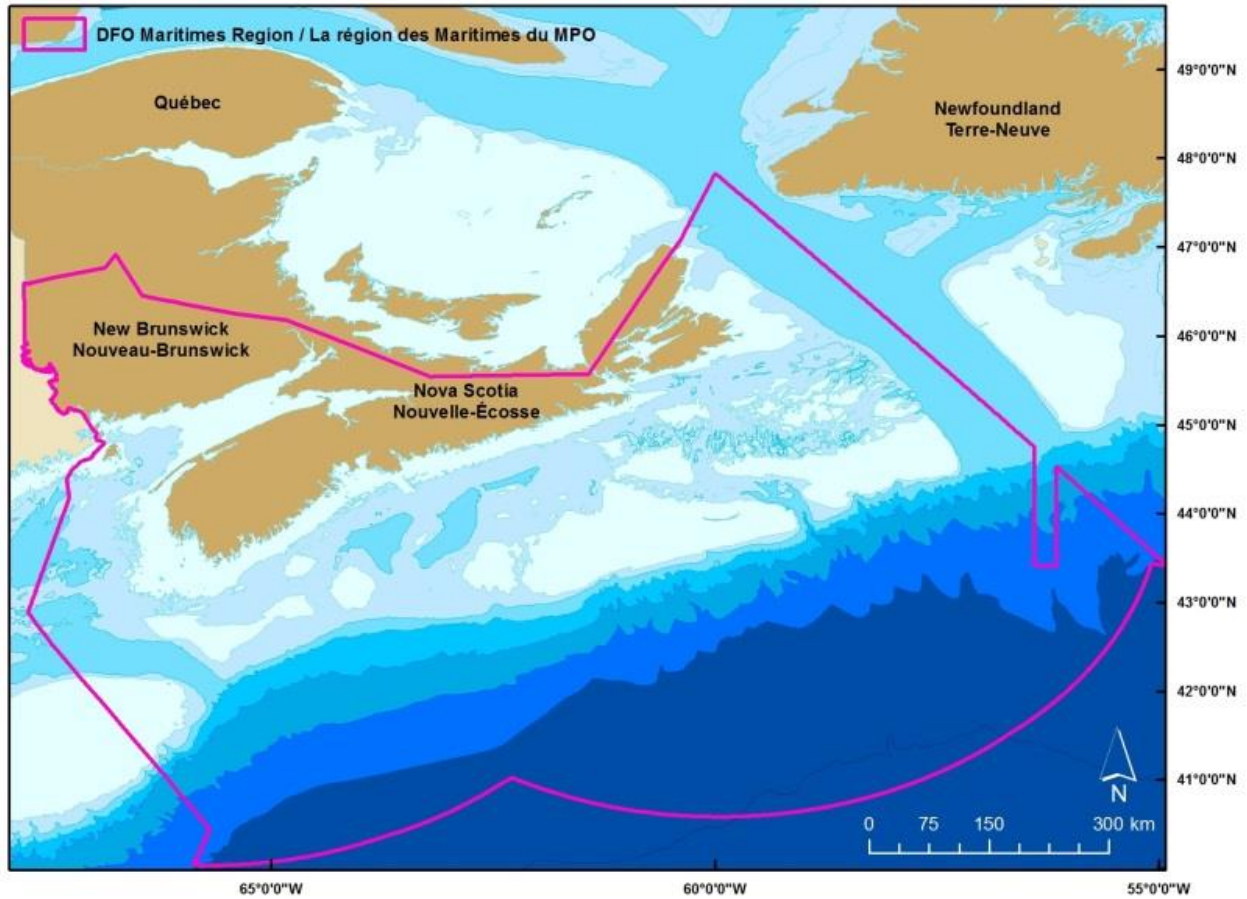


Figure 5: DFO Maritimes Region Boundary Map

Source: Fisheries and Oceans Canada (2021)

## **DFO Maritimes EBM Framework**

The amended *Fisheries Act* (Fisheries and Oceans Canada, 2019a) stipulates that the Minister may consider the application of an ecosystem approach while amending or implementing limited reference points and rebuilding plans. While this consideration is new in legislation, DFO Maritimes Region has been developing an Ecosystem-Based Management (EBM) Framework over the past several years to support its mandate in governing the ocean for four pillars of sustainability: Governance, Social/Cultural, Economic, and Ecological (Stephenson et al., 2021; Foley et al., 2020; Daly et al. 2020; Bundy et al., 2021).

Over the last decade, the Maritimes Region has developed three Ecosystem Approach to Management (EAM) Frameworks: the Gavaris Framework (2009), the Maritimes Region EAM Framework (2012), and the Canadian Fisheries Research Network (CFRN) Framework (2018) (Daly et al. 2020). The DFO Maritimes Region organized the first EBM Framework workshop in December 2019, where it examined the three frameworks and agreed to develop an updated Maritimes EBM Framework for fisheries and ocean management (Daly et al. 2020). Figure 6 below shows the evolution of the Maritimes Region EBM Framework and Figure 7 shows the pillars and objectives of the EBM Framework.

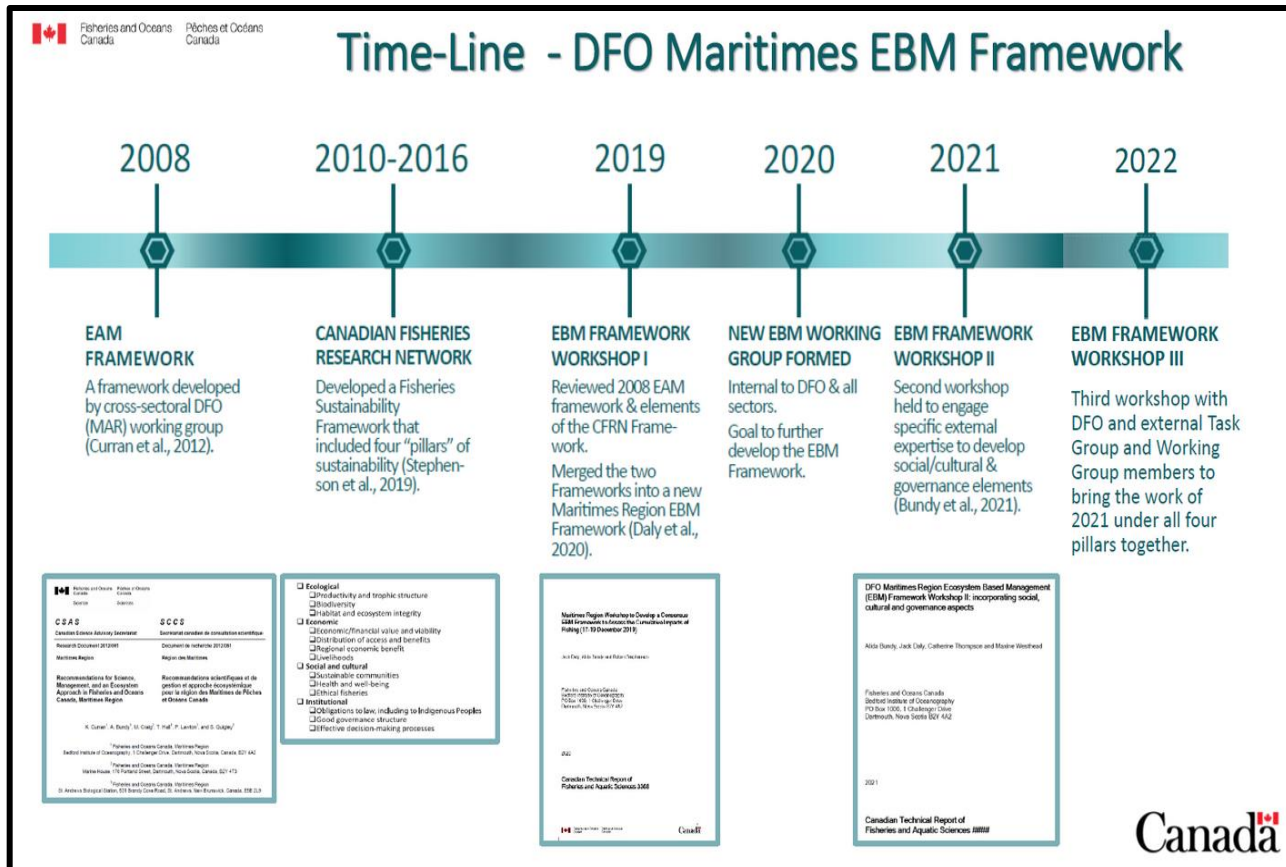


Figure 6: Evolution of the Maritimes Region EBM Framework

Source: DFO Maritimes (2023)



Maritimes EBM Framework		Pillars	Primary Objectives
		Ecological	<ul style="list-style-type: none"> <li>A. Productivity</li> <li>B. Biodiversity</li> <li>C. Habitat</li> </ul>
Economic	<ul style="list-style-type: none"> <li>A. Economic Efficiency</li> <li>B. Economic Equity</li> <li>C. Economic Sustainability</li> </ul>		
Social & Cultural	<ul style="list-style-type: none"> <li>A. Sustainable Communities</li> <li>B. Health &amp; Wellbeing</li> <li>C. Ethical &amp; Just Activities</li> <li>D. Culture</li> </ul>		
Governance	<ul style="list-style-type: none"> <li>A. Legal Obligations &amp; other Commitments</li> <li>B. Governance Structures &amp; Processes</li> <li>C. Governance Outcomes</li> </ul>		

Figure 7: EBM Framework Pillars and Objectives Source: DFO Maritimes (2023)

**Source:** DFO Maritimes (2023)

The DFO Maritimes Region held an EBM Framework Workshop II on 25-28 January 2021 to support its framework development. The workshop engaged experts outside DFO to develop the Social/Cultural and Institutional/Governance elements of the EBM framework (Stephenson et al., 2021; Foley et al., 2020; Daly et al., 2020; Bundy et al., 2021; Fisheries and Oceans Canada, 2019a). The third EBM workshop in 2022 with DFO and external expertise was to further develop the four pillars and their objectives.

In the background material, the characteristics of EBM were broadly reviewed. After working with the DFO Maritimes EBM Framework for months, I reflect on the extent to which the characteristics are reflected in the Framework.

The DFO Maritimes EBM Framework uses a comprehensive approach that considers social-ecological interactions under its four pillars- governance, social and cultural, economic and ecological. The EBM Framework is being developed through interdisciplinary knowledge. The DFO Maritimes held three workshops in 2019, 2021 and 2023 respectively where the DFO and external Task Group and Working Group members with various expertise worked on developing the four pillars of the EBM Framework (Daly et al., 2020; Bundy et al., 2021). Indigenous leaders have been part of the EBM development process, and the EBM is currently at the stage of an Indigenous-led review by the Atlantic Policy Congress (APC) of the First Nations Chiefs Secretariat (A. Bundy, personal communication, March 17, 2023). Collaboration with Indigenous Peoples is essential in ocean governance to better address the complex interactions between ecological and social systems (Standing Senate Committee on Fisheries and Oceans, 2022).

The EBM Framework is multi-functional, covering several aspects of ocean governance. The aspects include ecological, economic, social/cultural and governance. It focuses on multiple deliverables rather than one outcome. The primary objectives of the ecological pillar of the EBM Framework are productivity, biodiversity and habitat. The primary objectives of the economic pillar are economic efficiency, economic equity, and economic sustainability. In contrast, the primary objectives of the social and cultural pillar are sustainable communities, health and well-

being, ethical and just activities and culture (Bundy et al., 2021). Legal obligations and other commitments, governance structures and processes and governance outcomes are the primary objectives of the governance pillar (Bundy et al., 2021). The DFO Maritimes is actively engaged in formulating objectives and indicators to uphold its mandate of implementing an ecosystem approach to the ocean, estuarine, and freshwater management in the region (A. Bundy, personal communication, March 17, 2023). This next step is an Indigenous-led review of the Framework which will engage with Indigenous Peoples to determine how Indigenous values, perspectives and considerations may be incorporated into the Framework.

### **Jones et al. Marine Reconciliation Framework**

The Reconciliation Framework identified 23 reconciliation criteria that address the three types of injustices using the UNDRIP articles (Jones et al., 2023; Jones et al, In press; UNDRIP, 2008) (Figure 8). The three types of injustices associated with colonialism in the history of fisheries and ocean management in Canada are political domination, loss of territory (and benefits thereof), and cultural imposition (Moore, 2016).

Type of injustice and reconciliation criteria	UNDRIP Articles
<b>Political Domination</b>	
Effective Indigenous organizations in place at appropriate scales	18
Self government or management agreements in place	4
Mechanisms and resources to implement agreements and treaties	29, 37, 39
Development of joint policies and plans	5, 29
Processes and practices in place to secure Indigenous consent	10, 19, 28, 32
Meaningful engagement in development of relevant legislation, regulations and/or designations/listings	19, 38
Incorporation of Indigenous laws into decision-making	27
Incorporation of indigenous priorities and strategies into decision-making	32
Resorting to courts to resolve disputes	32, 37, 40
Indigenous capacity to govern or manage including financial autonomy	39
<b>Loss of Territory (and benefits thereof)</b>	
Consent for allocations, licences, tenures or plans in a territory related to an activity	19
Agreements on share or proportion of a resource or activity; or jointly approved plans in place	17, 19
Allocation policies or plans or targets account for Indigenous title and rights to specific territories	19, 26
Compensation for loss	10, 20, 28, 32
Revenue sharing or management funding for new or existing activities or uses	26, 32
Joint assessments of activities to account for environmental, social, cultural and economic impacts	23, 32
Sustainable use and/or species recovery over the long term as determined through assessments	25, 29, 32
<b>Cultural Imposition</b>	
Ability to practice rights and culture	8, 15
Incorporation of traditional knowledge into policies and plans	31
Uses Indigenous language in negotiation and decision-making	13
Contributes to an equal standard of living e.g., income, benefits, traditional food	21, 24
Activity occurs consistent with community values	23, 25
Policies and plans incorporate Indigenous worldview	25

*Figure 8: Reconciliation Framework*

**Source:** Jones et al. (2023)

The aim must be reconciliation to achieve an inclusive EBM Framework in the Maritime Region.

Only by identifying and bridging the reconciliation gaps in the EBM Framework through the

utilization of the Reconciliation Framework associated with UNDRIP can we establish an equitable future where everyone is happy.

### **3.3 Methods**

The study employed a literature review and a comparative analysis of the DFO Maritimes EBM Framework, in its current form, against Jones et al.'s Reconciliation Framework to identify existing reconciliation gaps and ways the framework could be a tool for reconciliation. Likewise, the research uses the lens of right-based fisheries implementation in studying reconciliation to understand how the framework could promote Indigenous self-determination.

#### **3.3.1 Literature Review**

A thorough literature review was conducted to gather existing academic publications, government reports, and grey literature related to ecosystem-based management, reconciliation, fisheries management, and Indigenous rights in the context of fisheries and ocean management. The literature review provided a foundation for understanding key concepts, frameworks, and approaches proposed or implemented in various contexts. This information gleaned in the review was summarized in Chapter 2.

#### **3.3.2 Review of the EBM Framework, Reconciliation Framework and DFO Coast Guard Reconciliation Strategy**

The EBM Framework, Reconciliation Framework and DFO Coast Guard Reconciliation Strategy were reviewed. The DFO Maritimes Region is developing the EBM Framework, encompassing the four pillars of ocean governance sustainability: Governance, Social/Cultural, Economic, and

Ecological (See Bundy et al., 2021 for an explanation of the pillars). For this research, I studied and reviewed the draft of the EBM Framework dated January 2023. This draft was provided by the Chair of the DFO Maritimes Region EBM Initiative, as this project was conducted in collaboration with DFO.

The Reconciliation Framework, which included the three types of injustices and the 23 reconciliation criteria was reviewed. Additionally, the DFO Coast Guard Reconciliation Strategy which includes the Federal Commitment, DFO Coast Guard Commitment, Long-term Objectives, Departmental Results, Departmental Indicators, Programs Contributing to Indicators, Guiding Principles, Action Areas of DFO Sectors and Coast Guard Sectors were reviewed.

### **3.3.3 Alignment Analysis: EBM Framework and DFO Coast Guard Reconciliation Strategy with Reconciliation Framework**

In this study, the alignment of the Ecosystem-Based Management (EBM) Framework, with a focus on its four pillars (Governance, Social/Cultural, Economic, and Ecological) and their objectives with the Reconciliation Framework linked with UNDRIP was assessed. Additionally, the alignment of the DFO Coast Guard Reconciliation Strategy with the Reconciliation Framework was evaluated. The aim was to shed light on the extent to which the EBM Framework and DFO Reconciliation Strategy are consistent with the principles of reconciliation.

To accomplish this, each pillar of the EBM Framework, along with the DFO Coast Guard Reconciliation Strategy, was mapped against the Reconciliation Framework. This mapping process facilitated a systematic comparison which enabled the identification of areas where there

are alignments and reconciliation gaps. A notable aspect of this analysis was the use of a traffic light system, which served as a visual aid for evaluating the alignment.

This system involves reviewing the pillars and objectives of the EBM Framework/DFO Reconciliation Strategy against the twenty-three (23) reconciliation criteria (which addressed the three types of injustices) of the Reconciliation Framework and assigning the three traffic light colours: grey, yellow, and green based on the degree to which the reconciliation criteria is addressed.

Grey: Indicated instances where there is a reconciliation gap between the EBM Framework and DFO Reconciliation Strategy and the Reconciliation Framework. This categorization is used when the EBM Framework's pillars and objectives and DFO Reconciliation Strategy have no mention of words or terms related to the reconciliation criteria.

Yellow: Denoted partial alignment existed between the EBM Framework and DFO Reconciliation Strategy and the Reconciliation Framework. This categorization was used when the language used in the EBM Framework's pillars and objectives and the DFO Reconciliation Strategy is not specific but could be interpreted as supporting the reconciliation criteria broadly.

Green: Signified a strong alignment with the principles of reconciliation, reflecting the successful incorporation of the reconciliation criteria into the EBM Framework's pillars and objectives and DFO Reconciliation Strategy. This categorization was used when the EBM

Framework and DFO Reconciliation Strategy specifically included and addressed the reconciliation criteria.

The outcomes of this assessment were documented in an Excel spreadsheet, which facilitated the systematic organization and visualization of the results. This approach allowed for a comprehensive overview of how each pillar of the EBM Framework, and the DFO Coast Guard Reconciliation Strategy support the Reconciliation Framework. The utilization of the traffic light system in conjunction with the spreadsheet format provided a clear and concise representation of the alignment analysis, aiding in the interpretation of results and the identification of trends. The systematic mapping and categorization process, coupled with the traffic light system, provided valuable insights into the extent to which these frameworks embody the principles of reconciliation, contributing to a nuanced understanding of their alignment and potential areas of improvement.

### **3.4 Limitations**

As with any research, the study had some limitations, the review of the EBM and Reconciliation framework was done by the researcher, drawing from the knowledge she had gained in the course of her Master's program. She interacted with her supervisor who guided her through the course of the research, however, the research was not community-specific and did not get data from Mi'kmaq communities in Nova Scotia to get their perspectives on the EBM Framework DFO Maritimes has been developing. The initial project team included Dr. Megan Bailey, an Associate Professor at Dalhousie Marine Affairs Program, with expertise in fisheries management in fisheries economics, marine governance, fisheries allocation, and ocean equity.



She has been working with both Sipekne'katik First Nation and DFO's EBM Framework development team over the past years and supervised the researcher. The other team members included Dr. Alida Bundy, a Research Scientist, at Fisheries and Oceans Canada, lead for the Maritimes Region EBM initiative and the EBM Framework and Cheryl Maloney, a Sipekne'katik community member, Mi'kmaw activist, and Professor of Political Science, Cape Breton University, who was once the Consultation Lead for the Sipekne'katik Governance Initiative and Grace Akinrinola, the researcher. The project team had a relationship building with Sipekne'katik Fisheries Band but could not continue the project with the community as they were not interested in a community-based project at the time and had just had new leadership elected. One key takeaway from the relationship-building was the emphasis on self-governing their fisheries and not on how many agreements the DFO was able to sign with the Mi'kmaq communities. The project moved from being community-based to a broader scope that considered how the been developed EBM Framework could be inclusive, promoting reconciliation and self-governance. This paper might have benefitted from a published EBM Framework and community engagement.

## **Chapter 4: Results**

### **4.1 Governance Pillar**

The assessment of the Governance pillar of the EBM Framework revealed a mixed alignment with the Reconciliation Framework's criteria. Certain reconciliation criteria were categorized as "green," indicating that the Governance pillar of the EBM Framework addressed such reconciliation criteria. These aligned aspects demonstrated a clear commitment to the development of joint policies and plans and incorporating traditional knowledge into policies. However, eight reconciliation criteria fell within the "yellow" category, suggesting areas where alignment was partial. These instances highlighted the Governance pillar of the EBM Framework supported such reconciliation criteria broadly but there is a need for explicitly. Notably, 13 of the 23 reconciliation criteria (which is more than half) were categorized as "grey," indicating reconciliation gaps in the Governance pillar of the EBM Framework concerning such reconciliation criteria.

Notably, two injustice types were partially addressed through the governance pillar - political domination and cultural imposition. The Governance pillar only broadly supported five of the reconciliation criteria to address the political domination and three of the reconciliation criteria to address the cultural imposition, some of which the interpretation suggests presence. The third injustice, loss of territory, was not addressed or inferred by the Governance pillar (Table 1).

Table 1: Mapping of the Governance Pillar of the EBM Framework with Reconciliation Framework

Types of Injustices and Reconciliation Criteria		UNDRIP Articles	Addressed in	Where
<b>Political Domination</b>				
1	Effective Indigenous organizations in place at appropriate scales	18		
2	Self government or management agreements in place	4		
3	Mechanisms and resources to implement agreements and treaties	29, 37, 39		A1a.i & ii3
4	Development of joint policies and plans	5, 29		B2d.i, A1a.ii2,4
5	Processes and practices in place to secure Indigenous consent	10, 19, 28, 32		A1a.iii
6	Meaningful engagement in development of relevant legislation, regulations and/or designations/listings	19, 38		B2d.i, B.1a
7	Incorporation of Indigenous laws into decision-making	27		B4a.i
8	Incorporation of Indigenous priorities and strategies in decision-making	32		C1a
9	Resorting to courts to resolve disputes	32, 37, 40		
10	Indigenous capacity to govern or manage including financial autonomy	39		
<b>Loss of Territory (and benefits thereof)</b>				
11	Consent for allocations, licences, tenures, or plans in a territory related to an activity	19		
12	Agreements on share or proportion of a resource or activity; or jointing approved plans in place	17, 19		
13	Allocation policies or plans or targets account for Indigenous title or rights to specific territories	19,26		
14	Compensation for loss	10, 20, 28, 32		
15	Revenue sharing or management funding for new or existing activities or uses	26, 32		
16	Joint assessments of activities to account for environmental, social, cultural, and economic impacts	23, 32		
17	Sustainable uses and/or species recovery over the long term as determined through assessments	25, 29, 32		
<b>Cultural Imposition</b>				
18	Ability to Practice rights and culture	8, 15		A1a.i
19	Incorporation of traditional knowledge into policies and plans	31		B4a.i
20	Uses Indigenous language in negotiation and decision-making	13		
21	Contributes to an equal standard of living e.g income	21, 24		
22	Activity occurs consistent to community values	23, 25		C1a
23	Policies and plans incorporate Indigenous worldview	25		B4a.i

## **4.2 Social/Cultural Pillar**

The Social/Cultural pillar of the EBM Framework addressed four of the 23 reconciliation criteria. The reconciliation criteria addressed were only under one of the three types of injustices-cultural imposition. The other two types of injustices that were not addressed by the Social/Cultural pillar were the loss of territory and political domination. The reconciliation criteria that were addressed were: the ability to practice rights and culture, incorporation of traditional knowledge into policies and plans, and contributes to an equal standard of living and activity consistent with community values (Table 2). Five reconciliation criteria were categorized with yellow because they were only broadly supported by the pillar. Fourteen reconciliation criteria were categorized with grey as they were not addressed by the pillar.

Table 2: Mapping of the Social/Cultural Pillar of the EBM Framework with Reconciliation Framework

Types of Injustices and Reconciliation Criteria		UNDRIP Articles	Addressed in	Where
<b>Political Domination</b>				
1	Effective Indigenous organizations in place at appropriate scales	18		
2	Self government or management agreements in place	4		
3	Mechanisms and resources to implement agreements and treaties	29, 37, 39		C1a.iii; A1a.i & ii3
4	Development of joint policies and plans	5, 29		C1a.iii; A1a.ii2,4
5	Processes and practices in place to secure Indigenous consent	10, 19, 28, 32		C1a.iii; A1a.iii
6	Meaningful engagement in development of relevant legislation, regulations and/or designations/listings	19, 38		B2c.ii & C1b.i; B.1a
7	Incorporation of Indigenous laws into decision-making	27		
8	Incorporation of Indigenous priorities and strategies in decision-making	32		
9	Resorting to courts to resolve disputes	32, 37, 40		
10	Indigenous capacity to govern or manage including financial autonomy	39		
<b>Loss of Territory (and benefits thereof)</b>				
11	Consent for allocations, licences, tenures, or plans in a territory related to an activity	19		
12	Agreements on share or proportion of a resource or activity; or jointing approved plans in place	17, 19		
13	Allocation policies or plans or targets account for Indigenous title or rights to specific territories	19,26		
14	Compensation for loss	10, 20, 28, 32		
15	Revenue sharing or management funding for new or existing activities or uses	26, 32		A1a.i
16	Joint assessments of activities to account for environmental, social, cultural, and economic impacts	23, 32		
17	Sustainable uses and/or species recovery over the long term as determined through assessments	25, 29, 32		
<b>Cultural Imposition</b>				
18	Ability to Practice rights and culture	8, 15		C1a.iii; A1a.i, D1-3
19	Incorporation of traditional knowledge into policies and plans	31		C1a.iv
20	Uses Indigenous language in negotiation and decision-making	13		
21	Contributes to an equal standard of living e.g income	21, 24		B2a.i- iii
22	Activity occurs consistent to community values	23, 25		B2c.i
23	Policies and plans incorporate Indigenous worldview	25		

### **4.3 Economic Pillar**

The evaluation of the Economic pillar's alignment with the Reconciliation Framework highlighted a mixed result. Only one of the three types of injustices- cultural imposition was addressed by the economic pillar, the other two- loss of territory and cultural imposition were not addressed. Three of the six reconciliation criteria under cultural imposition (a type of injustice) were addressed. The criteria that were addressed in the pillar were: the ability to practice rights and culture, an activity that occurs consistent with community values and policies and plans incorporating Indigenous worldview. Only one of the reconciliation criteria which is under the cultural imposition was categorized with yellow because they were only broadly supported by the pillar. The reconciliation criteria categorized as yellow was contribute to an equal standard of living e.g income. Of the 23 reconciliation criteria, 19 (82.6%) were categorized as "grey," showcasing a notable reconciliation gap in the economic pillar of the EBM Framework (Table 3).

Table 3: Mapping of the Economic Pillar of the EBM Framework with Reconciliation Framework

Types of Injustices and Reconciliation Criteria		UNDRIP Articles	Addressed in	Where
<b>Political Domination</b>				
1	Effective Indigenous organizations in place at appropriate scales	18		
2	Self government or management agreements in place	4		
3	Mechanisms and resources to implement agreements and treaties	29, 37, 39		
4	Development of joint policies and plans	5, 29		
5	Processes and practices in place to secure Indigenous consent	10, 19, 28, 32		
6	Meaningful engagement in development of relevant legislation, regulations and/or designations/listings	19, 38		
7	Incorporation of Indigenous laws into decision-making	27		
8	Incorporation of Indigenous priorities and strategies in decision-making	32		
9	Resorting to courts to resolve disputes	32, 37, 40		
10	Indigenous capacity to govern or manage including financial autonomy	39		
<b>Loss of Territory (and benefits thereof)</b>				
11	Consent for allocations, licences, tenures, or plans in a territory related to an activity	19		
12	Agreements on share or proportion of a resource or activity; or jointing approved plans in place	17, 19		
13	Allocation policies or plans or targets account for Indigenous title or rights to specific territories	19,26		
14	Compensation for loss	10, 20, 28, 32		
15	Revenue sharing or management funding for new or existing activities or uses	26, 32		
16	Joint assessments of activities to account for environmental, social, cultural, and economic impacts	23, 32		
17	Sustainable uses and/or species recovery over the long term as determined through assessments	25, 29, 32		
<b>Cultural Imposition</b>				
18	Ability to Practice rights and culture	8, 15		A2, A3e, C2a.ii
19	Incorporation of traditional knowledge into policies and plans	31		
20	Uses Indigenous language in negotiation and decision-making	13		
21	Contributes to an equal standard of living e.g income	21, 24		A1, B1b., C1b.
22	Activity occurs consistent to community values	23, 25		A3a., C2a.iv
23	Policies and plans incorporate Indigenous worldview	25		B2a.1

#### **4.4 Ecological Pillar**

Within the Ecological pillar of the EBM Framework, the alignment assessment demonstrated a considerable reconciliation gap, as none of the reconciliation criteria of the Reconciliation Framework were addressed. As such, the three types of injustices- political imposition, loss of territory and cultural imposition were also not addressed. The ecological pillar and objectives of the EBM Framework had no words related to the Reconciliation Framework (see Table 4).



Table 4: Mapping of the Ecological Pillar of the EBM Framework with Reconciliation Framework

Types of Injustices and Reconciliation Criteria		UNDRIP Articles	Addressed in	Where
<b>Political Domination</b>				
1	Effective Indigenous organizations in place at appropriate scales	18		
2	Self government or management agreements in place	4		
3	Mechanisms and resources to implement agreements and treaties	29, 37, 39		
4	Development of joint policies and plans	5, 29		
5	Processes and practices in place to secure Indigenous consent	10, 19, 28, 32		
6	Meaningful engagement in development of relevant legislation, regulations and/or designations/listings	19, 38		
7	Incorporation of Indigenous laws into decision-making	27		
8	Incorporation of Indigenous priorities and strategies in decision-making	32		
9	Resorting to courts to resolve disputes	32, 37, 40		
10	Indigenous capacity to govern or manage including financial autonomy	39		
<b>Loss of Territory (and benefits thereof)</b>				
11	Consent for allocations, licences, tenures, or plans in a territory related to an activity	19		
12	Agreements on share or proportion of a resource or activity; or jointing approved plans in place	17, 19		
13	Allocation policies or plans or targets account for Indigenous title or rights to specific territories	19,26		
14	Compensation for loss	10, 20, 28, 32		
15	Revenue sharing or management funding for new or existing activities or uses	26, 32		
16	Joint assessments of activities to account for environmental, social, cultural, and economic impacts	23, 32		
17	Sustainable uses and/or species recovery over the long term as determined through assessments	25, 29, 32		
<b>Cultural Imposition</b>				
18	Ability to Practice rights and culture	8, 15		
19	Incorporation of traditional knowledge into policies and plans	31		
20	Uses Indigenous language in negotiation and decision-making	13		
21	Contributes to an equal standard of living e.g income	21, 24		
22	Activity occurs consistent to community values	23, 25		
23	Policies and plans incorporate Indigenous worldview	25		

#### **4.5 DFO Coast Guard Reconciliation Strategy**

The DFO's Reconciliation Strategy was developed in September 2019 (Fisheries and Oceans Canada, 2019d). The evaluation of the DFO Coast Guard Reconciliation Strategy's alignment with the Reconciliation Framework unveiled a mixed result (Table 5). Notably, four of the 23 reconciliation criteria were categorized green as they were addressed by the DFO Coast Guard Reconciliation Strategy, indicating minimal incorporation of reconciliation principles within its scope. Three of the nine guiding principles of the Reconciliation Strategy aligned with the reconciliation criteria. The guiding principles of the Reconciliation Strategy that aligned with the Reconciliation Framework included:

- Collaborate with the Indigenous Peoples in the renewal of laws, policies, programs and operational practices.
- Bring everyone along holders, stakeholders, provincial/territorial governments, Canadians
- Adjust approaches based on geographic, cultural, social, economic, and capacity needs and differences

Six reconciliation criteria were categorized with yellow because they were only broadly supported by the pillar, highlighting areas where deeper alignment is required. Thirteen reconciliation criteria were categorized with grey because they were not addressed by the pillar.

Table 5: Mapping of the DFO Coast Guard Reconciliation Strategy with Reconciliation Framework

Types of Injustices and Reconciliation Criteria		UNDRIP Articles	Addressed in
<b>Political Domination</b>			
1	Effective Indigenous organizations in place at appropriate scales	18	
2	Self government or management agreements in place	4	
3	Mechanisms and resources to implement agreements and treaties	29, 37, 39	
4	Development of joint policies and plans	5, 29	
5	Processes and practices in place to secure Indigenous consent	10, 19, 28, 32	
6	Meaningful engagement in development of relevant legislation, regulations and/or designations/listings	19, 38	
7	Incorporation of Indigenous laws into decision-making	27	
8	Incorporation of Indigenous priorities and strategies in decision-making	32	
9	Resorting to courts to resolve disputes	32, 37, 40	
10	Indigenous capacity to govern or manage including financial autonomy	39	
<b>Loss of Territory (and benefits thereof)</b>			
11	Consent for allocations, licences, tenures, or plans in a territory related to an activity	19	
12	Agreements on share or proportion of a resource or activity; or jointing approved plans in place	17, 19	
13	Allocation policies or plans or targets account for Indigenous title or rights to specific territories	19,26	
14	Compensation for loss	10, 20, 28, 32	
15	Revenue sharing or management funding for new or existing activities or uses	26, 32	
16	Joint assessments of activities to account for environmental, social, cultural, and economic impacts	23, 32	
17	Sustainable uses and/or species recovery over the long term as determined through assessments	25, 29, 32	
<b>Cultural Imposition</b>			
18	Ability to Practice rights and culture	8, 15	
19	Incorporation of traditional knowledge into policies and plans	31	
20	Uses Indigenous language in negotiation and decision-making	13	
21	Contributes to an equal standard of living e.g income	21, 24	
22	Activity occurs consistent to community values	23, 25	
23	Policies and plans incorporate Indigenous worldview	25	

#### **4.6 Alignment Across Sources**

The loss of territory and benefits thereof form of injustice was the least addressed of the three types of injustices by the EBM Framework and DFO Reconciliation Strategy when compared with the political domination and cultural imposition type of injustices that had some of their criteria partially addressed by the framework and reconciliation strategy (Table 6 and Table 7). The framework and reconciliation strategy had more aligned areas under the cultural imposition when compared with the other two forms of injustice.

Table 6: Mapping of the four pillars of the EBM Framework with the Reconciliation Framework

Types of Injustices and Reconciliation Criteria		UNDRIP Articles	Governance	Social & Cultural	Economic	Ecological
<b>Political Domination</b>						
1	Effective Indigenous organizations in place at appropriate scales	18				
2	Self government or management agreements in place	4				
3	Mechanisms and resources to implement agreements and treaties	29, 37, 39				
4	Development of joint policies and plans	5, 29				
5	Processes and practices in place to secure Indigenous consent	10, 19, 28, 32				
6	Meaningful engagement in development of relevant legislation, regulations and/or designations/listings	19, 38				
7	Incorporation of Indigenous laws into decision-making	27				
8	Incorporation of Indigenous priorities and strategies in decision-making	32				
9	Resorting to courts to resolve disputes	32, 37, 40				
10	Indigenous capacity to govern or manage including financial autonomy	39				
<b>Loss of Territory (and benefits thereof)</b>						
11	Consent for allocations, licences, tenures, or plans in a territory related to an activity	19				
12	Agreements on share or proportion of a resource or activity; or jointing approved plans in place	17, 19				
13	Allocation policies or plans or targets account for Indigenous title or rights to specific territories	19,26				
14	Compensation for loss	10, 20, 28, 32				
15	Revenue sharing or management funding for new or existing activities or uses	26, 32				
16	Joint assessments of activities to account for environmental, social, cultural, and economic impacts	23, 32				
17	Sustainable uses and/or species recovery over the long term as determined through assessments	25, 29, 32				
<b>Cultural Imposition</b>						
18	Ability to Practice rights and culture	8, 15				
19	Incorporation of traditional knowledge into policies and plans	31				
20	Uses Indigenous language in negotiation and decision-making	13				
21	Contributes to an equal standard of living e.g income	21, 24				
22	Activity occurs consistent to community values	23, 25				
23	Policies and plans incorporate Indigenous worldview	25				

Table 7: Mapping of the O Maritimes EBM Framework and DFO Reconciliation Strategy with Reconciliation Framework

Types of Injustices and Reconciliation Criteria		UNDRIP Articles	Governance	Social & Cultural	Economic	Ecological	Reconciliation Strategy
	<b>Political Domination</b>						
1	Effective Indigenous organizations in place at appropriate scales	18					
2	Self government or management agreements in place	4					
3	Mechanisms and resources to implement agreements and treaties	29, 37, 39					
4	Development of joint policies and plans	5, 29					
5	Processes and practices in place to secure Indigenous consent	10, 19, 28, 32					
6	Meaningful engagement in development of relevant legislation, regulations and/or designations/listings	19, 38					
7	Incorporation of Indigenous laws into decision-making	27					
8	Incorporation of Indigenous priorities and strategies in decision-making	32					
9	Resorting to courts to resolve disputes	32, 37, 40					
10	Indigenous capacity to govern or manage including financial autonomy	39					
	<b>Loss of Territory (and benefits thereof)</b>						
11	Consent for allocations, licences, tenures, or plans in a territory related to an activity	19					
12	Agreements on share or proportion of a resource or activity; or jointing approved plans in place	17, 19					
13	Allocation policies or plans or targets account for Indigenous title or rights to specific territories	19,26					
14	Compensation for loss	10, 20, 28, 32					
15	Revenue sharing or management funding for new or existing activities or uses	26, 32					
16	Joint assessments of activities to account for environmental, social, cultural, and economic impacts	23, 32					
17	Sustainable uses and/or species recovery over the long term as determined through assessments	25, 29, 32					
	<b>Cultural Imposition</b>						
18	Ability to Practice rights and culture	8, 15					
19	Incorporation of traditional knowledge into policies and plans	31					
20	Uses Indigenous language in negotiation and decision-making	13					
21	Contributes to an equal standard of living e.g income	21, 24					
22	Activity occurs consistent to community values	23, 25					
23	Policies and plans incorporate Indigenous worldview	25					

## **Chapter 5: Discussion**

In the context of reconciliation, the convergence between governance frameworks and the principle of reconciliation serves as a crucial measure of progress and commitment. This study undertakes a comprehensive analysis to assess the alignment between the Reconciliation Framework and two pivotal governance instruments- the EBM Framework, characterized by its four foundational pillars (Governance, Social/Cultural, Economic, and Ecological), and the DFO Coast Guard Reconciliation Strategy. The primary goal of the research is to provide valuable insights into the extent to which these frameworks support reconciliation principles.

### **5.1 Ecosystem-Based Management (EBM) Characteristics**

The development of the EBM Framework is evidence-based on Western and Indigenous knowledge. Incorporating a two-eyed seeing approach into a novel collaborative management system for livelihood fisheries is crucial for its effectiveness. DFO's mandate should seamlessly integrate this Indigenous knowledge, recognizing it as an equally valuable and essential knowledge type (Standing Senate Committee on Fisheries and Oceans, 2022).

It is more complex to manage aquatic ecosystems than individual water bodies (O'Higgins et al., 2020). To ensure effective EBM decisions, it becomes imperative to account for spatial changes. Addressing this complexity necessitates the active involvement of local communities in EBM decision-making, as they often possess a more intimate understanding of the specific conditions and challenges in their immediate surroundings (Loreau et al., 2003; O'Higgins et al., 2020). The collaboration between DFO Maritimes and Indigenous Peoples is essential in developing an

EBM Framework that considers the spatial scale and complex interlinkages, both vital factors for informed and successful EBM decisions.

EBM does not only consider the complex interactions between social and ecological systems, but it also accounts for the relationship between different aquatic ecosystems- freshwater ecosystems, coastal ecosystems and transitional waters, and marine ecosystems (O'Higgins et al., 2020). An integral aspect of EBM is its proactive approach to considering unknown and unpredictable effects (O'Higgins et al., 2020). This recognition reflects an understanding that not all ecological interactions can be fully anticipated, emphasizing the need for adaptability and resilience in management strategies. The further consideration of this goal in the development of the DFO Maritimes EBM Framework will ensure a comprehensive understanding of the ecosystems, aiming to develop management strategies that go beyond surface-level insights to foster a deeper comprehension of the ecological intricacies at play.

EBM necessitates policy coordination between various sectors and across different governmental levels (O'Higgins et al., 2020). The governance pillar of the EBM Framework accounted for vertical and horizontal governance integration and collaboration with the Indigenous Peoples. The next stage of the EBM Framework development will help ensure better policy coordination and inclusive governance structures.

The complexity inherent in socio-ecological systems, coupled with the inherent uncertainty associated with future environmental conditions, underscores the need for a flexible and dynamic approach to ocean management (Long et al. 2015; O'Higgins et al., 2020). The EBM Framework



was built on an adaptive and dynamic management approach which will help navigate the complexities of socio-ecological systems and respond effectively to the uncertainty inherent in future environmental conditions (Long et al. 2015). It is interesting then that while encompassing all of the characteristics of EBM that have been recognized in the literature, opportunities for reconciliation are not inherent in the DFO EBM Framework, at least not as benchmarked against the Jones et al. (In press) criteria.

For the EBM Framework to truly catalyze reconciliation, it must possess all the characteristics of a functional EBM of aquatic ecosystems. Its design and implementation should extend beyond mere functionality to actively address challenges, demonstrating a dedicated commitment to fostering resilience, promoting sustainability, and intentionally integrating Indigenous knowledge into the management process (Standing Senate Committee on Fisheries and Oceans, 2022).

## **5.2 EBM as a Tool for Reconciliation**

The holistic and integrated nature of EBM generally aligns with the principles of reconciliation. Unlike the prevailing single-species approach to management, EBM inherently considers the interconnectedness of ecological and social factors (O’Higgins et al., 2020). By recognizing the intricate relationships between aquatic ecosystems and Indigenous communities, EBM holds the potential to be a tool for reconciliation if it addresses the three forms of injustice. This part will explore areas where the DFO Maritimes EBM Framework aligns with the reconciliation criteria and aspects of the framework to further develop to address the forms of injustices. While some areas of the DFO Maritimes EBM Framework align with reconciliation criteria, most of the

aspects of the framework necessitate further development to effectively address the form of injustices- political domination, loss of territory and benefits thereof and cultural imposition.

### **5.2.1 Political Domination**

Only one of the ten reconciliation criteria to address the political domination type of injustice was addressed by the EBM Framework. The reconciliation criterion- “Development of joint policies and plans” was addressed by the governance pillar and broadly supported by the social and cultural pillar. The criterion was based on UNDRIP articles five and 29. UNDRIP articles outline the collective and individual rights of Indigenous Peoples worldwide, emphasizing their rights to self-determination, culture, lands, and resources. Co-development of policies and plans with Indigenous Peoples is essential in sustainable management (House of Commons Standing Committee on Fisheries and Oceans, 2021; UNDRIP). Three reconciliation criteria were broadly supported by both the governance and social and cultural pillars of the EBM Framework- Mechanisms and resources to implement agreements and treaties; Processes and practices in place to secure Indigenous consent; Meaningful engagement in the development of relevant legislation, regulations and/or designations/listings. The EBM Framework partially aligns with the implementation of Treaty rights. Treaties and agreements with the Indigenous Peoples should be respected, recognized and implemented (UNDRIP, 2007). The agreement to implement includes Treaty fisheries by the Mi’kmaq and Wolastoqiyik First Nations and Peskotomuhkati Nation (House of Commons Standing Committee on Fisheries and Oceans, 2021). The rights of Indigenous Peoples have been overlooked for many years and ensuring a process in place to secure their consent is essential to fully address this reconciliation criterion (Jones et al, In press).

Improving engagement involves exploring more effective methods of interaction and communication with Indigenous communities. This strategy includes the employment of Indigenous personnel, as recommended by the House of Commons Standing Committee on Fisheries and Oceans in 2021.

The governance pillar broadly supported the following reconciliation criteria- Incorporation of Indigenous laws into decision-making and incorporation of Indigenous priorities and strategies in decision-making. Indigenous Peoples should be prioritized in decisions and Indigenous law should be incorporated in decisions. For the EBM Framework to be an effective tool for reconciliation, the governance pillar should be further developed to prioritize Indigenous Peoples in decision-making and integrate Indigenous law into the decision-making process. The EBM Framework did not address certain reconciliation criteria of the type of injustice categorized as political domination. These criteria include “Effective Indigenous organizations in place at appropriate scales”, “Self government or management agreements in place”, “Indigenous capacity to govern or manage including financial autonomy” and “Resorting to courts to resolve disputes”. It is notable that the DFO-Coast Guard Reconciliation Strategy broadly supports the first three criteria. DFO Maritimes’ next steps in developing the EBM Framework should involve providing greater specificity on the reconciliation criteria that received broad support and devising strategies to address those criteria that were not addressed in the framework.

### **5.2.2 Loss of Territory (and benefits thereof)**

Only one of the seven reconciliation criteria to address the loss of territory form of injustice was broadly supported by one of the pillars of the EBM Framework (social/cultural)- Revenue

sharing or management funding for new or existing activities or uses. The DFO-Coast Guard reconciliation strategy only broadly supports the criterion “Consent for allocations, licences, tenures, or plans in a territory related to an activity”. Indigenous Peoples possess the right to maintain their unique spiritual connection with their traditionally owned and occupied lands, territories, waters, and resources, while also fulfilling their responsibilities to future generations (UNDRIP, 2007). Our frameworks for management must preserve and respect the territories of the Indigenous Peoples.

Upon careful review and consideration of the reconciliation criteria under the loss of territory form of injustices, below are the pillars that can be developed to address them. The governance pillar of the EBM Framework could be further developed with the Indigenous Peoples to address the “Consent for allocations, licences, tenures, or plans in a territory related to an activity”, “Agreements on share or proportion of a resource or activity; or jointing approved plans in place” and “Allocation policies or plans or targets account for Indigenous title or rights to specific territories” criteria given the pillar’s primary objectives include governance outcomes, legal obligations and other commitments. The governance and social and cultural pillars could be enhanced to incorporate the criterion of “Joint assessments of activities to account for environmental, social, cultural, and economic impacts”, as it spans across both pillars. The need for further development in the governance, ecological, and social/cultural pillars to meet the reconciliation criterion of “Sustainable uses and/or species recovery over the long term as determined through assessments” arises from the recognition that these pillars play crucial roles in achieving sustainable and ecologically responsible practices. Addressing this reconciliation criterion involves integrating considerations for sustainable resource use and species recovery

into the governance structure, ecological planning, and social/cultural aspects. Enhancing these pillars ensures a comprehensive approach to reconciliation that aligns with the long-term environmental and cultural goals outlined by UNDRIP articles 25, 29 and 32 (UNDRIP, 2007). It reflects a commitment to balancing ecological health, cultural values, and sustainable resource management, aligning with the principles of reconciliation and responsible ecosystem stewardship (Jones et al, In press; UNDRIP, 2007; House of Commons Standing Committee on Fisheries and Oceans, 2021; Standing Senate Committee on Fisheries and Oceans, 2022). The reconciliation criteria of “Compensation for loss” and “Revenue sharing or management funding for new or existing activities or uses” may be beyond the scope of the EBM Framework and may not be anticipated within the framework. It is recommended that these criteria be addressed by the Government of Canada using other tools.

### **5.2.3 Cultural Imposition**

The cultural imposition form of injustice was the most addressed by the DFO Maritimes EBM Framework. The reconciliation criteria “Ability to Practice rights and culture” and “Activity occurs consistently to community values” were addressed by both the social/cultural and economic pillars and broadly supported by the governance pillars. The governance and social/cultural pillars addressed the reconciliation criterion- Incorporation of traditional knowledge into policies and plans. In contrast, the reconciliation criterion “Contributes to an equal standard of living e.g income” was addressed by the social/cultural pillar and broadly supported by the economic pillar. The criterion of “Policies and plans incorporate Indigenous worldview” was addressed by the economic pillar and broadly supported by the governance pillar. Only one of the reconciliation criteria to address the cultural imposition type of injustice

was addressed by the governance pillar. The criterion “Uses Indigenous language in negotiation and decision-making” was not addressed nor supported by any of the pillars of the EBM Framework and DFO-Coast Guard reconciliation strategy. Despite some progress in addressing injustices, significant work remains. DFO must take decisive actions to genuinely pursue reconciliation by comprehensively addressing all forms of injustice through the EBM Framework. EBM’s approach to ocean management possesses the characteristics for a transformative change only when it preserves the Indigenous culture and self-governance (Barnes et al., 2017). A shift towards integrated management and an Indigenous-led review of the EBM Framework provides opportunities to incorporate the Indigenous worldview, values and knowledge into policies and plans (Paul, 2018; Jones et al, In press). Utilizing Indigenous language in negotiations and decision-making is a fundamental measure for promoting equity and acknowledging the interconnection between Indigenous Peoples’ languages, customs and worldviews (Iseke & Ndimande, 2014; McKinley & Laukaitis, 2019).

The governance, social & cultural and economic pillars have wordings and language related to the reconciliation criteria across the three types of injustice. The ecological pillar did not address any of the reconciliation criteria of the three forms of injustices, possibly due to its emphasis on ecological outcomes rather than social equity outcomes. While it remains our duty to safeguard a healthy ecosystem to maintain Indigenous Peoples’ access to resources, it is equally crucial to apply a reconciliation lens in shaping all the pillars and objectives within the EBM Framework. By doing so, we affirm our commitment to achieving holistic sustainability, encompassing ecological, social, and cultural dimensions (Jones et al, In press). The interconnected nature of injustices and environmental issues necessitates a comprehensive approach. Neglecting

reconciliation criteria within the ecological pillar could hinder the framework's ability to address the root causes of both environmental and social challenges. Furthermore, adopting a community-centric approach is fundamental to the success of EBM. Integrating reconciliation criteria in all pillars is a tangible demonstration of our commitment to recognizing and rectifying historical injustices. This inclusive approach fosters trust and collaboration between Indigenous communities and broader conservation efforts.

### **5.3 Treaty Right Reconciliation in Fisheries**

Although DFO has provided multiple responses to Treaty rights, none has effectively addressed rights-based fisheries. The true definition of Treaty fisheries implementation for the Indigenous Peoples is promoting Indigenous self-governed fisheries (Standing Senate Committee on Fisheries and Oceans, 2022). EBM has a greater potential to promote reconciliation and Indigenous self-determination if its framework is developed in such a way that it addresses the reconciliation criteria. In the pursuit of a comprehensive and equitable EBM Framework, it is imperative to consider Treaty-rights reconciliation in fisheries. The research analysis of the EBM Framework reveals that none of its pillars support the reconciliation criterion of having self-government and agreement in place. The DFO Reconciliation Strategy only partially aligns with this criterion. Reflecting equity and a nation-to-nation relationship that cuts across all aspects of fisheries management- fisheries science, fisheries economics, and fisheries management is foundational for the developed EBM Framework to promote reconciliation and self-determination (Standing Senate Committee on Fisheries and Oceans, 2022; Silver et al., 2022; Reid et al., 2020). Fisheries management is an essential aspect of the framework as the Indigenous Peoples have a great connection to their land, water and fisheries.

### **5.3.1 Fisheries Science**

The impact of colonialism on fisheries science has not led to the effective integration of Western and Indigenous knowledge systems (Silver et al., 2022). Indigenous knowledge should be integrated into Western science in a nation-to-nation approach in fisheries science. The Etuaptmumk/Two-Eyed Seeing concept, developed by Elder Albert Marshall and Murdena Marshal, must be applied in integrating both knowledge systems in fisheries science (Reid et al., 2020). This concept involves using one eye to perceive through Indigenous knowledge and the other through Western knowledge (Reid et al., 2020). A good example is integrating Haida Traditional knowledge into Western science in the ecosystem-based rebuilding plan for the herring fishery in British Columbia (Jones et al., 2017). Bringing Indigenous and Western knowledge systems together will create new knowledge in a process known as the co-production of knowledge (Yua et al., 2022). Co-production must go beyond stakeholder engagement by scientists to the more deliberate design of societal transitions that must involve diverse actors to conduct research in the service of societal and policy change (Wyborn et al., 2019). Furthermore, establishing and achieving equity forms the basis of the co-production of knowledge that would greatly benefit the development of an inclusive EBM Framework (Yua et al., 2022).

### **5.3.2 Fisheries Economics**

Fisheries management in Canada has traditionally focused on maximizing economic benefits through commercial fishing (Wien & Williams, 2022). This approach has often come at the expense of Indigenous Peoples, who rely on fisheries for subsistence and cultural purposes. Implementing UNDRIP in fisheries management requires a re-evaluation of the way we value fisheries and the economic benefits they provide. In fisheries economics, a nation-to-nation



relationship should mean prioritizing communal-commercial fisheries. Communal-commercial fisheries are managed and controlled by Indigenous communities for subsistence and commercial purposes. Communal-commercial fisheries have great importance, for example, capital investment in boats and gears, employment, and income generation for the Indigenous communities (Wien & Williams, 2022). An example of a nation-to-nation relationship in this context would mean the Indigenous Communal Commercial Licencing Initiative to support Indigenous communities' economic development, preserve their cultural traditions, and protect their marine resources communities (Wien & Williams, 2022, Jones et al, In press). The Atlantic Integrated Commercial Fisheries Initiative (AICFI) has made progress in communal commercial fisheries access and capacity building by providing \$97 million from its launch in 2007 to 2021 (Fisheries and Oceans Canada, 2021a). Communal-commercial fisheries in the Maritimes Region were valued at \$81 million in 2019 and employed First Nations members- 1,300 harvesters, 110 land-based positions and 250 other positions in the fishing industry (Fisheries and Oceans Canada, 2021a). This demonstrates Indigenous leadership and sovereignty for fisheries management.

### **5.3.3 Fisheries Management**

In Canada, fisheries management decision-making is predominantly based on Western science and often excludes Indigenous knowledge and people (Denny & Fanning, 2016). For Mi'kmaq in what is now Nova Scotia, implementation of the Treaty-protected right to fish for a moderate livelihood has been a challenge (Fisheries and Oceans Canada, 2021b). The dispute between Sipekne'katik First Nation and non-Indigenous commercial fishers over a self-regulated lobster fishery in 2020 highlighted the need for collaborative and respectful fisheries management that

recognizes Indigenous Treaty rights and promotes sustainable fishing practices (Bailey, 2020; Fisheries and Oceans Canada, 2021b).

Co-management and co-governance can support nation-to-nation relationships in fisheries management. The governance pillar of the EBM Framework and Reconciliation Strategy align with the co-development of policies. Substantial power imbalances between the government and local resource users must be addressed to achieve effective co-management. Power sharing should be the result and not the starting point of the co-management process (Carlsson & Berkes, 2005; Castro & Nielsen, 2001). Co-management has more to do with managing human relationships than resources per se, understanding the heterogeneity of the people involved in the process is critical for effective communication among the co-management board and their ultimate success (Natcher et al., 2005). We should move from co-management to co-government, where the government and Indigenous Peoples both have decision-making power. A good case study of collaborative governance and management is the Integrated Fisheries Management Plan (IFMP) for Pacific herring by the Haida Nation in British Columbia and the government. Haida Gwaii and DFO have been collaboratively developing an EBM Framework for IFMP (Jones et al., 2017). According to Jones et al. (2023), the integrated management in British Columbia made progress in implementing 10 out of 23 UNDRIP criteria identified in the reconciliation framework. However, it is crucial to ensure that the reconciliation process moves forward by addressing the injustice from colonization, such as political domination, territorial loss, and cultural imposition (Jones et al., 2023; Jones et al, In press). A continued effort to address all injustice is required.

#### 5.4 Towards Self-Determination, Cultural Vibrancy and Territorial Sovereignty

This study emphasizes the pivotal role of addressing forms of injustice to promote reconciliation. The elimination of political domination creates a pathway for **self-determination**. Similarly, the absence of loss of territory (and benefits thereof) would result in **territorial sovereignty**, while the eradication of cultural imposition would foster **cultural vibrancy**. In the vision towards self-determination, territorial sovereignty, and cultural vibrancy, there lies the aspiration for a reality where Indigenous Peoples in Canada are not only recognized but deeply respected for their inherent rights to their lands, water, and resources (Jones et al, In press; UNDRIP, 2007). Only one of the criteria to tackle political domination and initiate a pathway for self-determination was addressed by the EBM Framework. Other criteria to support our journey towards self-determination were either not addressed or broadly supported, with no specificity. Five of the six criteria to address cultural imposition were supported by one or two of the pillars of the framework with an exemption of the ecological pillar. More advancement has been made towards creating cultural vibrancy. We still have a long way to go in promoting territorial sovereignty as only one of the criteria to address loss of territory was partially supported by only the socio-cultural pillar of the framework. Advancing the implementation of rights-based fisheries is central to this pursuit. Advancing the implementation of rights-based fisheries is central to this pursuit. Fully developing an EBM Framework that echoes the principles of equity and a nation-to-nation relationship is imperative to a transformed world committed to reconciliation (UNDRIP, 2007; Barnes et al., 2017; Standing Senate Committee on Fisheries and Oceans, 2022). It envisions a harmonious integration of socio-ecological considerations with a genuine dedication to reconciliation and self-determination.

As we navigate this path, it becomes evident that the traditional silos of fisheries science, economics, and management must dissolve to embrace a holistic and interconnected approach, which in theory EBM has the potential to do (Silver et al., 2022; O’Higgins et al., 2020). A crucial aspect of Indigenous resilience is cultural vibrancy (Kirmayer et al., 2011; McKinley & Laukaitis, 2019; Iseke & Ndimande, 2014).

In this envisioned future, Indigenous Peoples exercise self-determination, their cultural vibrancy thrives, and territorial sovereignty is asserted. This is not a mere dream but a collective commitment to rectify historical wrongs and forge a future where recognition, respect, and shared prosperity define the relationship between Indigenous Peoples and the broader Canadian society (Standing Senate Committee on Fisheries and Oceans, 2022).

## **Chapter 6: Conclusion and Recommendations**

### **6.1 Conclusion**

The systematic utilization of the traffic light system and the Excel spreadsheet format provided a comprehensive and nuanced understanding of the alignment between the Reconciliation Framework, the EBM Framework's pillars, and the DFO Coast Guard Reconciliation Strategy. This assessment enables a clear identification of strengths, areas for improvement, and actionable steps to enhance the alignment of these frameworks with the principles of reconciliation.

This research analyzed the alignment of the pillars and objectives of the EBM Framework and the DFO Coast Guard Reconciliation Strategy with the Reconciliation Framework. It unravels the intricate interplay between governance structures and reconciliation principles. Through an analysis, this study contributes to a deeper understanding of the steps required to foster genuine reconciliation in fisheries management.

The DFO Maritimes' collaboration with Indigenous Peoples to further develop the EBM Framework is a step in a positive direction to address the forms of injustices the Indigenous Peoples of Canada have experienced over the years. This reflects a transformed thinking that prioritizes the joint pursuit of holistic management that promotes reconciliation. The aligned and partially aligned areas (green and yellow areas) are opportunities for the EBM Framework to be a vehicle for reconciliation as they address the forms of injustice. There is a need to continually develop the EBM Framework to the Indigenous Peoples' definition of self-determination to enable the EBM Framework not just to be an ocean management tool but also a tool for reconciliation.

Recognizing that reconciliation is an ongoing journey rather than a destination, focusing on the outcome of self-determination may be an effective approach than pursuing reconciliation for its own sake. To promote self-determination through EBM, it is essential to fully implement Treaty rights as Indigenous Peoples have struggled for their inherent rights to fish and govern their fisheries for far too long. This requires a fundamental shift in the value we place on fisheries and their management by implementing UNDRIP in fisheries management. Furthermore, working with Indigenous communities in addressing all the criteria of the forms of injustice should be prioritized. Integrating Indigenous knowledge and recognizing the spiritual and cultural importance of fish to Indigenous Peoples is critical for achieving equality in fisheries management. Additionally, collaborative decision-making processes incorporating Indigenous knowledge and perspectives are crucial for ensuring fisheries management strategies are consistent with cultural practices and traditions. One of the biggest impediments to self-determination and reconciliation in fisheries is arguably the fact that there is still Ministerial discretion at virtually all points of decision-making. Moving from that to collaboration between Indigenous Peoples and the Government of Canada in fisheries management provides a roadmap for future collaboration and reconciliation. By recognizing and respecting the rights of Indigenous Peoples, the Government of Canada can ensure the sustainability of fisheries for future generations and establish a nation-to-nation relationship based on recognition of rights, respect, cooperation, and partnership.

## **6.2 Recommendations**

In this study, the DFO Maritimes EBM Framework was benchmarked against a reconciliation framework developed by Jones et al. (In press). While some components of the EBM Framework

contained elements related to reconciliation (and UNDRIP), as evidenced by green and yellow areas, much of the Framework does not explicitly address injustices. The EBM Framework then has the potential to support reconciliation and should be used in such a way where and when possible, but DFO must ensure its other programs, as outlined in the background of this work, are adequately tackling reconciliation from multiple angles. Additionally, reconciliation is a ‘whole of government’ response and therefore where DFO is not the best department to tackle some injustices, concerted effort and coordination across the Government of Canada is essential.

Below are first-step recommendations that can be taken to start progressing toward reconciliation based on the injustices identified by Jones et al. (In press):

1. DFO, in its current conversations with the Atlantic Policy Congress (APC) of First Nations Chiefs Secretariat, should prioritize refining the objectives of the green and yellow areas to support reconciliation in the short term.
2. DFO or Government of Canada policies and programs should address the reconciliation criteria mapped as grey against the EBM Framework in the long term.
3. The Government of Canada should use a reconciliation lens in developing inclusive and equitable policies moving forward.

Implementing these recommendations holds the potential to significantly advance the envisioned future wherein Indigenous Peoples in Canada actively pursue self-determination, cultivate cultural vibrancy, and affirm territorial sovereignty- a collective commitment to redress historical injustices. To actualize this vision, the ongoing evolution of the EBM Framework, harmonized with Indigenous self-determination is pivotal, transforming it beyond a tool solely for ocean

management to a powerful driver for reconciliation. This strategic approach not only propels the comprehensive advancement of the EBM Framework but also provides a path forward for broader Indigenous reconciliation efforts in Canada.



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