

Developing an Equitable Framework to Support Indigenous Co-Governance of St. Anns  
Bank Marine Protected Area

By

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Submitted in partial fulfillment of the requirements for the degree  
of  
Master of Marine Management

at

Dalhousie University  
Halifax, Nova Scotia

December 2022

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## Table of Contents

<i>Armand Dominic McFarland</i> .....	1
<i>Submitted in partial fulfillment of the requirements for the degree</i> .....	1
<i>Dalhousie University</i> .....	1
<i>List of Figures</i> .....	4
<i>List of Tables</i> .....	4
<i>Abstract</i> .....	5
<i>Acknowledgements</i> .....	6
<i>Abbreviations</i> .....	7
<i>Chapter 1 – Introduction</i> .....	8
1.1 The Management Problem.....	8
1.2 Research Objectives.....	10
<i>Chapter 2 – Unpacking Context</i> .....	13
2.1 Marine Protected Areas.....	13
2.2 Canadian Conservation Legislature .....	13
2.2.1 Oceans Act MPAs.....	14
2.2.2 Canada National Marine Conservation Areas Act (NMCAs).....	14
2.3 Canadian Marine Conservation Targets.....	15
2.4 Defining Co-Management and Co-Governance .....	15
2.5 Study Areas.....	17
2.5.1 St. Anns Bank Marine Protected Area.....	17
2.5.1.1 Biophysical Overview.....	17
2.5.1.2 Designation Timeline.....	18
2.5.1.3 Management Structure .....	19
2.5.2 Gwaii Haanas National Marine Conservation Area.....	20
2.5.2.1 Biophysical Overview.....	20
2.5.2.2 Designation Timeline.....	21
2.5.2.3 Management Structure.....	22
2.5.3 SGaan Kinghlas-Bowie Seamount Marine Protected Area .....	22
2.5.3.1 Biophysical Overview.....	22
2.5.3.2 Designation Timeline.....	23
2.5.3.3 Management Structure .....	24
2.6 Indigenous Rights in Canada .....	24
2.7 Principles of Equity.....	27
2.7.1 Recognition.....	28
2.7.2 Procedure .....	30
2.7.3 Distribution .....	32

<i>Chapter 3 – Approach</i> .....	34
3.1 Selection and Collection .....	34
3.1.1 Scope Selection.....	34
3.1.2 Management Document Collection .....	35
3.1.3 Scientific Literature .....	35
3.2 Analysis.....	36
3.2.1 Identification of Principles.....	36
3.2.2 Comparative Analysis.....	38
<i>Chapter 4 – Results</i> .....	38
4.1 Key Principles Identified .....	38
4.1.1 Key Principles of Recognition .....	41
4.1.2 Procedural principles .....	43
4.1.3 Distributional principles.....	46
<i>Chapter 5 – Discussion: Insights for St. Anns Bank from the West</i> .....	49
5.1.1 Principle 1: Recognition and respect for the rights of Indigenous peoples .....	49
5.1.2 Principle 2: Recognition of different identities, values, knowledge systems and institutions.....	51
5.1.3 Principle 3: Recognition of all relevant actors and their diverse interests, capacities, and powers to influence .....	53
5.1.4 Principle 4: Full and effective participation of all relevant actors in decision-making .....	54
5.1.5 Principle 5: Access to justice, including an effective dispute-resolution process .....	55
5.1.6 Principle 6: Transparency supported by timely access to relevant information in appropriate forms .....	58
5.1.7 Principle 7: Effective mitigation of any costs to Indigenous peoples and local communities.....	59
5.1.8 Principle 8: Benefits shared equally among relevant actors .....	60
5.1.9 Principle 9: Benefits to present generations do not compromise benefits to future generations .....	63
5.2 Recommendations.....	64
5.2.1 Policy Recommendations.....	64
5.2.2 Future Research .....	65
<i>Chapter 6 – Conclusion</i> .....	66
6.1 Limitations .....	66
6.2 Assumptions.....	66
6.3 Conclusion .....	67
<i>References</i> .....	68

## List of Figures

Figure 1. Map of St. Anns Bank Marine Protected Area (DFO, 2019). .....	18
Figure 2. Map of Haida Gwaii and Gwaii Haanas National Marine Conservation Area (CHN and Government of Canada, 2018). .....	21
Figure 3. Map of SGaan Kinghlas-Bowie Seamount Marine Protected Area (CHN and DFO, 2018). .....	23
Figure 4. General research approach taken to Identify Principles of Equity. ....	34
Figure 5. Identification of principles of equity from an excerpt within the Gwaii Haanas Marine Agreement (2010).....	37

## List of Tables

Table 1. Principles of recognitional equity as proposed by Schreckenberg et al., 2016. ....	30
Table 2. Principles of procedural equity as proposed by Schreckenberg et al., 2016. ....	31
Table 3. Principles of distributional equity as proposed by Schreckenberg et al., 2016. ....	33
Table 4. Search syntax for scientific literature .....	35
Table 5. Management documents collected and analyzed for SK-B and GHNMCA to identify key principles of equity.....	39
Table 6. The occurrence of Key principles and dimensions of equity in Gwaii Haanas National Marine Conservation Area and SGaan Kinghlas-Bowie Seamount Marine Protected Area (adapted from Schreckenberg et al., 2016). ....	39

## **Abstract**

Marine protected areas (MPAs) comprise a large proportion of the conservation measures used to achieve the international conservation commitments of the federal government (10% of Canadian waters by 2010, and now 25% by 2025). There is a substantial overlap of Indigenous territories and these ambitious federal goals may lead to infringements on Indigenous rights. Sharing management and governance of MPAs could work toward reducing these infringements. Due to a confluence of Mi'kmaq interest, historical treaty rights, and burgeoning federal support, St. Anns Bank MPA (SAB) located east of Unama'ki (Cape Breton Island), may be a suitable location for implementing a framework of shared governance and Indigenous stewardship. Fisheries and Oceans Canada (DFO) is responsible for the management of this MPA; however, the maritime region of this department lacks the extensive co-governance and relationship building experience present on the Pacific coast or within Parks Canada. This research explores the question: how can DFO equitably support and implement a framework of Mi'kmaq participation and co-governance in St. Anns Bank MPA? This question will be addressed with a two-pronged approach: a literature review will first investigate equity in the establishment, development, and management of two sites co-managed by Parks Canada, DFO, and the Haida Nation on the Pacific coast, to identify key principles. Identified principles are then applied using a comparative analysis between the East and West coasts to provide management, policy, and research insights for the co-governance of St. Anns Bank MPA.

**Keywords:** Marine protected areas, St. Anns Bank, Indigenous governance, Co-governance, Equity, Justice

## **Acknowledgements**

To begin with, thank you to my academic supervisor, Dr. Melanie Zurba, thank you for your continued support, invaluable feedback, and advice. The direction you gave me, and my project has been incredible and hugely appreciated. As well, thank you to Dr. Sondra Eger, for offering to review this project and act as my Second Reader. I truly appreciate your expertise and insight.

I'd be remiss not to thank my internship hosts, the Marine Planning and Conservation team at BIO. Catherine Schram and Paul Macnab, you gave me the time, resources, and insight to complete and enrich this project. Thank you for giving me the lovely opportunity to learn and experience the marine manager's playground that is DFO.

Next, I want to thank the Marine Affairs Program and all my friends for such an amazing chance to learn. I could never have predicted the multi-dimensional and exponential growth I experienced this year. To the Faculty, thank you for your constant encouragement, for pushing me to be better, and guiding me through this process. To my friends and cohort, thank you for the laughter, and support. Thanks for accompanying me on adventures and reminding me to have fun. You made it easy and even pleasant to navigate the chaos.

Finally, to my friends and family in Ontario and beyond. Thank you for bringing me here. Thank you for being a constant support and anchor, even though I might tend to wander off.

Finally, I'd like to thank my partner, Gynelle Mendonca. Without you this would not have happened. Even while working on your DVM, you provided tireless support this last year. You helped breathe life into this project. Thank you for being constant, ceaselessly positive, and patient.

*Alea Iacta Est*

## **Abbreviations**

AFG – Aboriginal Fisheries Guardian

AFS – Aboriginal Fisheries Strategy

AMB – Archipelago Management Board

AOI – Area of Interest

BC – British Columbia

CBD – Convention of Biological Diversity

CHN – Council of the Haida Nation

DFO – Fisheries and Oceans Canada

FSC – Food, Social, and Ceremonial

GHA – Gwaii Haanas Agreement

GHNMCMA – Gwaii Haanas National Marine Conservation Area

KMKNO – Kwilmu'kw Maw-Klusuaqn Negotiation Office

MCT – Marine Conservation Target

MOU – Memorandum of Understanding

MPA – Marine Protected Area

NGO – Non-governmental organization

NMCA – National Marine Conservation Area

RFA – Reconciliation Framework Agreement

SAB – St. Anns Bank MPA

SCC – Supreme Court of Canada

SK-B – SGaan Kinghlas-Bowie Seamount MPA

UNDRIP – United Nations Declaration on the Rights of Indigenous Peoples

## **Chapter 1 – Introduction**

The Canadian federal government has continually committed to increasing area-based conservation measures. In 2010, Canada committed to conserving 10% of coastal and marine waters by 2020 and most recently in 2021, 25% of these areas by 2025 (Fisheries and Oceans Canada, 2021). Marine protected areas (MPAs) compose the largest percentage of the conservation measures used to achieve these goals. The establishment of MPAs is often based on paradigms that exclude people from the environment (Augustine & Dearden, 2014). These exclusionary principles have been exemplified in Canadian MPAs such as the Laurentian Channel MPA which restricts all human activity excepting navigation and Indigenous communal fishing. However, the overlap of expansive Indigenous territories and ambitious Western conservation goals may infringe on Indigenous rights (Artelle et al., 2019). MPAs that are equitably co-governed with Indigenous peoples could move away potential infringements, and instead affirm and recognize Indigenous rights. As Indigenous communities are empowered to participate in governance and management, they can more effectively advocate for the continued enjoyment of their rights.

### **1.1 The Management Problem**

Indigenous Peoples have been stewards of the land and sea for millennia. Sustainable resource use and management is often central to Indigenous People's relationships with their environment (Reed et al., 2021). Moreover, Indigenous Knowledge and ecological science share key objectives seeking to understand and predict the environment while recognizing the interconnectedness of whole ecosystems; however, there exist important differences between these two Knowledge Systems that could act synergistically to improve conservation effectiveness (Ban et al., 2018). Mi'kmaq communities have also explicitly expressed interest in participating and sharing governance of protected spaces on the Atlantic coast (ANSC & KMKNO, 2018). This is especially true where Mi'kmaq rights to marine resources exist. There is clear interest from both Mi'kmaq and DFO as well as opportunities for benefits, but progress to support Indigenous participation or share MPA governance has been slow.

Upholding Indigenous rights to continued use and stewardship of marine resources in protected spaces could be an integral step toward protecting marine biodiversity (Reed et al.,



2021, Artelle et al., 2019). The conservation objectives of MPAs could work synergistically with Indigenous stewardship. Spatial conservation measures based on Indigenous Knowledge systems have been shown to improve biological indicators of Dungeness crab fisheries (Frid et al., 2016). With appropriate support for resource capacity, Indigenous communities could address the monitoring, enforcement, and management requirements of MPAs (Artelle et al., 2019).

A few Canadian marine conservation sites that include Gwaii Haanas National Marine Conservation Area (NMCA), and SGaan-Kinghlas Bowie Seamount MPA are managed collaboratively. Both sites have a unique management framework based on agreements between the Haida Nation and the Canadian government. There are several examples of shared governance in the north and west regions of the country. In contrast there are few examples of shared MPA governance with east coast Indigenous communities. The MPAs in Nova Scotia are relatively new and have been designed without a shared governance framework. St. Anns Bank MPA is located east of Unama'ki (Cape Breton Island), Nova Scotia. This MPA may be a suitable location for sharing governance and supporting Indigenous stewardship as the Kwilmu'kw Maw-klusuaqn Negotiation Office (KMKNNO) has expressed interest in co-governing St. Anns Bank MPA with DFO. This interest has been mirrored by DFO and sets the stage for co-governance of St. Anns Bank to occur as an affirmation of Mi'kmaq treaty rights.

DFO is responsible for the management of this MPA; however, the maritime division of this department lacks the extensive co-governance experiences from the West coast. Parks Canada did not begin its relationship with Indigenous communities respectfully. Parks Canada recognized the potential for co-governance in protected areas in 1979; however, prior to this Parks were based on exclusionary principles, sometimes forcibly removing Indigenous communities from National Parks. The agency has been taking steps toward co-governance since 1979 (Johnston and Mason, 2021; Thomlinson and Grouch, 2012). A report in 1977 stated that parks could protect wildlife and foster Indigenous culture simultaneously, initiating a shift toward more positive relationships between Parks Canada and Indigenous peoples (Thomlinson and Grouch, 2012). This shift has resulted in co-governance and elements thereof being implemented in several terrestrial and marine conservation areas administered by Parks Canada. It is the experience of designing and implementing these co-managed areas that DFO lacks. To effectively establish an equitable framework of co-

governance in St. Anns Bank MPA, DFO can rely on evidence and principles aggregated from previously implemented co-managed protected spaces.

## 1.2 Research Objectives

The two co-governance examples used in this study were selected based on their unique contexts and history. Gwaii Haanas National Marine Conservation Area (GHNMCA) was selected due to its regime of relatively successful history of co-governance, beginning with the signing of the first Gwaii Haanas Agreement in 1993. GHNMCA was designated under the Canadian *National Marine Conservation Areas Act* and is co-managed by the Haida Nation and Parks Canada (Council of the Haida Nation and Canada, 2018). Parks Canada has a wealth of mixed co-governance experience which was the second reason GHNMCA was selected for this study (Thomlinson and Crouch, 2012).

SGaan-Kinghlas Bowie Seamount MPA (SK-B) is the second site considered. The selection of this site was three-fold. First, this MPA shares legislation with St. Anns Bank MPA as both sites were legally designated under Section 35 of the *Oceans Act*. This designation means that Fisheries and Oceans Canada (DFO) is the primary federal partner with which the Haida Nation co-manage this site (Council of the Haida Nation and Canada, 2019). Thus, DFO will be the primary federal partner with which the Mi'kmaq will co-manage St. Anns Bank MPA. Second, SK-B is located 180 kilometres offshore from Haida Gwaii. Offshore MPAs present managers with unique challenges and opportunities. Several issues arise due to the general inaccessibility of these areas. St. Anns Bank is not 180 kilometres offshore from Unama'ki (Cape Breton Island), but its relatively remote location and commercial importance confers similar challenges and opportunities as those of SK-B. Finally, the establishment of SK-B was coloured by a dispute between the Haida Nation and DFO over the closure of the Sablefish fishery (Watson & Hewson, 2018). This issue provides an important instance of navigating a dispute and lessons from the resulting resolution processes. The issue resulted in a prolonged dispute which resolved using informal dispute resolution processes. The lessons learned from this dispute can be applied to SAB to help prevent and resolve current or future disputes.

This research applied a framework of equity for protected areas to the co-governance processes of Gwaii Haanas NMCA and SGaan Kinghlas-Bowie Seamount MPA. Using this framework, key principles of equity in co-governance are identified in a Canadian context. Analysis was conducted through an in-depth review of management documents, as well as a supplementary scoping review of peer-reviewed literature. Through the application of a framework of equity, this research aims to answer the following question:

*How can Fisheries and Oceans Canada equitably support and implement a framework of Mi'kmaq participation and co-governance in St. Anns Bank MPA?*

This question is answered through an investigation of the following secondary questions:

1. *What principles of equity can be identified in the co-governance processes of GHNMCA and SK-B?*
2. *How can these principles be applied to SAB?*

Shared governance has been associated with improved socioeconomic, cultural, and ecological outcomes for MPAs. These benefits can be due to increased representation and participation from local communities which improves acceptance and consequently compliance of MPA regulations (Di Franco et al., 2016). Indigenous involvement in MPA management is often associated with improved cultural benefits, as greater Indigenous engagement brings more focus to cultural objectives in MPAs (Ban and Frid, 2018). Additionally, Indigenous Knowledge Systems rely on qualitative indicators that can fill knowledge gaps and balance objectives of traditional Western management frameworks (Thompson et al., 2020). Furthermore, as the Canadian government looks to conserve large expanses of marine space, resources allocated to management and monitoring will likely be stretched thin. Collaboration with the Indigenous Peoples who have relied upon and managed these ecosystems for millennia could provide an avenue for a more efficient allocation of resources (Artelle et al., 2019). Resources provided by the Canadian government can help support Indigenous communities to further fill Knowledge gaps as well as fulfill conservation objectives through existing cultural frameworks.

Canada has legal and moral obligations to support Indigenous participation and shared governance of MPAs. These obligations begin with Section 35 of the *Constitution Act* which recognizes and affirms Indigenous treaty rights. In Nova Scotia, Peace and Friendship Treaties protect all hunting and fishing rights of the Mi'kmaq, Maliseet, and Passamaquoddy

First Nations (CIRNAC, 2015). Canada’s moral obligations include the need for reconciliation between Western governments and Indigenous Peoples. The government’s history of oppression and the horrific legacy of residential schools requires a comprehensive response from the Canadian government. Sharing governance of protected spaces could be one element of a response specific to the Truth and Reconciliation Call to Action 45, which calls upon the Government of Canada to “jointly develop with Aboriginal peoples a Royal Proclamation of Reconciliation... and reaffirm the nation-to-nation relationship between Aboriginal peoples and the Crown”. The Royal Proclamation would have several commitments, with the two most relevant being:

- ii. Renew or establish Treaty relationships based on principles of mutual recognition, mutual respect, and shared responsibility for maintaining those relationships into the future.
- iii. Reconcile Aboriginal and Crown constitutional and legal orders to ensure that Aboriginal peoples are full partners in Confederation, including the recognition and integration of Indigenous laws and legal traditions in negotiation and implementation processes involving Treaties, land claims, and other constructive agreements. (Truth and Reconciliation Commission, 2015, p. 5)

Co-governance agreements can help reconcile Crown-Indigenous relationships, and further affirm their laws and traditions within the context of MPAs. Sharing governance of MPAs can also ensure that Indigenous Knowledge Systems and cultures are respected and can assert mutual recognition and shared responsibility between nations. This obligation is further supported by Canada’s commitment to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), affirmed by the UNDRIP Act coming into force in June 2021 (Department of Justice, 2021). Canada has legal and moral obligations due to historical oppression on Indigenous peoples has led to the need for reconciliation. Equitably co-managing marine protected areas could be a part of the reconciliation process as well as fulfilling legal obligations.

## **Chapter 2 – Unpacking Context**

### **2.1 Marine Protected Areas**

Marine protected areas (MPAs) are spatial measures used primarily for the conservation of marine biodiversity. MPAs exist as one tool in the fisheries management toolbox for achieving social-ecological sustainability alongside [other tools]..... As defined by the International Union for Conservation of Nature (IUCN), MPAs are “a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values” (IUCN, 2012). The primary goal of MPAs is the conservation of marine biodiversity and productivity (Grorud-Colvert et al., 2021), and achieving this goal is associated with a range of benefits. In addition to biodiversity conservation, MPAs can also increase productivity of fisheries by improving resilience, contributing to knowledge and research, as well as protecting culturally important places. To achieve these benefits, MPAs implement a range of restrictions on human activity across a scheme of zones. Restrictions are typically site-based and dependant on the types of human activities in the area and their associated degree of ecological impact (Day et al., 2019). In Canada, the zones, boundaries, and restrictions in an MPA typically consider the economic impacts on local fisheries as well as ecological features (DFO, 2022). Terminology surrounding MPAs (marine park, marine sanctuary, marine reserve, marine conservation area, marine refuge) is often used interchangeably, depending on the designating jurisdiction and legislation. The plurality of MPA nomenclature reflects the continuum of spatial conservation strategies used around the world; Canadian MPAs are defined and named by their designating legislation.

### **2.2 Canadian Conservation Legislation**

The Canadian federal government has created several legislative tools to implement spatially based marine conservation measures. There are three key legislative vehicles used to establish MPAs in Canada: The *Oceans Act*, the *National Marine Conservation Act*, and the *Canada Wildlife Act*. Each act allows the associated federal department to establish, manage, monitor, and enforce MPAs in Canada. Oceans Act MPAs and National Marine Conservation Areas account for the spatial majority of marine conservation measures in Canada, accounting for 6% and 2% of Canada’s oceans respectively (DFO, 2020; Parks Canada,

2022). Each of these tools are distinct have distinct uses and benefits, that complement the others.

### **2.2.1 Oceans Act MPAs**

In 1996 the federal government of Canada brought into force the *Oceans Act*, which among other things, sought to improve the management, conservation, and knowledge of Canadian oceans. This Act grants the Minister of Fisheries and Oceans and therefore Fisheries and Oceans Canada (DFO) the power to establish marine protected areas. The Act defines MPAs as an “area of the sea that forms part of the internal waters of Canada, the territorial sea of Canada or the exclusive economic zone of Canada”(Oceans Act, 1996, S 35.1). Importantly, marine areas can be protected for specific reasons under this act, including conservation and protection of fishery resources, endangered species and habitats, unique habitats, areas of high biodiversity or biological productivity, to maintain ecological integrity or as necessary to fulfil the mandate of the Minister. Since coming into force, the *Oceans Act* has been used to designate 13 MPAs, with the most recent being Tuvaijuittuq MPA in 2019.

### **2.2.2 Canada National Marine Conservation Areas Act (NMCAs)**

The *Canada National Marine Conservation Areas (CNMCA) Act* was signed into force by the Canadian federal government in 2002. This Act seeks to use the precautionary principle to establish a network of marine conservation areas to maintain healthy marine ecosystems, contribute to international conservation efforts, and provide opportunities for people to appreciate the Canadian natural and cultural marine heritage and sustainably use marine resources. Most importantly, the Act affirms the need to involve federal and provincial ministers, affected coastal communities, Indigenous governments and organizations, and bodies established under land claims agreements. The *CNMCA Act* gives the Minister responsible for the Parks Canada Agency, and therefore Parks Canada, the power to establish national marine conservation areas for the purpose of “protecting and conserving representative marine areas for the benefit, education and enjoyment of the people of Canada and the world”. NMCAs are to be managed and used sustainably to meet the needs of present and future generations. Since coming into force the *CNMCA Act* has been used to enact five NMCAs.

### **2.3 Canadian Marine Conservation Targets**

As global fisheries and oceans continue to decline, spatial conservation measures are gaining popularity. In response to the decline of marine ecosystems and global biodiversity, in 2010 the United Nations' Convention on Biological Diversity (CBD) enacted 20 targets for the 2011-2020 period. Aichi Biodiversity Target 11, called for:

10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, [to be] conserved through effectively and equitably managed, ecologically representative, and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape (CBD, 2010).

Commonly referred to as Aichi Target 11, this led to a rapid response from member nations to expand the coverage of protected spaces over the past decade.

As a member of the CBD, the Canadian federal government announced marine conservation targets (MCTs) of 5% by 2017 and 10% by 2020 (DFO, 2022). This target was surpassed in 2019 with the designation of Tuvaijuittuq MPA which conserves 5.55% of Canadian waters. The federal government is now working toward protecting 25% of marine and coastal areas by 2025 and 30% by 2030 (DFO, 2022). These targets were reaffirmed when Canada joined the Global Ocean Alliance which advocates for protecting at least 30% of the world's oceans by 2030. Canada is undoubtedly committed to protecting vast swaths of its territory.

### **2.4 Defining Co-Management and Co-Governance**

It is critical to distinguish between the terminology that describe the range of principles and methodologies used to equitably share powers of decision-making in MPAs. There are two critical terms that should be conceptualized before moving forward; co-management and co-governance, both meaning collaborative or cooperative decision-making structures that share power over protected areas.

There are several historic examples of co-management in protected areas; however, the earliest use of the term has been sourced to the 1970s in salmon management between Indigenous communities in Washington, USA (Pinkerton, 2003). Co-management in

protected areas only began spreading in the 1990s, with early examples arising from Australia (Borrini-Feyerabend et al., 2004; Zurba et al., 2012). The diversity of rights and stakeholders, and the complexities of resource management lead to each instance of co-management having a different approach to the last. The consequence of this is a lack of a universally accepted definition of co-management, and instead a flexible framework of management based on place and context (Armitage et al., 2007).

In general co-management, describes a dicentric or polycentric sharing of power over a shared pool of resources (Berkes, 2009). These agreements typically exist as a formalized arrangement between a government and a user group or community to equal or equitable responsibility and power-sharing (Berkes, 2009; Carlson and Berkes, 2005; Zurba et al., 2012). Co-management has been described as the transfer of power and responsibility from a single body or agency to a collaborative body that represents one or more parties (Pomeroy and Berkes, 1997; Dodson, 2014). This partnership exists on a continuum that ranges from information sharing and exchange to equal or equitable sharing of governance and decision-making (Pomeroy and Berkes, 1997). Most definitions that exist along this continuum delineate an institutionalized arrangement for greater rights and stakeholder participation in decision-making (Berkes, 2009).

Management is described as the actions and decisions made to achieve specific conservation objectives, while governance refers to the decision-making process through which decisions are made and objectives are defined (Armitage et al., 2012). Dodson (2014) further explains that co-management generally implies a transfer of power or devolution to a collaborative body; whereas co-governance implies ultimate decision-making authority is conferred to a collaborative body. Thus, co-management can generally be defined as the sharing of power and responsibility for specific management actions, and co-governance as conferring authority over management objectives, decision making, and decision-making processes.

Pomeroy and Berkes (1997) explain that Canadian examples of successful co-management have relied on a legal backing. Cases of co-management in Canada typically create a devolution from the federal government to Indigenous communities. These areas benefit from the legal right Indigenous communities have to their traditional land and resources.



In GHNMCA the Gwaii Haanas Marine Agreement, establishes the Archipelago Management Board (AMB) which is responsible for cooperatively planning, operating, managing, and using the area. The SGaan Kinghlas-Bowie Seamount Memorandum of Understanding establishes a Canada-Haida Management Board that is responsible for cooperatively managing and planning for the MPA (MOU, 2007). While no clear definition is presented in either case, co-management of the areas occurs through consensus-based decision-making over objective setting and management actions. In practice this framework could be described as equal power sharing; however, under non-Indigenous law the relevant Canadian Minister has the final authority. In contrast, Haida law affirms that the Haida Nation has the final authority. Thus, the SK-B Management Board provides consensus-based recommendations which the CHN President and DFO Ministers are politically, and legally incentivised to concur (Amyot, personal communication, September 2, 2022; Ban and Frid, 2017).

Sharing power and responsibility over an MPA is an adaptive and ongoing process (Dodson, 2014). It is highly context, time, and place-based, and thus will always exist on a continuum. Selecting and defining the terminology for collaborative decision-making processes is an important step. These processes should be defined by both parties, and any result should be equitable. Efforts have been made by the author to acquire a definition of co-governance from the KMKNO to provide a Mi'kmaw perspective of co-governance. As no input was received, this research will define co-governance as conferring authority over management objectives, decision making, and decision-making processes to a joint management body. This definition was developed using peer-reviewed literature and may not be reflective of the final definition of co-governance in SAB.

## **2.5 Study Areas**

### **2.5.1 St. Anns Bank Marine Protected Area**

#### *2.4.1.1 Biophysical Overview*

St. Anns Bank MPA is comprised of four zones which cover 4364 km<sup>2</sup> (Figure 1). The MPA is located off the coast of Unama'ki (Cape Breton Island) and sits at an intersection of diverse benthic habitats, including deep ocean basins, shallow banks, and the slope of the Laurentian Channel (Ford & Serdyska, 2013). The heterogeneity of benthic habitats supports an exceptional amount of marine biodiversity. SAB protects several commercially and non-

commercially relevant fish and invertebrate species including American plaice, snow crab, redfish, and Atlantic cod (Ford & Serdynska, 2013). Whales, pinnipeds, marine turtles, and seabirds also rely on this area for migration and feeding grounds (Ford & Serdynska, 2013). Finally, cold water corals, deep sea sponges, and sea pens are distributed throughout the MPA (Ford & Serdynska, 2013).

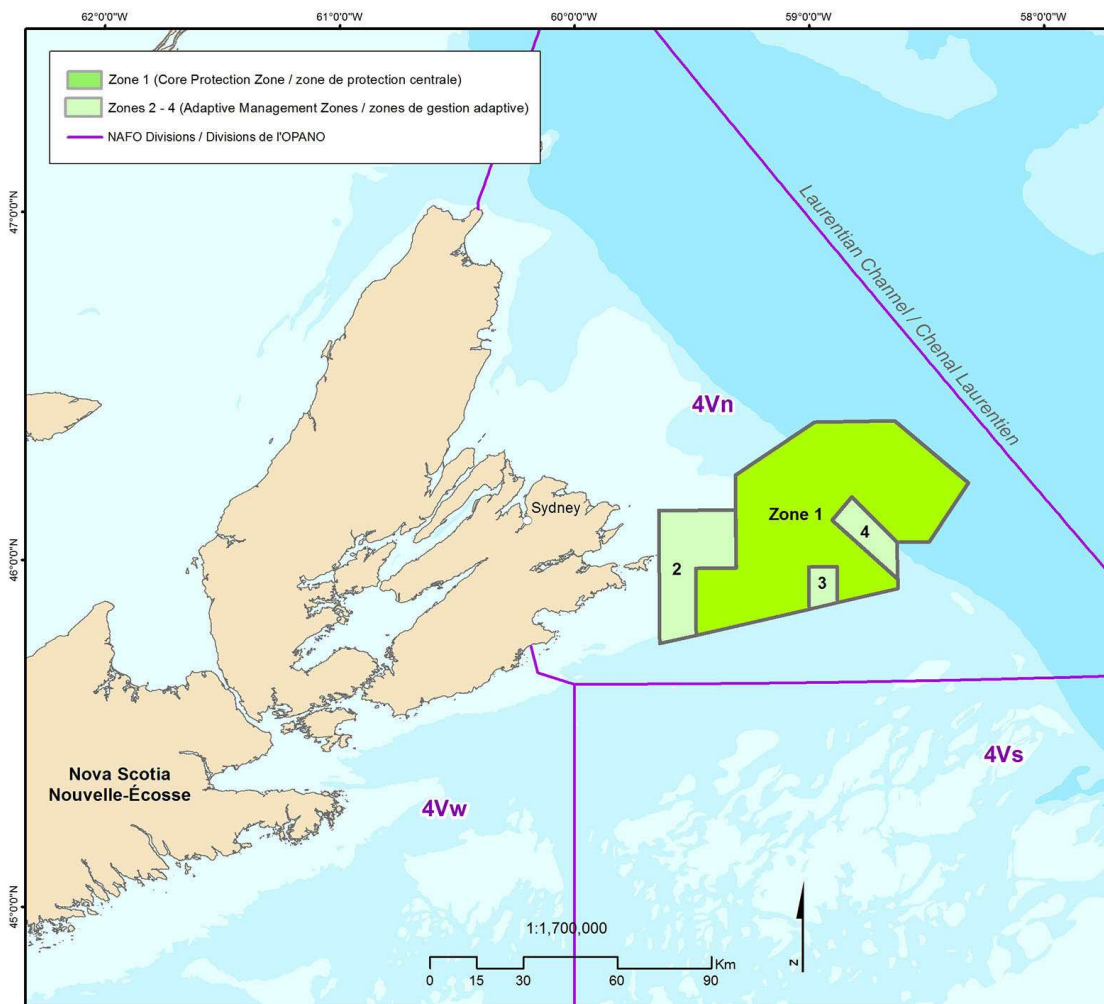


Figure 1. Map of St. Anns Bank Marine Protected Area (DFO, 2019).

### 2.5.1.2 Designation Timeline

In 2011 a 5100 km<sup>2</sup> area around St. Anns Bank was formally announced as an Area of Interest (AOI) for consideration as an MPA after seven months of public consultation in 2009 and 2010. DFO began the MPA establishment process following this announcement. In 2012, an Advisory Committee was formed to review the available information and inform the design of the MPA. The Advisory Committee included Mi'kmaq and Indigenous

organizations, marine industries, academia, environmental NGOs, and other provincial and federal departments. At the end of 2016, the proposed MPA Regulations were published in the *Canada Gazette* for public consultation. The submitted feedback was incorporated into the MPA Regulations and SAB was designated under Canada's *Oceans Act* in 2017.

The MPA was designated with four different zones: a single core protection zone (CPZ) and five adaptive management zones (AMZ). The CPZ comprises 75% of the MPA and has the highest level of protective regulations (DFO, 2017). The CPZ limits all commercial and recreational harvest, excepting traditional seal harvest and Indigenous food, social, and ceremonial fisheries. Whereas the AMZs (zones 2, 3, and 4) allow some amounts of low impact fishing, using specified gear types (DFO, 2017). Before the designation of the MPA, St. Anns Bank accounted for fishery landings with an estimated value of \$161,700, with the most significantly impacted fisheries being snow crab and halibut longline (DFO, 2017). The MPA had a range of impacts on 17 licence holders but represented no more than 5% of the total catch for each licence holder (DFO, 2017).

The regulations do not restrict food, social, or ceremonial First Nation fisheries; however, the Assembly of Nova Scotia Mi'kmaq Chiefs via the KMKNO was concerned about the MPA restricting Mi'kmaq access to commercial fisheries (DFO, 2017). The KMKNO has also requested to have discussions around collaboration and building First Nations capacity for site management. DFO is currently in the process of developing and publishing a management plan for SAB.

### *2.5.1.3 Management Structure*

As an *Oceans Act* MPA SAB is currently managed by DFO, with ongoing conversations with Mi'kmaq partners to establish a co-governance arrangement. Under current non-Indigenous law, it would be the Crown's perspective that they hold final decision-making power over this MPA; however, this may not be the perspective of Mi'kmaq partners. Monitoring and enforcement occur through *Oceans Act* processes, with support from the Canadian Coast Guard and collaboration with research. The Advisory Committee currently consults and advises on several aspects of the MPA's management.

## 2.5.2 Gwaii Haanas National Marine Conservation Area

### 2.5.2.1 Biophysical Overview

GHNMCA is located on the southern tail of the Haida Gwaii archipelago, which is situated off the north coast of BC (Figure 2). The Haida Gwaii archipelago consists of 160 islands which benefit from an upwelling of nutrient-rich waters leading to a high level of biological productivity and marine biodiversity (CHN and Government of Canada, 2018). GHNMCA is home to 23 marine species registered under the *Species at Risk Act* (Parks Canada, 2016). These species include yelloweye rockfish, stellar sea lions, sea otters, bluntnose sharks, leatherback sea turtles, North Pacific right whales, three distinct populations of orcas, and blue whales (Parks Canada, 2016). The coastal waters around Gwaii Haanas have many distinct habitat types including a rocky intertidal zone, deep ocean basins, continental slopes, and shallow shelf habitats (Parks Canada, 2019). The nutrient-rich waters and habitat heterogeneity supports kelp beds and seagrass meadows which act as nurseries and spawning grounds for important traditional fisheries such as Pacific herring (Jones, et al., 2017; Salomon e al., 2002).

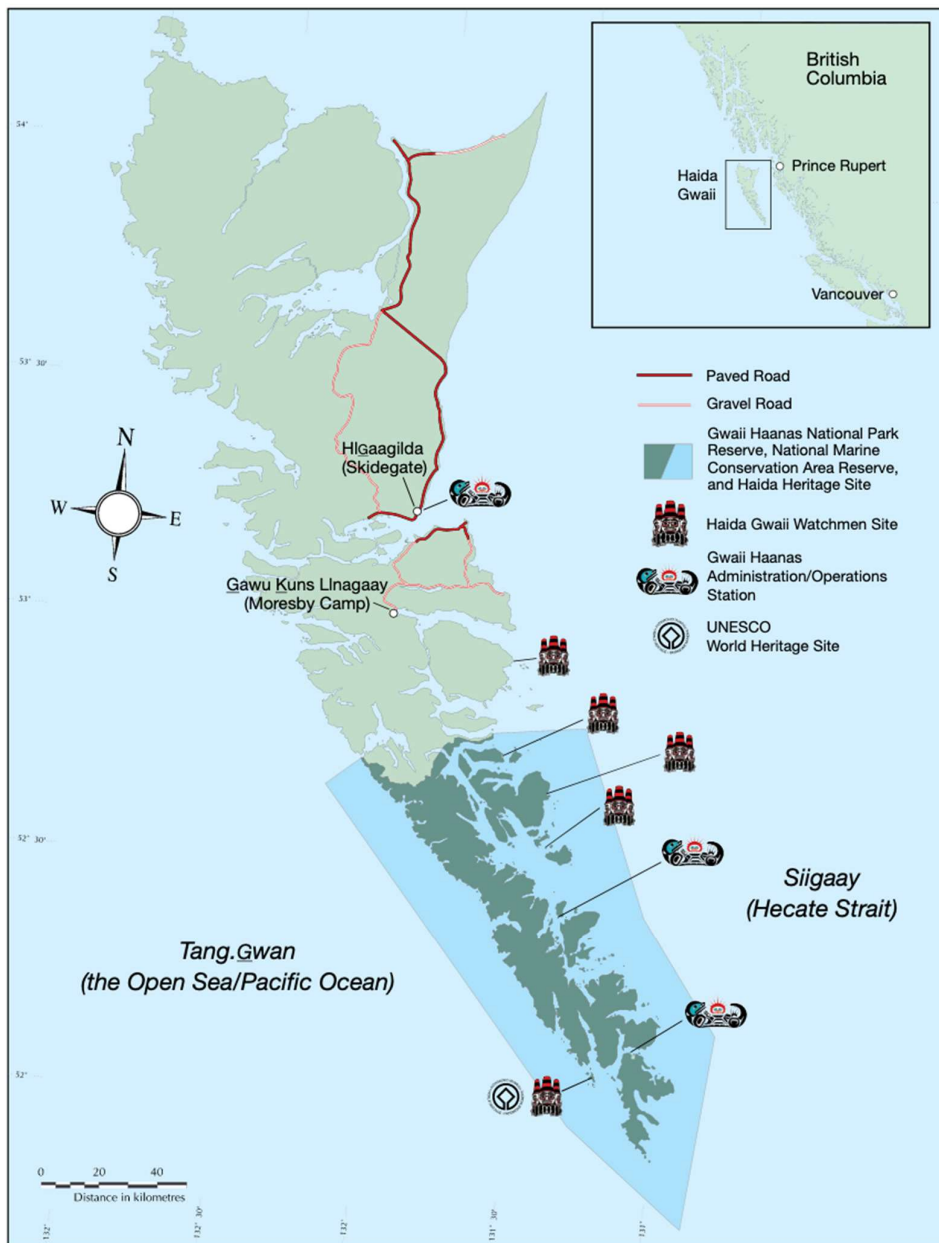


Figure 2. Map of Haida Gwaii and Gwaii Haanas National Marine Conservation Area (CHN and Government of Canada, 2018).

### 2.5.2.2 Designation Timeline

The land and sea of the 5000km<sup>2</sup> Gwaii Haanas area were designated in 1985 by the Haida Nation as a Haida Heritage site. The Government of Canada and the Province of BC then signed agreements with the Haida Nation that sought to maintain and conserve the area. The Gwaii Haanas Agreement was signed in 1993, establishing the co-governed Archipelago Management Board. The area was established as a National Marine Conservation Area in 2010 with the signing of the Gwaii Haanas Marine Agreement. The 3500km<sup>2</sup> area of

GHNMCA is divided into three zones which protect important cultural and ecological areas. The zones have increasing levels of restrictions. The Multiple Use Zone restricts only shellfish and finfish aquaculture and commercial infrastructure. The Strict Protection Zone is more restrictive and allows only traditional use, education, tourism, recreation, safety infrastructure, anchoring, buoys, and docks conditionally. Lastly, the Restricted Access Zone allows only traditional use, in addition to research, monitoring, and restoration work conditionally.

#### *2.5.2.3 Management Structure*

GHNMCA is co-governed by the Haida Nation and the Government of Canada via Parks Canada (CHN and Government of Canada, 2018). The Gwaii Haanas Marine Agreement describes the terms of the co-governance arrangement. The AMB is currently has three representatives from the Government of Canada (2 from Parks Canada and 1 from DFO), and three representatives from the CHN (CHN and Government of Canada, 2018). Two representatives co-chair the AMB, one from the Government of Canada and one from the CHN (Gwaii Haanas Marine Agreement, 2010). All decisions made by the AMB are consensus-based.

### **2.5.3 SGaan Kinghlas-Bowie Seamount Marine Protected Area**

#### *2.5.3.1 Biophysical Overview*

SK-B is an offshore MPA located 180km west of Haida Gwaii (DFO, 2011). The MPA is 6,000km<sup>2</sup> and encompasses three separate seamounts, SGaan Kinghlas-Bowie, Hodgkins, and Davidson (DFO, 2011). The seamounts create a depth range of 3000m to within 24m of the ocean surface, providing a wide range of benthic habitat (Figure 3). Thus, both deep water and coastal fish species can be found in the MPA but mainly consist of rockfish (DFO, 2011). The seamounts also encourage eddies to form around them which trap nutrients in the area, supporting high biodiversity and productivity. Seabirds, marine mammals, pelagic sharks and other migratory species feed, stopover, and navigate around the seamounts (DFO, 2011). Additionally, there is a consistent population of the demersal sablefish which resides within the MPA. This population is thought to be a significant nutrient exporter as they make two migratory trips, from the continental slope across the abyssal plains toward the seamounts, and then back across the abyssal plains and south along the continental slope (DFO, 2011).

The MPA is also home to gorgonian corals, coralline algae, and kelp which act as biogenic habitats (DFO, 2011).

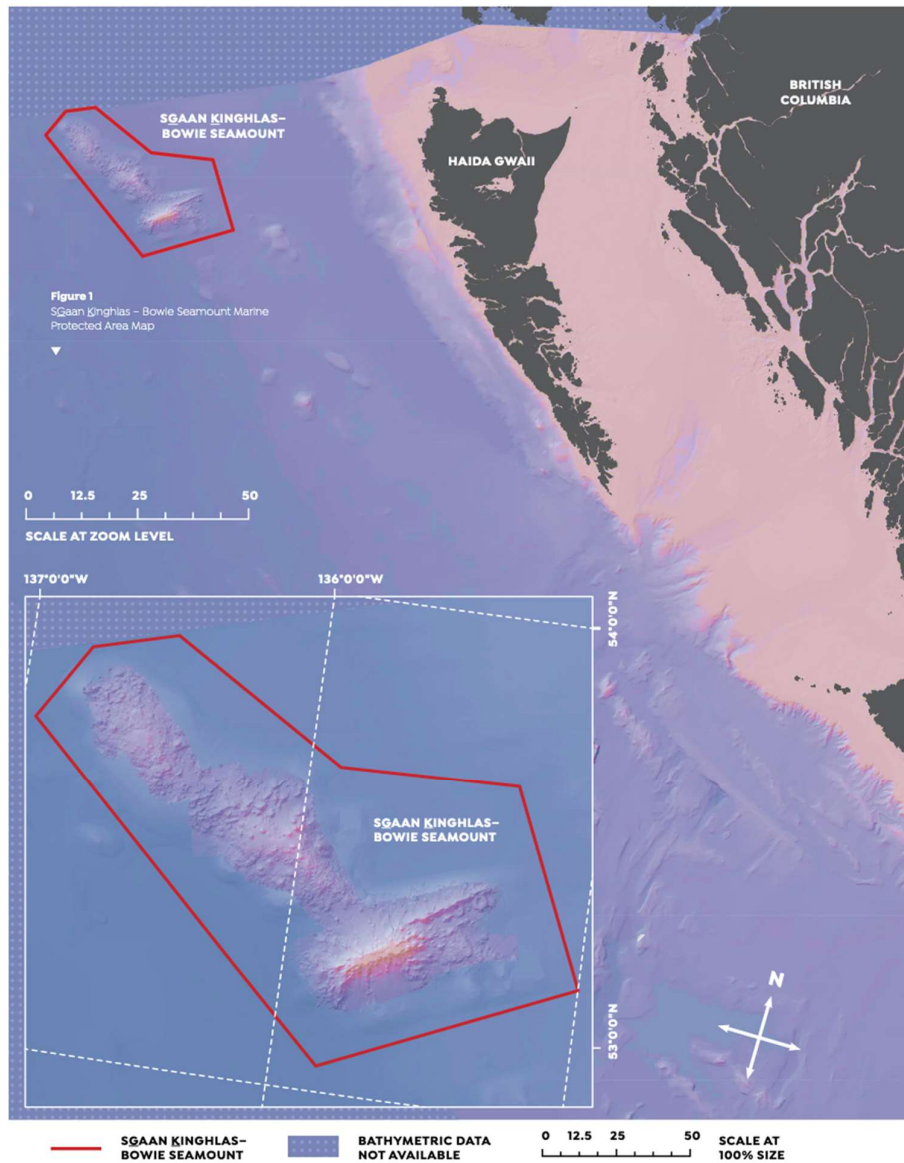


Figure 3. Map of SGAAN KINGHLAS-BOWIE SEAMOUNT Marine Protected Area (CHN and DFO, 2018).

### 2.5.3.2 Designation Timeline

The CHN first designated SGAAN KINGHLAS a Haida marine protected area in 1997; DFO identified the area as an AOI for consideration as an *Oceans Act* MPA in 1998 (CHN and DFO, 2018). In 2007 the CHN and DFO signed a Memorandum of Understanding (MOU) that created a commitment to cooperatively plan and manage the MPA through a Management Board (MOU, 2007). The area was officially designated as an *Oceans Act* MPA

in 2008. The SK-B Advisory Committee was formed in 2011 as a multi-stakeholder group that provided advice to the Management Board. The SK-B management plan was published in 2018 (CHN and DFO, 2018).

The MPA is composed of three zones. Zone 1 surrounds the upper portion of the SGaan Kinghlas-Bowie Seamount, and zone 3 encompasses the Hodgkins and Davidson seamounts respectively (DFO, 2008). Zones 1 and 3 both protect sensitive benthic habitats and are afforded a high level of protection. Zone 2 consists of the remaining SGaan Kinghlas-Bowie Seamount and the surrounding waters (DFO, 2008). Licenced commercial fishing and recreational fishing within the MPA is permitted in accordance with the *Fisheries Act*. At the time of designation, the sablefish trap fishery was the only operating commercial fishery (DFO, 2008). The fishery was restricted to one vessel per month, and traps were limited to depths greater than 456 meters (CHN and DFO, 2018). The fishery was closed in 2018 after evidence of the ecological impacts on the benthic ecosystem was produced (CHN and DFO, 2018). The continued operation of this fishery from the time of SKB's designation to 2018 was a significant source of contention between the Haida Nation and Canadian government.

#### *2.5.3.3 Management Structure*

Similar to GHNMCA, SK-B is co-managed by the Haida Nation and the Government of Canada via DFO. The terms of co-governance are described in the MOU signed by both parties and establishes a Management Board to cooperatively manage the MPA (MOU, 2007). The Management Board consists of two representatives from the CHN and two representatives from DFO. Mirroring the AMB, the SK-B Management Board employs consensus-based decision-making (MOU, 2007).

## **2.6 Indigenous Rights in Canada**

The Canadian landscape of Indigenous rights is complex and varied. With many different and overlapping views, laws, treaties, and agreements, defining Indigenous rights is difficult and highly place and nation based. Canadian law uses the term Aboriginal to mean Inuit, Metis, and First Nation, this term will be used when describing Indigenous rights in the legal context of Canada. Aboriginal rights are the collective and inherent rights of all Indigenous peoples in Canada, which flow from their continued use and occupation of areas and the resources (Indigenous foundations UBC, n.d.). Specific rights differ between Aboriginal groups;



however, Aboriginal rights generally include rights to the land and the use of its resources for subsistence, the right to self-determination and self-government, and the right to practice culture and customs (Indigenous foundations UBC, n.d.). These rights are recognized and affirmed in Section 35 of the Canadian *Constitution Act* (1982); however, the Constitution does not specifically define these rights. Aboriginal rights are defined case-by-case through the Canadian judicial system. The Constitution further recognizes and affirms Treaty rights, which are defined by Nation-to-Nation Treaty agreements (CIRNAC, 2020). Treaties can include exclusive rights to land, money paid to a First Nation, hunting and fishing rights, and other benefits (CIRNAC, 2020); however, these agreements often extinguished Aboriginal rights (Indigenous foundations UBC, n.d.).

There are 70 historic Treaties recognized by the Government of Canada, signed between 1701 and 1923 (CIRNAC, 2013). Of these, the Peace and Friendship Treaties, signed between 1725-1779 are most relevant to St. Anns Bank MPA. The Peace and Friendship Treaties are the basis of Mi'kmaq rights in Mi'kma'ki (Nova Scotia). The main objective of these agreements was to prevent war between First Nations and the British as well as facilitate trade (Wallace, 2020). These Treaties ceded no land or rights, but rather affirmed that Mi'kmaq hunting, fishing, and harvesting would continue unhindered (L'neuey, n.d.). The Peace and Friendship Treaties signed up until 1752 were generally similar. Three treaties were signed in 1752, 1760, and 1761, which included a “truck house” clause as an instrument to encourage trade between the British and Mi'kmaq (CIRNAC, 2013). A “truck house” was a trading post for the exclusive use of the signed First Nations (CIRNAC, 2013). These clauses and the Peace and Friendship Treaties as a whole, provide a firm legal foundation for the Mi'kmaq to assert and affirm their rights to the resources of Mi'kma'ki.

This legal foundation was the basis of the Supreme Court of Canada case *R V Marshall* (1999) which affirms the Mi'kmaw right to hunting, fishing, and gathering in pursuit of a “moderate livelihood” as agreed in the Peace and Friendship Treaties (DFO, 2022). The Marshall case surrounds the charge of a Mi'kmaq individual, Donald Marshall Jr., for fishing eels without a license, during a closed season, and with illegal gear. Marshall had claimed to be fishing under the Mi'kmaw treaty right to fish for sale to support his family. Despite this claim, Marshall was charged, but then acquitted before the Supreme Court of Canada. This decision affirmed the Mi'kmaw treaty right to fish for sale toward a “moderate livelihood”.

The concept of a “moderate livelihood” limits this right from the open accumulation of wealth, which allows the right to be regulated stating:

Catch limits that could reasonably be expected to produce a moderate livelihood for individual Mi’kmaq families at present-day standards can be established by regulation and enforced without violating the treaty right. (*R. v. Marshall, 1999, para. 61*)

This case was followed with an appeal that led to a second decision stating that “treaty rights could only be limited for conservation reasons or other compelling and substantial public objectives” (*R. v. Marshall, 1999*). The Marshall decisions and the Peace and Friendship Treaties form the landscape of Indigenous Rights in Mi’kma’ki and St. Anns Bank MPA.

In contrast, no treaties have been signed between the Haida Nation and the Crown (BC Treaty Commission, n.d.). Despite a continuous Haida claim to Haida Gwaii, negotiations delineating specific Haida rights have been slow (Jones et al., 2010). This has resulted in several court decisions as well as interim agreements which aim to resolve issues of ownership and jurisdiction. For instance, *R. v. Sparrow* (1990), outlined a set of criteria that seeks to define whether a government activity infringes on an Aboriginal right, and what might justify an infringement. Furthermore, *Delgamuukw v. BC* (1997) defines Aboriginal Title as a right to the land claimed as well as what might constitute a land claim. The CHN has formally submitted a land claim and is currently negotiating tripartite reconciliation agreements with the Province of BC and Government of Canada (BC Treaty Commission, n.d.; CHN, 2002). Finally, agreements such as the Gwaii Haanas Agreement between the Haida Nation and the Government of Canada outline agreed upon rules for the co-governance of specified areas (Hawkes, 1996). The absence of treaties and a continuous Haida land claim have given the CHN significant leverage and negotiations for their treaty rights. As no rights have been extinguished and no lands have been ceded, the non-Indigenous legal landscape is like that of Mi’kma’ki.

Finally, in 2021, the *United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) Act* received Royal Assent and came into force. This act affirms and sets out a broad range of rights for Indigenous peoples which include: equality and non-discrimination, self-determination, self-government, and treaty recognition, participation in decision-making, as well as economic and social rights (Department of Justice, 2022). This act further ensures

that the Government of Canada “must, in consultation and cooperation with Indigenous peoples, take all measures necessary to ensure that the laws of Canada are consistent with the Declaration” (*UNDRIP Act* 2021). The United Nations Declaration on the Rights of Indigenous Peoples was adopted by the UN in 2007, and fully endorsed by the Government of Canada in 2016 (Department of Justice, 2022). The *UNDRIP Act* is a result of this endorsement.

## **2.7 Principles of Equity**

Equity is quickly becoming a key principle in the management of MPAs and is present in Aichi Target 11 which calls for “effectively and equitably managed” protected areas (CBD, 2010). MPAs can impact Indigenous communities by restricting access to resources, or culturally and historically important areas (Ban and Frid, 2018). Access to marine resources and marine areas is an important issue for Indigenous communities as it is critical for economic benefit and cultural continuity. Restricting access to the ocean may impede the transfer of Indigenous Knowledge between generations (Turner et al., 2000). MPAs can further impact Indigenous food security, as commercial fishers may share their harvest extensively throughout a community (Islam and Berkes, 2016). Furthermore, equity can impact the effectiveness of MPA management for conserving biodiversity. Insufficient resources or negative stakeholder sentiment could reduce compliance of management measures or lead to expensive and elevated conflict (Dehens and Fanning, 2018). Focus on equity is especially important within co-managed MPAs to address issues of power dynamics and effective participation in decision-making. As Indigenous communities can be highly impacted by MPAs and have been historically dealt with inequity, it should therefore be ensured that any co-governance arrangement with these communities is equitable.

Equity is based on the role of justice in social systems. The concept of equity dates back to Aristotle’s explanation on proportionalism in justice (Konow 2003). Aristotle proposes that outcomes should be distributed equally based on the inputs of a system (Konow 2003). This proposition dictates the right and fair treatment of people. Konow (2003) further explains that equity assumes the existence of an impartial and unbiased spectator with no personal stake. The reality of resource management means that this unbiased spectator does not exist; however, society can still attempt to achieve equity. To achieve equity, human well-being,

rights, and the fair allocation of benefits, must be considered. While biases may exist, inclusion of diverse perspectives, Knowledge systems, and values can help remedy bias.

McDermott and Schreckenberg (2013) describe equity as being comparative and considerate of human relationships and their relative circumstances. Equity seeks to remedy the consequences of a blindly just society, which places burden without proportionate benefit. Historical inequalities and conflict, differences in culture, or ways of knowing can all create unequal starting lines, through which the cost of management actions will have disparate impacts. This context is critical when seeking equity, as we must consider the full suite of inputs and outcomes, to ensure the appropriate distribution of burdens and benefits. McDermott and Schreckenberg (2013) make the comparison, “If Justice is blind, Equity has her eyes wide open.” and so through equity we can open our eyes to a truly just society.

Conservation literature recognizes that equity is multidimensional (Pascual et al., 2014). Equity can be considered to have three dimensions: recognition, procedure, and distribution (Pascual et al., 2014, Schreckenberg et al., 2016). Schreckenberg et al. (2016) present 16 principles to create a framework of equity in protected area management based on these dimensions. These principles have become internationally recognized through the convention of biological diversity (CBD, 2010). The principles presented build on the three dimensions of equity and provide a nuanced framework through which to achieve equity in protected area management.

### **2.7.1 Recognition**

The first dimension of equity, recognition, describes the need to recognize asymmetries of resources and power and their ties to the capability of a party to participate in management actions (Mcdermott and Schreckenberg, 2013). This dimension acknowledges the social and political context which underlie the structure of governance (Pascual et al., 2014). Furthermore, the first dimension of recognition seeks to respect and affirm different identities and cultural diversity (Martin et al., 2016). Importantly, areas of high biodiversity have been associated with high occurrences of language diversity (Gorenflo et al., 2012). Authors have found that nearly half of all languages found on earth are found in biodiversity hotspots (Gorenflo et al., 2012). Using languages as an indicator for cultural diversity, biodiversity and cultural diversity can be said to co-occur (Maffi, 2005). As previously stated, one of the

primary goals of MPAs is to protect marine biodiversity. Effective MPAs protect places identified as marine biodiversity hotspots; and the *Oceans Act* specifically mentions areas of high biodiversity (*Oceans Act 1996*). Canadian MPAs and their associated inequities may therefore be intrinsically connected to cultural diversity. There is value in embracing the mosaic of cultural diversity associated with MPAs. Local communities acquire knowledge through experience and may adopt sustainable resource management practices that are synergistic with the conservation objectives of MPAs (Artelle et al., 2019). Place-based knowledge and Indigenous Knowledge systems could help address resource limitations and fill knowledge gaps. The recognition dimension also acknowledges the importance of distinct identities, histories, and cultures in resource management.

Recognition further identifies and respects the rights of local communities. Acknowledging legitimacy and respecting human rights as well as rights to access and resources are becoming increasingly important for MPAs. As Canada works toward its MCTs it is increasingly protecting large expanses of water. New existing MPAs may consequently overlap with Indigenous territories, generating the possible infringement of Indigenous rights in these areas. When working toward just conservation outcomes, it is critical to avoid interfering with an individual's enjoyment of their right (Schreckenberg et al., 2016). Aichi Target 11 further states that "Protected areas should also be established... through equitable processes that recognize and respect the rights of Indigenous and local communities, and vulnerable populations" further emphasizing the need to recognize rights in MPAs (CBD 2010). This is also where recognition becomes key, as these marginalized groups may not have the capacity or voice to defend their rights to resources (Dawson et al., 2017).

Finally, recognition acknowledges disparities in capacity and power between stakeholders (Schreckenberg et al., 2016). These disparities can impact the effectiveness of rights and stakeholders' influence on decision making, limiting their ability to affirm their rights, interests, values, and culture. Power dynamics can further impact the relationships between individuals and groups, leading to escalating conflict which can impede achievement of conservation objectives.

Schreckenberg et al., (2016) propose the equity framework on which this research is based. This framework is further based on guidance for protected area governance and workshops that brought together a variety of perspectives on equity, justice, conservation, and advocacy

for the rights of Indigenous peoples and local communities. Development of this framework included research of equity in ecosystem services, environmental justice, guidance for good governance in protected areas, and social assessments of protected areas (Schreckenberg et al., 2016). Consequent workshops included academics, policymakers, practitioners, and NGOs which developed a framework of equity and principles. This framework was then validated in three areas of East Africa, using interviews and discussions with local stakeholders. Participants highlighted key equity concerns in their areas, which was captured by Schreckenberg et al. (2016). This methodology elicited 16 principles of equity; the first 6 which fall under the dimension of recognition are shown in table 1.

Table 1. Principles of recognitional equity as proposed by Schreckenberg et al., 2016.

<b>Recognition</b>
Recognition and respect for human rights
Recognition and respect for statutory and customary property rights
Recognition and respect for the rights of Indigenous peoples, women, and marginalized groups
Recognition of different identities, values, knowledge systems and institutions
Recognition of all relevant actors and their diverse interests, capacities, and powers to influence
Non-discrimination by age, ethnic origin, language, gender, class, and beliefs

### **2.7.2 Procedure**

Procedural equity describes the process by which decisions are made and how rights and stakeholders are included in this process (Martin et al., 2015). Procedure further refers to the role of stakeholder in decision making (Sikor et al., 2014). A procedure can only be regarded as fair if legal processes and the rights of individuals are accurately respected (Jonge, 2011). This dimension is based on the inclusion of all relevant rights and stakeholders, and their effective participation (Schreckenberg et al., 2016). Issues of procedural equity arise from the decisions made in MPAs on the distribution of costs and benefits (Sikor et al., 2014). These decisions can rely on input from various groups of disparate levels of influence with differing

experiences of costs and benefits (Sikor et al., 2014). There must exist an equitable forum for all affected groups to effectively participate in the decision-making process. Addressing the issues that surround the creation and management of this forum forms the basis of procedural equity.

Equitable procedure requires transparency and accountability within management regimes as well as toward resource users. Improving transparency regarding rules and enforcement as well as within boundary negotiations have been suggested as management responses to address issues of equity in protected area management (Dawson et al., 2017). Transparency and information sharing can also facilitate effective conflict solving. Zafra-Calvo et al. (2019) found that greater transparency was positively associated with increased conflict-resolving capacity in local stakeholders of protected areas. Furthermore, people were more satisfied about their participation in decision-making in addition to having better access to benefits from the protected areas.

Procedural equity requires transparency which permeates all other aspects of this dimension. If procedure is to be equitable, steps must be taken to facilitate participation in decision making. Fair and equitable participation requires colonial and institutional barriers to be dismantled to facilitate the full participation of groups (McDermott et al., 2013). This can occur through affirmative action that favours marginalized groups, resource sharing within co-governance arrangements, or changes in legislature. The full and effective participation of all rights and stakeholders underscores the importance of transparency in procedural equity as well as the interconnections between all dimensions of equity. Recognition of social contexts is required to identify the barriers that prevent groups from effectively participating. Furthermore, full participation is required for groups to effectively advocate for an equitable distribution of costs and benefits.

Table 2. Principles of procedural equity as proposed by Schreckenberg et al., 2016.

<b>Procedure</b>
Full and effective participation of all relevant actors in decision-making
Clearly defined and agreed responsibilities of actors
Accountability for actions and inactions

Access to justice, including an effective dispute-resolution process
Transparency supported by timely access to relevant information in appropriate forms
Free, prior, and informed consent for actions that may affect the property rights of Indigenous peoples and local communities

### 2.7.3 Distribution

Distributional equity primarily concerns the allocation of costs and benefits of conservation to rights and stakeholders (McDermott et al., 2013). This dimension of equity was the focus of early academic research investigating the inequity in the distribution of environmental costs, risks, and benefits (Schlosberg 2013). Marginalized communities have historically and continue to experience unjust resource management actions that tend toward burdening these communities with harmful environmental impacts. This has resulted in environmental toxins and pollutants, poor water quality, and general environmental deterioration to be unfairly thrust upon these communities. This unjust distribution further oppresses communities, often already saddled with numerous social inequities.

As the world has moved toward prioritizing environmental conservation, the associated costs are being unfairly distributed toward these marginalized communities. MPAs can exacerbate poverty, as these spaces can come with significant economic opportunity costs. The costs of MPAs are often paid by local peoples, and it has been further recognized that the benefits of conservation are not distributed proportionally to the costs paid (Adams et al., 2004).

Distributional equity has been suggested as a method toward equalising differences in inequality (Martin et al., 2015). This concept departs from the idea of meeting an equal threshold for all, and instead works toward allocating costs and benefits based on the needs of a community.

The distribution of social impacts has mainly been focused on economic indicators, such as loss of income or benefits from protected area revenue (Dawson et al., 2017); however, equity also considers the socio-cultural costs associated with MPAs. Protected areas have long been associated with an exclusionary paradigm (Zurba et al., 2019). This model of protected area is based on a philosophy of these areas as refuges from human impacts,



separating people from place and the environment (Shultis and Heffner, 2016). This displacement of people can be especially impactful on Indigenous peoples who remain culturally linked to their local ecosystems (Ban and Frid, 2017). MPAs can thus have significant socio-cultural costs on Indigenous communities who have their culture and identity tied to the harvest of traditional resources and access to traditional places. Distributional equity identifies and mitigates socio-cultural and economic costs, while allocating benefits based on how much burden is borne by a community.

This final dimension of equity is intrinsically tied to recognition and procedural equity. For costs and benefits to be equitably distributed, there must be recognition of the social contexts surrounding the MPA. As well, transparent, and equitable decision-making processes facilitate the effective participation of rights and stakeholders, allowing them to better voice the costs placed on them as well as advocate for the value of conservation benefits (McDermott et al., 2013). Schreckenberg et al. (2016) propose four principles of distributional equity (table 3). All the proposed principles are important for equitable protected areas; however, community perceptions and management context can reveal some principles as more pertinent than others.

Table 3. Principles of distributional equity as proposed by Schreckenberg et al., 2016.

<b>Distribution</b>
Identification and assessment of costs, benefits and risks and their distribution and trade-offs
Effective mitigation of any costs to Indigenous peoples and local communities
Benefits shared equally among relevant actors or according to contribution to conservation, costs incurred, recognized rights and/or the priorities of the poorest
Benefits to present generations do not compromise benefits to future generations

## Chapter 3 – Approach

### 3.1 Selection and Collection

#### 3.1.1 Scope Selection

The key objective of this study is to identify key principles of equity from the framework presented by Schreckenberget al. (2016) which can then be applied to St. Anns Bank MPA. To achieve this, a scoping review was selected as the central form of analysis for scientific literature as it provides a mechanism for summarizing and disseminating existing research findings (Arksey & O’Malley, 2005). Scoping reviews are a new approach to literature analysis but produce a summary on a body of literature particularly concerning relatively unreviewed concepts (Arksey & O’Malley, 2005). For this reason, this method was preferred to a systematic review which typically address topics with a well-established body of literature (Pham, et al., 2014). This scoping review was conducted based on the research question: *What principles of equity can be identified in the co-governance processes of GHNMCA and SK-B?* The geographic range of the scoping review was expanded from the Haida Gwaii archipelago to the whole of British Columbia due to a lack of literature that focused on principles of equity in the region. GHNMCA and SK-B were selected due to their relevance and similarities to the SAB context, as well as the unique governance contexts of each site.

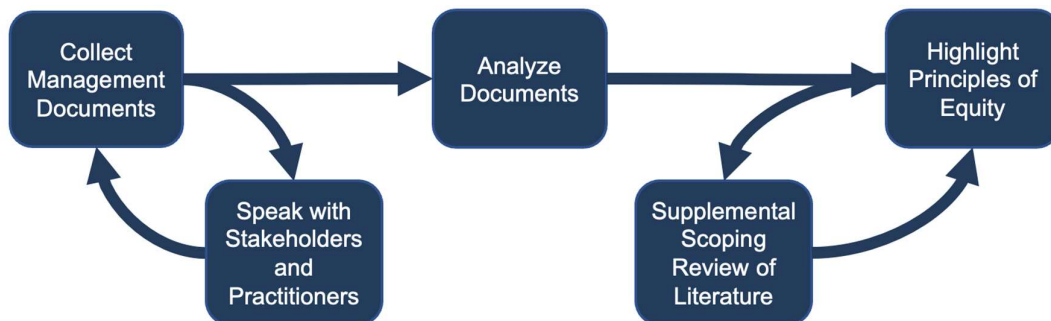


Figure 4. General research approach taken to Identify Principles of Equity.

### 3.1.2 Management Document Collection

Analysis of equity in co-governance for both GHNMCA and SK-B was conducted through an in-depth review of publicly available management documents and agreements. Documents were collected on the websites of the Council of the Haida Nation, Parks Canada, and DFO. Documents were then selected based on relevance through a cursory study and discussions with site managers and practitioners.

### 3.1.3 Scientific Literature

Supplemental analysis was conducted on scientific literature discussing principles of equity. Analysis was conducted through a scoping literature review to identify key principles of equity described in the literature. The results of the scoping review provide supplemental evidence and background for the principles identified in management documents.

This review was performed through a systematic series of searches using online databases available on ScienceDirect and Scopus. Key concepts and terminology from the equity framework were included in the search syntax to find relevant results. The search syntax was adapted based on advice from evidence synthesis and database experts through the Dalhousie University library (Table 4).

Table 4. Search syntax for scientific literature

Database	Search Syntax
Scopus	TITLE-ABS-KEY(co-manag* OR manag*) AND TITLE-ABS-KEY(co-govern* OR govern*) AND TITLE-ABS-KEY (British Columbia OR BC) AND TITLE-ABS-KEY(protected area*) AND TITLE-ABS-KEY(knowledge system* OR capacity OR power OR participat* OR responsib* OR accountab* OR justice OR disput* OR transpar* OR consent OR cost* OR benefit* OR distribut*)
ScienceDirect	Keywords(knowledge system OR capacity OR power OR Participation OR responsibility OR accountability OR justice OR dispute OR transparency OR consent OR cost OR benefit OR distribution) Title, abstract, keywords((co-management OR management OR co-governance OR governance) AND (British Columbia OR BC) AND (marine protected area)

The review targeted only peer-reviewed articles with the assumption that the rigorous peer-review process would produce reliable evidence. Grey literature was not included in this review due to a wide variation of quality and possible biases. Including this literature would require further analysis that would fall outside the scope of this supplemental review. Articles were screened based on adherence to inclusionary criteria created for this study. Articles were

selected only if their subject area was local to British Columbia or Haida Gwaii, included a direct reference to equity or a principle of equity (Schreckenberg et al., 2016), and were specific to protected areas. In addition to the prior criteria, the articles were selected if they had subject matter or substantial mention of Indigenous communities or co-governance. A preliminary search with a scope limited to Haida Gwaii yielded substantial knowledge gaps, resulting in the expansion of the scope to the province of British Columbia. Results from this scoping review were used to validate and augment principles of equity identified within management documents.

## **3.2 Analysis**

### **3.2.1 Identification of Principles**

Using the equity framework for protected areas as set out in Schreckenberg et al. (2016), principles of equity in governance were identified through a review of management documents pertaining to GHNMCA and SK-B. After a management document was determined to be relevant to this study the title, year of publication, location, and objectives were recorded into a text file. Each document was then reviewed and each instance of a principle of equity was charted into an Excel datasheet. Information regarding the quality, significance, or context of principles was further recorded as required. There were several occurrences of text that simultaneously applied more than one principle of equity, for these instances each principle of equity present was recorded and the principle most related to the overarching objective of the excerpt was noted (Figure 4). Key principles were chosen based on the relative frequency with which they appeared in management documents and published literature, as well as the significance of their presence and context. Intrinsic principles were selected from the subset of key principles, using contextual information. This selection relied mainly on the significance of the presence rather than frequency of a principle within a document or management framework.

**4.0 ROLES AND RESPONSIBILITIES OF THE AMB WITH RESPECT THE GWAII HAANAS MARINE AREA**

4.1 In addition to those roles and responsibilities set out in section 4.0 of the *Gwaii Haanas Agreement* regarding Gwaii Haanas, upon execution of this Agreement, the AMB will have the following roles and responsibilities with respect to the planning, operation, management and use of the Gwaii Haanas Marine Area:

- a) developing the Interim Management Plan and within five (5) years and reviewing every five (5) years thereafter, the Gwaii Haanas Marine Area Management Plan, which includes, but is not limited to, the management and zoning of activities;

developing ecosystem objectives for the management of activities, including fisheries, as selected by the AMB;  
 developing a Gwaii Haanas Marine Area Strategy;  
 consulting with parties, organizations and advisory bodies, which have interests in the management approaches and actions proposed for the Gwaii Haanas Marine Area Strategy or the Gwaii Haanas Marine Area Management Plan;  
 developing recommendations to the Council of the Haida Nation and the Government of Canada regarding guidelines and processes applicable to business permits or licenses for commercial tour operations, research and other activities within the Gwaii Haanas Marine Area;  
 collaborating with other departments and agencies or other parties which conduct or authorize activities affecting the planning, operation, management and use of the Gwaii Haanas Marine Area;

**RECOGNITION**

1. Recognition<sup>i</sup> and respect<sup>ii</sup> for human rights
2. Recognition and respect for statutory<sup>iii</sup> and customary property rights<sup>iv</sup>
3. Recognition and respect for the rights of Indigenous peoples, women and marginalized groups
4. Recognition of different identities, values, knowledge systems and institutions
5. Recognition of all relevant actors<sup>v</sup> and their diverse interests, capacities and powers to influence
6. Non-discrimination by age, ethnic origin, language, gender, class and beliefs

**PROCEDURE**

7. Full and effective<sup>vi</sup> participation of all relevant actors in decision-making
8. Clearly defined and agreed responsibilities of actors
9. Accountability<sup>vii</sup> for actions and inactions
10. Access to justice, including an effective dispute-resolution process
11. Transparency<sup>viii</sup> supported by timely access to relevant information in appropriate forms
12. Free, prior and informed consent<sup>ix</sup> for actions that may affect the property rights of Indigenous peoples and local communities

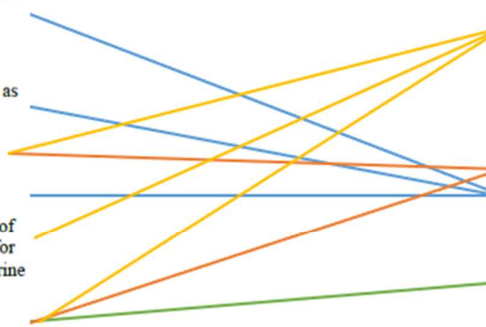


Figure 5. Identification of principles of equity from an excerpt within the Gwaii Haanas Marine Agreement (2010).

Principles that were absent throughout the management documents were identified as inessential to co-governance, inherent to management processes, or assumed in the development context. The supplemental scoping review of scientific literature was critical in this step to differentiate absent principles as inessential, inherent to, or assumed in co-governance. In this context, inherent principles of equity are defined as principles that are administered by the creation of a management document, process, or objective. Whereas, assumed principles of equity are defined as principles that are presupposed in the creation and implementation of co-governance processes.

### **3.2.2 Comparative Analysis**

Application of key principles of equity to the St. Anns Bank MPA context occurred through a subsequent comparative analysis. Specifically, the treaty contexts, commercial fisheries, and management structures were compared between Haida Gwaii and Mi'kma'ki and Unama'ki. This analysis elucidated critical similarities and differences which were then used as a lens to apply key principles of equity to St. Anns Bank MPA. Literature describing each subject was first collected and reviewed to provide data. Similarities and differences between the East and West coasts were then identified. These elements were then discussed to provide a foundation for the application of highlighted principles of equity in SAB, as well as opportunities or challenges that may arise.

## **Chapter 4 – Results**

### **4.1 Key Principles Identified**

The results of the research approach are presented in this chapter. While all 16 principles of equity play important roles in protected area management; the approach taken highlighted nine key principles as important to the St. Anns Bank context (Figure 6). Non-highlighted principles varied with most absent and three appeared comparatively infrequently. In this chapter, each of the highlighted principles will be defined and explored. Significant instances of evidence for equity in the presented case studies will be further examined. Each of the identified principles

were exemplified throughout the management documents or identified in published literature. Six management documents were reviewed for this study, with three pertaining to GHNMCA and three pertaining to SK-B (Table 5). The review of these documents provided the foundation for highlighting principles of equity. The scoping literature review produced 26 different papers pertaining to management in GHNMCA or the British Columbia region.. The results of this review are presented in this section through examples and excerpts pulled from management documents.

Table 5. Management documents collected and analyzed for SK-B and GHNMCA to identify key principles of equity.

<b>SGaan Kinghlas Bowie Seamount MPA</b>	<b>Gwaii Haanas National Marine Conservation Area</b>
Memorandum of Understanding (2007)	Gwaii Haanas Marine Agreement (2010)
Reconciliation Framework Agreement (2018)	Gwaii Haanas Agreement (1993)
SGaan Kinghlas-Bowie Seamount Management Plan (2019)	Gwaii Haanas Land-Sea People Management Plan (2018)

Table 6. The occurrence of Key principles and dimensions of equity in Gwaii Haanas National Marine Conservation Area and SGaan Kinghlas-Bowie Seamount Marine Protected Area (adapted from Schreckenber et al., 2016). Principles found to be intrinsic to co-governance are highlighted in purple, recognitional principles are in yellow, procedural principles are in green, and distributional principles in orange.

Key Principles and Dimensions of Equity		Occurrences in documents (i.e., ...)	
		Gwaii Haanas National Marine Conservation Area	SGaan Kinghlas-Bowie Seamount Marine Protected Area
<b>Recognition</b>			
	Recognition and respect for human rights		
	Recognition and respect for statutory and customary property rights		
<b>1</b>	Recognition and respect for the rights of Indigenous peoples, women, and marginalized groups	11	3
<b>2</b>	Recognition of different identities, values, knowledge systems and institutions	23	10
<b>3</b>	Recognition of all relevant actors and their diverse interests, capacities, and powers to influence	17	13
	Non-discrimination by age, ethnic origin, language, gender, class, and beliefs		
<b>Procedure</b>			
<b>4</b>	Full and effective participation of all relevant actors in decision-making	5	10
	Clearly defined and agreed responsibilities of actors	2	5
	Accountability for actions and inactions		
<b>5</b>	Access to justice, including an effective dispute-resolution process	4	2
<b>6</b>	Transparency supported by timely access to relevant information in appropriate forms	10	8
	Free, prior, and informed consent for actions that may affect the property rights of Indigenous peoples and local communities	1	1
<b>Distribution</b>			
	Identification and assessment of costs, benefits and risks and their distribution and trade-offs	2	2
<b>7</b>	Effective mitigation of any costs to Indigenous peoples and local communities	4	2
<b>8</b>	Benefits shared equally among relevant actors or according to contribution to conservation, costs incurred, recognized rights and/or the priorities of the poorest	7	4
<b>9</b>	Benefits to present generations do not compromise benefits to future generations	7	1



### 4.1.1 Key Principles of Recognition

Recognition equity acknowledges the importance of distinct social and cultural values, identities, institutions, and knowledge systems of interested parties (Schreckenberget al., 2016, Martin et al., 2016, Dawson et al., 2017). Three principles were identified under the recognition dimension of equity. Recognition and respect for the rights of Indigenous peoples, women, and marginalized groups (Principle 1); Recognition of different identities, values, knowledge systems and institutions (Principle 2); and Recognition of all relevant actors and their diverse interests, capacities, and powers to influence (Principle 3). It should be noted that while all elements of these principles are important, this review and the literature it analyzes is limited to Indigenous issues. For example, when considering Principle 1: recognition and respect for the rights of Indigenous peoples, women and marginalized groups, the rights of Indigenous peoples were the focus of this study.

Of these identified principles, Principle 1 “recognition and respect for the rights of Indigenous peoples, women and marginalized groups” was highlighted as intrinsic to the co-governance of both sites. This principle was selected as intrinsic because protected area co-governance usually occurs as an affirmation of Indigenous rights (Jones et al., 2010, Takeda and Røpke, 2010, Llyod-Smith, 2017). Furthermore, due to a string of decisions made by the Supreme Court of Canada Parks Canada has affirmed the right of some Indigenous groups to continue activity within national parks (Thomlinson and Crouch, 2012). Literature also suggests that the individuals with the right to resources should be identified and if regulations can be effectively applied (Hawkes, 1996).

In general, the guiding documents written for GHNMCA recognized and respected the rights of Indigenous partners more than those from SK-B. For instance, the Gwaii Haanas Agreement (GHA) begins with recognition of both parties' views and interests. This section is directly followed with excerpts recognizing the position of both Haida and Crown rights to Gwaii Haanas. Principle 1 was further reflected in the purpose and objectives section of the agreement as it specifically sought to respect Haida culture in all aspects of the planning, operation, and management of the Haida Gwaii archipelago. As this agreement establishes the Archipelago Management Board (AMB), the recognition of Haida rights pervade the entirety of the AMB's

mandate. The recognition of Haida rights at this point of the GHA, demonstrates the inherent importance of this principle to equitable co-governance, especially with Indigenous communities. It is noted that the GHA states that the agreement does not constitute a land claims agreement or recognize or deny any Aboriginal or treaty rights. This stipulation represents a larger issue within the Canadian legislative framework, which will subsequently be explored in the discussion.

Fewer instances of respect and recognition of Haida rights were identified in the guiding documents for SK-B. One key example of this principle exists in the Reconciliation Framework Agreement (RFA) between the Pacific North Coast Nations and the Government of Canada. The RFA begins with the recognition and affirmation of existing Aboriginal and treaty rights from the *Constitution Act* (1982). As this document was signed to facilitate reconciliation and co-governance, the recognition of rights within it is significant for all consequent processes.

Principle 2: “recognition of different identities, values, knowledge systems and institutions” was highlighted as the second key recognitional principle in both GHNMCA and SK-B. Several goals and objectives within both the GHNMCA and SK-B management plans recognized both Haida and western values, knowledge systems, and institutions. For example, in the Land-Sea People Management Plan for GHNMCA, Goal 5 “Advance Knowledge and Understanding of Gwaii Haanas” and the associated objectives were dedicated to improving scientific knowledge of Gwaii Haanas and documenting traditional knowledge and laws. Further targets listed within Goal 5 wove ecological monitoring with cultural and archaeological inventories. Existing partnerships with Haida Watchmen an Indigenous Guardian initiative, were identified as opportunities to support monitoring, further recognizing the knowledge systems and values of the Haida Nation.

Similarly, in the SK-B, Indigenous knowledge systems and values are recognized throughout the management plan. Two notable examples are the Haida Guiding Principles that precede the rest of the plan. The Guiding Principles play a central role to Haida culture (Jones et al., 2010), and the inclusion of these principles at the beginning of the management plan signifies the importance of Haida Knowledge and values in the management of SK-B. Further recognition of

Haida Knowledge occurred in the management framework, specifically with the operational objectives of Goals 3, 4, and 5. For example, an objective in Goal 5 states that Haida language and oral traditions should be used in all SK-B communication materials; underscoring the importance of Haida institutions and tradition in SK-B management. Published research further suggested that the recognition of diverse Knowledge Systems, and particularly Indigenous Knowledge and values was critical in co-governance, protected area management, and resource management (Ayers et al., 2012; Ban et al., 2020; Doberstein & Devin, 2004; Jones et al., 2010; King, 2004; Lee et al., 2021; Muhl et al., 2020; Reid et al., 2022).

Principle 3: “recognition of all relevant actors and their diverse interests, capacities and powers to influence” was well dispersed throughout both sets of management documents. This principle was reflected in section 4 of the Gwaii Haanas Marine Agreement. Section 4 delineated the role and responsibility of the AMB with respect to Gwaii Haanas. The responsibilities assigned to the AMB included collaboration and consultation with other departments, agencies, organizations, advisory bodies, and parties that have an interest in management approaches, activities, actions, and planning. The extent of this consultation attempts to ensure that all relevant actors and stakeholders and their interests are recognized in the management of GHNMCA.

There were no significant examples of Principle 3 in the SK-B management documents; this may speak to the difference in co-governance partners as SK-B is jointly managed by the CHN and DFO, while GHNMCA is managed by the CHN and Parks Canada. Recognition of capacity is particularly important as capacity may limit effective governance (Muhl et al., 2020).

Furthermore, First Nation capacity to effectively participate in governance may be directly tied to their power and capacity (Stronghill et al., 2015). Therefore, it is important to recognize relative capacities and powers to influence to ensure that co-governance partners are effectively able to participate.

#### **4.1.2 Procedural principles**

Procedural equity concerns how decisions are made and who is involved in decision making; inclusivity and effective participation are the foundation of this dimension (Schreckenberg et al., 2016, Martin et al., 2016, Dawson et al., 2017). Literature analysis and review of management

documents in SK-B and GHNMCA highlighted three principles of procedural equity. “Full and effective participation of all relevant actors in decision-making” (Principle 4); “Access to justice, including an effective dispute-resolution process” (Principle 5); and “Transparency supported by timely access to relevant information in appropriate forms” (Principle 6). These principles were similarly highlighted due to the relative frequency and importance with which they appeared and were given in management documents and published literature.

Principle 4: “Full and effective participation of all relevant actors in decision-making” was present in both SK-B and GHNMCA. This principle was interpreted to mean participation throughout all stages of management and decision-making including design, consultation, implementation, monitoring, and review.

The GHA outlines a consensus-based decision-making structure for the AMB. Consensus-based decision making ensures that all parties within the AMB agree on and participate in all management decisions. The AMB is composed of equal representation from the Government of Canada and the CHN with a co-chairperson selected from these representatives. This means that both non-Indigenous and Indigenous leadership have full participation in all matters addressed by the AMB. These include developing the management plan and guidelines concerning the “care, protection and enjoyment of the Archipelago”, and all actions related to planning, operation, and management of the Archipelago. Enacting a consensus-based decision-making structure at this level of management was a key factor to ensuring the full and effective participation of both parties. Furthermore, as the AMB and its members are advised by technical working groups and advisory committees of various rights and stakeholders, this ensured that all relevant actors were engaged in decision-making.

The AMB oversees the management of SK-B, and consensus-based decision making is affirmed in the SK-B memorandum of understanding (MOU) between DFO and the CHN. These agreements further underscore the importance of this decision-making structure, and the inclusion of all parties. The AMB was first composed of equal representatives from the CHN and Parks Canada, and since the signing of the MOU in 2007, representatives from DFO were included with additional equal representation from CHN.

Consensus-based decision making in a jointly managed institution encourages the full and effective participation of both parties. As an agreement must come to pass, this structure with equal representation from both sides, theoretically this should ensure that each party has an equal voice in all management decisions. Thus, highlighting principle 4 as a key component of equity. Principle 4 was also highlighted in several articles including Ban et al., 2014; Diggon et al., 2022; Eagles et al., 2010; Heck et al., 2011 and Mitchell-Banks, 2006. Effective participation was described as a key indicator of protected area effectiveness as well as a contributor to good governance.

Principle 5: “Access to justice, including an effective dispute-resolution process” was highlighted as a key and intrinsic principle of equity through the analysis of co-governance in both SK-B and GHNMCA. Literature suggests that co-governance frameworks must have access to informal and formal systems to resolve conflict (Hawkes, 1996). Furthermore, clear, and built-in dispute resolution processes are key to ensuring that planning and management move forward (Diggon et al., 2020, Ban et al., 2008). Finally, an absence in effective dispute resolution processes can lead to costly escalations which may lay further costs on partners with reduced capacity (Klain et al., 2014). Effective dispute resolution was intrinsic to management of both sites due to the inclusion of a dispute resolution process in their initial guiding documents.

Both the Gwaii Haanas Marine Agreement and the SK-B MOU outline a formal dispute resolution process in the event of a clear and final disagreement of AMB members. The processes further state that senior representatives of the members (the Minister of Fisheries or Environment, and the CHN) would be referred to and they would meet to resolve a disputed issue. A clear dispute resolution process appears only in the Gwaii Haanas Marine Agreement, SK-B MOU, and RFA; however, all these documents guide the overarching operations of all management activities for the AMB over GHNMCA and SK-B. Thus, this principle has been highlighted as key and intrinsic to co-governance.

Principle 6: “Transparency supported by timely access to relevant information in appropriate forms” was the final procedural principle of equity highlighted in management documents. In

this study transparency was interpreted as transparency relating to decision-making and between management parties, as well as transparency with rights and stakeholders through public facing communication and information sharing.

Public awareness and education were emphasized in the GHNMCA Land-Sea-People management plan. Goal 6 is a good demonstration of this as it looks to enhance public awareness of and appreciation for Gwaii Haanas. This includes initiatives like participation in outreach and engagement programs, youth education, as well as knowledge sharing with Haida Gwaii residents and external groups.

Sub-objectives within Goal 4 of the SK-B management plan further demonstrate transparency, as they aim to make the cooperative management of SK-B adaptive and responsive through open communication. The two sub-objectives of this goal and six operational objectives all have an aspect of transparency integrated within them. A clear example is “Operational Objective a” which states “SK-B data is shared openly and transparently between DFO and the CHN...”. This is example of transparency as relative to decision-making between management parties, highlights the importance of Principle 6 to equitable co-governance.

#### **4.1.3 Distributional principles**

Distributional equity concerns how the costs and benefits of conservation measures are distributed across stakeholders (Schreckenberg et al., 2016, Martin et al., 2016, Dawson et al., 2017). Literature analysis and review of management documents in SK-B and GHNMCA highlighted three principles of distributional equity. Effective mitigation of any costs to Indigenous peoples and local communities (Principle 7); Benefits shared equally among relevant actors or according to contribution to conservation, costs incurred, recognized rights and/or the priorities of the poorest (Principle 8); and Benefits to present generations do not compromise benefits to future generations (Principle 9).

Principle 7 :“Effective mitigation of any costs to Indigenous peoples and local communities” was found to be intrinsic to the co-governance process due to its importance to reconciliation with Indigenous Peoples in Canada. Alleviating the burden of conservation on Indigenous

communities can be an important step toward reconciliation. In a co-governance context, reconciliation could entail ensuring that the resource costs associated with joint management of an MPA be equitably distributed between both parties, to ensure that Indigenous parties are able to match the capacity of their non-Indigenous partners.

Evidence of Principle 7 was found in both the Gwaii Haanas Marine Agreement and the SK-B MOU. Both documents state in their funding section that the Government of Canada and the CHN “will seek to reach agreement on a contribution agreement to provide financial resources for on-going costs to: support the activities of the AMB; and support the CHN’s participation in the Agreement”. This was a clear example in these agreements to mitigate any costs of co-governance in both sites to the Haida Nation. The presence of this principle in both agreements which initialize co-governance has highlighted it as intrinsic to this process.

Principle 8: “Benefits shared equally among relevant actors or according to contribution to conservation, costs incurred, recognized rights and/or the priorities of the poorest”, was the second distributional principle highlighted in the management documents. This principle was interpreted mainly as benefits of the protected area being shared effectively with Indigenous communities.

Principle 8 was particularly well demonstrated in the roles and responsibilities outlined for the AMB in the Gwaii Haanas Marine Agreement. The final responsibility described is “developing strategies to assist Haida individuals and organizations to take advantage of the full range of economic and employment opportunities associated with the planning, operation, management and use of the Gwaii Haanas Marine Area”. This makes certain that the management of Gwaii Haanas is mandated to ensure that the benefits of GHNMCAs are distributed to Haida individuals and organizations. Sharing of benefits was further exhibited in the Land-Sea-People management plan, which identified “continue to support a living Haida culture and economy” as an objective. All four targets for this objective play some role in providing opportunity and growth for Haida and Haida cultural activities and programs.

In contrast, there is no mention of a distribution of benefits in the whole of the SK-B MOU or the management plan; however, the purpose statement of the RFA identifies “economic opportunities for Pacific North Coast Nations in relation to oceans management and protection” as an objective. This is the only example of Principle 8 found in the SK-B management documents. While this principle was not apparent in SK-B, peer-reviewed literature found it to be key to equity and effectiveness in MPAs (Ban et al., 2014; Jones et al., 2010; Singleton, 2009).

Principle 9: “Benefits to present generations do not compromise benefits to future generations” was the last highlighted distributional principle of equity in management documents. This principle mirrors the Mi’kmaq concept of *Netukulimk*, which describes physical and spiritual sustainability and considers impacts of management actions on future generations (Prosper et al., 2011). The presence of this principle in both Mi’kmaq culture and co-governance documents makes it well placed as a key equity principle.

The first objective outlined in the Gwaii Haanas Agreement states that “The parties agree that the Archipelago will be maintained and made use of so as to leave it unimpaired for the benefit, education and enjoyment of future generations”. This is a clear example of Principle 9 and is set out as important by both parties in this document. An agreement to consider the impacts on future generations as the foremost objective described by the Gwaii Haanas Agreement expresses its importance to the overall management of GHNMCA. Furthermore, it is through the lens of this principle that all planning and management of the GHNMCA will be cast.

This objective is mirrored in the SK-B MOU as a clause that identifies that “the Government of Canada and CHN have a common desire to protect and conserve the Protected Area for the benefit, education and enjoyment of present and future generations”. The same clause is reflected in the SK-B management plan, and further underlines the importance of this final principle of distributional equity.



## **Chapter 5 – Discussion: Insights for St. Anns Bank from the West**

The West coast examples presented in this study share several important contextual elements with the East; however, both areas also differ with St. Anns Bank in critical ways. This section presents the results from these comparisons and uses them as a lens to discuss the application of the highlighted principles of equity in St. Anns Bank MPA. This chapter interweaves results and adjacent discussion to highlight potential challenges and opportunities in applying each principle to SAB.

### **5.1.1 Principle 1: Recognition and respect for the rights of Indigenous peoples**

The Haida Gwaii archipelago has been home to the Haida Nation since time immemorial (CHN and Government of Canada, 2018). Historical evidence and continuous occupation have provided firm evidence for the Haida land claim to the archipelago (Statement of Claim, 2002). Despite this consistent claim, the Haida Nation has had to battle for the respect and affirmation of their rights to the land and resources for decades (Takeda and Røpke, 2010). Furthermore, in contrast to other parts of the country, no treaty was ever signed between the Haida Nation and the Crown (Statement of Claim, 2002). This has meant that Haida rights have been established through Supreme Court cases and a modern treaty is currently being negotiated (Jones et al., 2010). This means that while Haida rights are not protected by a treaty, they have not been extinguished (Haida Nation v. British Columbia, 2004, para 25). Any potential rights the Haida must Haida Gwaii are protected by Section 35 of the *Constitution Act, 1982*. These rights are not defined by the *Constitution Act*, and courts have suggested that the Crown negotiate and resolve treaty issues with the Haida Nation.

Although the negotiation of a modern treaty is slow in Haida Gwaii, the lack of treaty agreement has placed the Haida in a unique position. With no extinguishment of lands and resources, and rights that are undefined but constitutionally protected rights, the Haida have a strong legal claim to resource management over the entirety of Haida Gwaii. In practice, the Haida Nation and the Crown have agreed to co-governing the region and resources through the AMB.

In comparison, Mi'kma'ki is governed by the Peace and Friendship Treaties. Five individual treaties were signed between 1726 and 1779. These treaties ensured that the Mi'kmaq would have continued access to their traditional lands and resources (McMillan and Prosper, 2016). In 1985 the Supreme Court of Canada ruled that the 1752 Peace and Friendship Treaty continues to be in force and effect (R. v. Simon, 1985). The Mi'kmaq rights to hunt and fish unhindered remain unextinguished today. The Marshall decisions in 1999 were further affirmations of the Peace and Friendship Treaties. The first of these two SCC decisions recognized and affirmed the Mi'kmaq treaty right to fish for sale or a moderate livelihood. While the second Marshall decision identified significant limitations to this treaty right, Aboriginal titles or rights have ever been extinguished. Due to conflicts over moderate livelihood lobster fisheries in 2020, DFO has begun developing and implementing moderate livelihood fishing plans with Mi'kmaq communities (DFO, 2021).

Despite the protections of Mi'kmaw rights afforded by the Peace and Friendship Treaties, the Mi'kmaq have had to rely on Supreme Court decisions. In this sense, the landscape of Indigenous rights on the east coast is quite like that of the west in three ways. First, both the Mi'kmaq First Nation and the Haida Nation have not had their rights to fishing extinguished by a treaty. Second, as their rights continue to exist within the non-Indigenous legislature, both nations have seen significant legal victories in the Supreme Court of Canada. Finally, these victories have directed the Crown to act honourably in its dealings with Indigenous communities, leading to interim resource management agreements.

Any effective and equitable co-governance arrangements in St. Anns Bank MPA will need to recognize and affirm the rights protected by the Peace and Friendship Treaties. Indeed, co-governance of SAB could act as recognition of these rights. Principle 1 has been highlighted as intrinsic to co-governance processes and present in both GHNMCA and SK-B. The co-governance of GHNMCA and SK-B exists as a result of the recognition of Indigenous rights. As Indigenous rights in Haida Gwaii have never been extinguished by a treaty, and the Crown has been reluctant to cede control of these resources, co-governance arrangements have been created. The Peace and Friendship Treaties have created a similar legal context in Mi'kma'ki, and similar

co-governance arrangements could be an appropriate pathway toward the recognition of Mi'kmaq rights.

### **5.1.2 Principle 2: Recognition of different identities, values, knowledge systems and institutions**

Resource management and stewardship is central to both Mi'kmaq and Haida cultures. Netukulimk, describes the Mi'kmaq concept of sustainability which is mirrored in several Haida ethics. Mi'kmaq communities have been sustainably managing their fishing practices since time immemorial, and have place-based knowledge that can provide valuable insights in the management of SAB. As highlighted in our western case studies, recognition of Mi'kmaq knowledge and values will be a key principle in co-governance of SAB.

The Haida approach to marine planning is based on six Haida ethics and values (CHN, 2007; Jones et al., 2010).

Yahguudang - Respect

Giid tll'juus - "The world is as sharp as the edge of a knife"

Gina waadluxan gud ad kwaagiida - "Everything depends on everything else"

Isda ad diigii isda - Giving and Receiving

Gina k'aadang.nga gii uu tl' k'anguudang - Seeking Wise Counsel

'Laa guu ga kanhllns - Responsibility

These ethics describe key aspects of Haida culture, and co-governance agreements in Haida Gwaii have relied on these ethics as a foundation for sustainable management and resource conservation. The Haida ethics act as guiding principles for management of both GHNMCA and SK-B. As the Haida co-govern both sites as partners with Canada, recognizing their Knowledge Systems and values are integral to equitable co-governance. Indigenous Knowledge and non-Indigenous Knowledge can be complementary and synergistic. Recognizing the differences between these two Knowledge Systems can help identify opportunities for each to support and guide the other.

The benefits produced when recognizing multiple Knowledge Systems is well documented and exists as a concept in several Indigenous cultures. Similar frameworks exist within other Indigenous Knowledge systems that support the integration of distinct epistemologies. This is seen in Indigenous cultures that include the Haudenosaunee Confederacy in Eastern New York, the Yolngu people of Arnhem land Australia, the Māori of New Zealand, and finally the Mi'kmaq peoples in Nova Scotia, Canada (Reid et al., 2020). Each culture has a different name for the coexistence of Knowledge systems but share underlying principles. These principles include recognizing the separateness of two cultures but the need to coexist. The Yolngu framework of “Ganma” describes two waters that interact without compromising each other (Reid et al., 2020). Whereas the He Waka-Taurua framework created by the Māori acknowledges that although two cultures may be different, they can still be tied together to achieve a singular purpose (Reid et al., 2020).

The Mi'kmaq word for this concept is Etuaptmunk, or “Two-Eyed Seeing”. The concept of Two-Eyed Seeing and the principles associated with it were first described by Mi'kmaq Elder Albert Marshall in the fall of 2004 (Bartlett et al., 2012). This teaching encourages us to integrate the strengths of Indigenous ways of knowing and Western knowledge to benefit all people. Two-Eyed Seeing is about bringing these knowledge systems to coexist together rather than merging them (Reid et al., 2020). Two-Eyed Seeing has further applied to integrating knowledge systems of separate Indigenous nations and may have been used to integrate neighbouring nations (McGregor, 2020). This practice is a part of Mi'kmaq history, and an important contributor to peaceful coexistence. This concept is a critical element of facilitating the relationship between Western Society and Indigenous communities. The coexistence of multiple perspectives and Knowledge systems requires the coexistence of the associated cultures. Furthermore, Two-Eyed Seeing designates Indigenous Knowledge as valid, and disrupts the power imbalance that Western Knowledge holds over Indigenous Knowledge in research (McGregor, 2020). This teaching accepts science while depending on thousands of years of Indigenous Knowledge (Marshall, 2020). Recognizing multiple Knowledge systems is essential to co-governance in SAB which will bring the resource management principles of two nations together. Non-Indigenous and Indigenous Knowledge systems can rely on this historic tradition to emphasize the strengths of each system, and benefit the management of SAB.

### **5.1.3 Principle 3: Recognition of all relevant actors and their diverse interests, capacities, and powers to influence**

Principle 3, focuses specifically on inclusiveness in decision-making, ensuring that all relevant actors and their social contexts are considered. This principle has two important elements that need to be explored. First, recognition of all diverse interests. The current management GHNMCA and SK-B seeks to recognize the interests of all relevant rights and stakeholders through advisory committees. Advisory committees are powerful tools in MPA management that ensure that all relevant actors have the ability to give voice to their interests. Furthermore, specific objectives for both sites laid identified interdepartmental and intergovernmental coordination. These are critical objectives for this principle as advisory committees may not capture the full extent of relevant actors.

The second key element of this principle is recognition of capacity and power to influence. This is especially important in co-governance agreements as power dynamics can impact the ability of parties to influence decisions (Dawson et al., 2017; Sikor et al., 2014). Power and capacity are interrelated, as resource and human capacity can impact the level to which a group can participate in decision making. Co-governance agreements need to recognize historical, present, and future dynamics in power capacity between both parties if these agreements are to be equitable. This is particularly important in co-governance agreements between the Canadian government which wields significant legislative and political power and the Mi'kmaq who have suffered through the impacts of colonization for centuries. As reconciliation with Indigenous communities is a crucial goal in Canada, the government has a responsibility to recognize the inequalities of power created as a result of its prior actions. Power dynamics could influence co-governance frameworks, leading to reduced autonomy or inequitable decision making.

Capacity is tied to power and can often dictate how much power a group can wield. Even if legislation and policy allow for increased autonomy, it must be ensured that parties have the capacity to wield this power. This would include recognizing that a party lacks the human or financial resources, infrastructure, or institutions to effectively participate in the process. Co-

governance agreements should both recognize and address reduced capacity to influence. This should be done collaboratively, with both parties identifying issues, and suggesting solutions to resolve these issues. Capacity can be supported through provisional statements that create initiatives which bolster any resources that may be required to participate. While this includes human and financial resources and infrastructure, it may also include training and education, provisions of equipment. Indigenous Knowledge Systems could also be supported through resources and programs that enhance the transfer of knowledge between generations or help with the application of these systems in management and governance (Artelle et al., 2019). Since there may be significant differences in interests, capacity, and power to influence; recognizing these differences and working toward balancing each of these aspects is key if co-governance is to be equitable.

#### **5.1.4 Principle 4: Full and effective participation of all relevant actors in decision-making**

GHNMCA and SK-B have been designated by the Crown under the *National Marine Conservation Areas Act* and the *Oceans Act* respectively; however, they share the same issue of sharing true governance powers with the CHN. In both areas the associated minister, (Minister of Environment - GHNMCA; and Minister of Fisheries and Oceans - SK-B) is the final decision-making authority. Since in practice, co-governance has prevailed in both sites, this is not a significant barrier to implementing co-governance in SAB. This does leave co-governance arrangements vulnerable to changes in non-Indigenous governments. In the case of SAB, it would be well within the Minister's power to supersede any decisions collaboratively agreed upon. Due to this, a co-governance agreement must be careful not to fetter the discretion of the Minister. Any agreements made between DFO and the Mi'kmaq to co-govern SAB would need to consider this. Fettering the discretion refers to situations when a decision maker with delegated authority binds themselves to a policy or another person's opinion (Heron Law Firm, 2015). This is an abuse of the discretion and authority delegated by the Crown, as the decision maker is not using their independent judgement (Heron Law Firm, 2015).

Memorandums of understanding and other co-governance agreements could be possibly subject to judicial review if unfavourable decisions are made. There is precedent for this in GHNMCA, where the decision-making process was challenged in court. In 2001, tour operators challenged a

restriction imposed on their license conditions by the AMB in the Federal Court of Appeal. It was argued that Canada had fettered the discretion of the Minister by agreeing to consult with the Haida Nation through consensus within the AMB. The applicants argued that since the park Superintendent (the Canadian representative on the AMB) had no control over the AMB, which oversees all management of GHNMCA, the AMB was the real decision maker (*Moresby Explorers Ltd. v. Canada*, 2001, para. 47). The court stated that as both the Haida Nation and Canada had claim to management of GHNMCA, it was in the interest of both parties to create a co-governance framework which allowed decisions to be made without deciding the authority under which those decisions are made. Furthermore, the consensus by which the decision was made implies that the Superintendent exercised their discretion freely and agreed with the decision (*Moresby Explorers Ltd. v. Canada*, 2001, para. 77). Thus, any co-governance agreements in SAB would require a consensus-based decision-making approach to retain the authority of both the Crown and Mi'kmaq First Nation.

Consensus-based decision making, also provides the benefit of ensuring that both parties can fully and effectively participate in management. In a consensus format, Indigenous and non-Indigenous representatives would have an equal say in the decision process and any conflicting opinions would forestall the decision. This would mean that all representatives are able to exercise independent judgement and would have full power over management decisions.

#### **5.1.5 Principle 5: Access to justice, including an effective dispute-resolution process**

Access to a dispute-resolution process provides a pathway for parties to co-governance to resolve internal conflicts without impacting ongoing management efforts. Furthermore, the existence of a formal process can help reduce the impacts of power dynamics and inequities in resource capacity. A formal dispute-resolution process was present in the co-governance agreements that exist as the foundation for both GHNMCA and SK-B; this principle was therefore highlighted as intrinsic to equity in co-governance. GHNMCA, SK-B, and SAB were all key fishery areas prior to their designation as protected areas. In GHNMCA and SK-B commercial fisheries have shown the importance of including an effective dispute-resolution process in equitable co-governance. The roe herring fishery is a traditional resource for the Haida Nation, and a valuable commercial fishery. Stock area for this fishery is defined by herring spawning locations; a major stock area

exists within the boundaries of Gwaii Haanas (Jones et al., 2017). Haida have traditionally harvested herring by gathering “k’aaw” (herring spawn-on-kelp), as well as fishing adult herring for bait (CHN and Government of Canada, 2018; Jones et al., 2017).

The commercial herring fishery began in the early 1900s and continued until the stock collapsed from 1969 to 1972. The collapse resulted in targeted reopenings and fishery management through limited licenses and quotas (Jones et al., 2017). The fishery experienced periodic annual closures and was closed between 2005 and 2013. In 2014, the Minister of Fisheries reopened the commercial herring fisheries despite advice from the AMB. This decision triggered the formal dispute resolution process put into place by the Gwaii Haanas Marine agreement. This process was unsuccessful in resolving the issue, which led to the Haida bringing the case to the Federal Court of Appeal. The court ultimately ruled in favour of the Haida Nation (Haida Nation v. Canada, 2015).

Although the initial dispute resolution process triggered by the Gwaii Haanas Marine Agreement was unsuccessful, the issue was resolved through the judicial resolution process in the Federal Court. This case presents a context where the Minister’s final decision opposed a recommendation of the AMB and remained unfettered. The judicial process represents the final formal dispute resolution process available to co-governance arrangements.

Formal dispute resolution has been described as the last resort by management, where informal processes including technical working groups and discussions are preferred, and have demonstrated to be successful (Amyot, personal communication, September 2, 2022). This is what occurred in the case of the Sablefish fishery around SK-B. Sablefish are a demersal species harvested using weighted traps dropped on the ocean floor. This commercial fishery was allowed to operate within SK-B until 2018 despite objections from the CHN (Watson and Hewson, 2018). The Haida Nation opposed the continued operation of the fishery due to concerns over the impacts of the traps on the sensitive benthic ecology in the MPA. Measures were put in place to manage the fishery, including limited entry and limited seasons; however, concerns surrounding the uncertainty of impacts of the fishery persisted (CHN and DFO, 2018). The existence of the



sablefish fishery had stalled the development of the management plan, as the Haida Nation had no appetite for this fishery.

This issue was disputed for several years until 2016, when increased momentum due to a change in minister, reconciliation initiatives, and the reconfirmation of the MCTs in 2015, spurred the resolution process forward. This led to interim management measures, which included fewer fishing trips, at-sea observer coverage, and the implementation of a coral and sponge encounter protocol (CHN and DFO, 2018). As well to address the uncertainty of the impacts of the fishery, the AMB collaborated with the sablefish industry to affix cameras to sablefish traps. The resulting footage provided evidence that the traps were damaging fragile and slow-growing corals and sponges. This resulted in the Crown and Haida Nation agreeing to prohibit all bottom-contact fishing within the MPA, including the sablefish trap fishery.

The sablefish trap fishery dispute was a result of an informalized dispute resolution process. The formal dispute resolution process was available to the SK-B Management Board throughout. Instead, the Board chose to utilize informal resolution processes instead. This occurred through technical working groups that sought to model the problem and develop a joint recommendation to the Board. This working group allowed governance partners and stakeholders to participate in the resolution process while at the same time resolving conflicts that arose due to differences in values and risk tolerance.

There are no foreseeable fishery-based conflicts in SAB. Despite being a key fishery area, SAB contributed less than 5% of total revenue to the licence holders operating in the area (DFO, 2016). As well, the Adaptive Management Zones in SAB (Zones 2, 3, and 4) allow for some amounts of commercial fishing. However, the importance of a formal dispute resolution process for co-governance arrangement should not be underestimated. Formalized dispute resolutions within co-governance agreements provide an alternative less resource intensive path for parties to resolve potential conflicts. Furthermore, as showcased by disagreements and tensions surrounding moderate livelihood fisheries, issues of sovereignty and treaty rights may be a source of conflict. Thus a formalized dispute resolution process supported with informal

strategies would provide crucial benefits for a co-governance arrangement in SAB where a significant power dynamic and capacity differential exists between the Mi'kmaq and DFO.

#### **5.1.6 Principle 6: Transparency supported by timely access to relevant information in appropriate forms**

Transparency and data sharing are critical tenets of the co-governance arrangements in GHNMCA and SK-B. Fair and equitable knowledge sharing is crucial to facilitating the full participation of all parties in co-governance. This principle emphasizes timely access to information, as well as information provided in appropriate forms. Fast and efficient knowledge sharing will ensure that parties are well informed and able to effectively participate in decision making. Furthermore, developing the pathways and relationships required to provide timely access can help to resolve future conflicts. Efficient information sharing in co-governance relies on strong partnerships between all parties, which will have compounding benefits and help governance structures implement all principles of equity.

The second key aspect of this principle is that information and data is provided in appropriate forms. This aspect is synergistic with principles 2 and 3, which recognize different identities, values, Knowledge systems, and institutions, as well as diverse interests, capacities, and powers to influence. Providing information in accessible forms will require parties within co-governance to recognize differences particularly in Knowledge systems and capacity. Since Indigenous Knowledge systems can be fundamentally different from non-Indigenous systems, these differences can act as opportunities for synergy when sharing information. If these differences are recognized, two different knowledge systems can complement each other, emphasizing the strengths of both systems (Ban et al., 2018).

Finally, recognizing the capacity of co-governance partners will ensure that information is shared in appropriate forms. In the context of SAB, due to a history of colonial injustices, Canada has more capacity available for management than the Mi'kmaq. Thus, when sharing information, DFO must ensure that Mi'kmaq capacity is adequately supported to receive and act on the information. This could come in the form of technical support and training to analyze

information, or financial support to allow Mi'kmaw organizations to acquire the human resources necessary to receive information.

Transparency within co-governance structures was identified as important in GHNMCA and SK-B; however, both areas also identified transparency with the public as key objectives. Ensuring the public has adequate access to information about how decisions are made is critical in achieving equitable MPAs (Zafra-Calvo et al., 2019). The same aspects of transparency that should exist within co-governance, should exist toward local Indigenous and non-Indigenous communities. These communities exist as rights and stakeholders to the MPA, and education, outreach, and information-sharing initiatives may benefit their participation in MPA management.

#### **5.1.7 Principle 7: Effective mitigation of any costs to Indigenous peoples and local communities**

Effective mitigation of costs to Indigenous peoples and local communities is a key principle of equity in general MPA management, as these peoples often bear the greatest burdens associated with conservation (Adams et al., 2004). In the GHNMCA and SK-B case studies, this principle was highlighted as intrinsic as these areas are co-governed with Indigenous communities. In MPAs co-governed with Indigenous peoples, this principle is particularly important as it addresses the recognized historical injustices faced by Indigenous communities with a reallocation of burdens. Despite treaties of Peace and Friendship signed at the beginning of relationships with the Mi'kmaq, the Crown implemented policies based in oppression for nearly two centuries. The injustices wrought on Mi'kmaq communities have caused a severe power imbalance between the Crown and Mi'kmaq and reduced their capacity for governance and management. Co-governance agreements should recognize and address this inequity through mitigation of the costs required to effectively participate in governance.

Both GHNMCA and SK-B include statements that aim to mitigate the costs associated with co-governance. Governance and management of MPAs is highly resource intensive. The Gwaii Haanas Marine Agreement and the SK-B MOU both describe contribution agreements in which the Crown supports the activities of the AMB and supports the CHN's participation on the AMB.

As well as supporting participation in governance of the MPA, resources should be provided to facilitate on the ground Indigenous management activities. Providing funding and resources that support Indigenous ecological monitoring and enforcement activities could be further pathways toward the recognition of Indigenous Knowledge as well as facilitating further participation in management. This principle also considers the accessibility of co-governance activities. Joint meetings, workshops, and working groups should consider the accessibility of these initiatives for Indigenous partners. Travel can be costly and non-Indigenous governments should make efforts to meet their Indigenous partners within Indigenous communities. This has several compounding benefits including, allowing non-Indigenous governments to support local communities and economies, supporting on-site engagement, and ensuring that meetings are accessible for Indigenous partners.

The establishment of MPAs can be associated with several costs to local and Indigenous communities. These in addition to the costs associated with co-governance and co-management of an MPA can limit Indigenous participation and intensify existing inequities. If co-governance agreements are to be equitable, these costs should not represent an obstacle for Indigenous communities to effectively participate in co-governance.

#### **5.1.8 Principle 8: Benefits shared equally among relevant actors**

In connection with mitigating costs, comes sharing benefits equally among relevant actors. The aforementioned pathways toward cost mitigation can further be applied in the context of sharing MPA benefits. MPAs have a wide range of ecological benefits, and several cultural as well as socioeconomic benefits. Measures should be taken to ensure that rights and stakeholders can take advantage of the full suite of these benefits.

Initiatives that support sustainable Indigenous lead economic activities within MPAs could also be considered as pathways toward sharing the benefits of conservation. For instance, in GHNMCA, the management plan identifies specific objectives and targets for management to support Haida culture and economy. Specifically, targets within Objective 3.1 “Continue to support a living Haida culture and economy”, identify initiatives to guide Haida use and stewardship in Gwaii Haanas, develop and grow new and existing cultural programs, maintain,

or increase economic opportunities for Haida in the area, and increase the application of Traditional Knowledge. Due to the relative remoteness of St. Anns Bank, many of these initiatives may not be practical in this area; however, they reflect the nature of objectives that co-governance agreements should strive toward. There do exist opportunities to develop sustainable Indigenous economic opportunities in St. Anns Bank in the form of tourism-based strategies. Land-based cultural centres, and similar initiatives that showcase Mi'kmaq culture in Unama'ki and the area around St. Anns Bank could represent valuable economic inflow into the region.

Further opportunities may arise through establishing support and building capacity for Mi'kmaq enforcement and monitoring in SAB. An emerging concept in Canadian conservation management are Indigenous Guardian initiatives. These are community-based stewardship programs that implement traditional and cultural environmental management and monitoring (Reed et al., 2021). Currently, more than 30 Indigenous guardian programs are supported by Environment and Climate Change Canada (Environment and Climate Change Canada, 2021). These initiatives have several benefits including, addressing intergenerational trauma, emphasizing intergenerational knowledge sharing, and re-establishing the human connection with nature (Reed et al., 2021). These programs have also produced significant ecological benefits through the integration of multiple ways of knowing into management (Popp et al., 2020). Voluntary crab fishery closures implemented by coastal Indigenous Guardians in BC have produced significant increases in body size and abundance in closed areas as compared to fished areas (Frid et al., 2016).

Similar programs exist in Haida Gwaii through the Haida Watchmen and CHN Fisheries Guardians. Haida Watchmen were first established in 1981 as an effort to protect cultural sites (CHN and Government of Canada, 2018). In addition to protecting important cultural sites, the program now provides cultural education to visitors (CHN and Government of Canada, 2018). Haida Watchmen also conduct creel surveys and carry out interviews to provide data on recreational fishing activities in Haida Gwaii (CHN, n.d.). This initiative allows the Haida nation to benefit from employment and tourism activities based around GHNMCAs while also contributing to the management objectives of the area. The CHN Fisheries Guardians exist as a joint program between DFO and the CHN (CHN and DFO, 2018). Fisheries Guardians are hired

by the CHN and designated by the Minister of Fisheries through Section 5 of the Fisheries Act and by the CHN (CHN and DFO, 2018). CHN Fisheries Guardians are managed through the Haida Fisheries Program which assesses and reviews all commercial and recreational fisheries in Haida Gwaii. Guardians act as stewards of the inland and marine fisheries in Haida Gwaii and take part in monitoring and compliance programs (CHN and Province of BC, 2015).

An Indigenous Guardian program is already present within the Sipekne'katik First Nation (Environment and Climate Change Canada, 2021). This program is part of a developing province-wide Mi'kmaw Land Guardian Network named Nuki Kelo'tokatijik or Earth Keepers (Dorey, 2020). Drawing on ancient wisdom and traditions, Earth Keepers could act as ecological monitors integrating western science with holistic worldviews. Furthermore, the intimate connection that guardians would have with the community would support outreach and awareness initiatives for the MPA.

A contracted Fishery Guardian program similar to the CHN Fisheries Guardians exists in Newfoundland and Labrador as part of an ongoing arrangement dating back to the 1930's. This program complements the efforts of Fishery Officers to protect inland trout and salmon fisheries (DFO, 2016). Contracted Fishery Guardians are distinct from another program identified as Aboriginal Fishery Guardians (AFGs). AFGs are an element of DFO's Aboriginal Fisheries Strategy (AFS) which began in 1992. The AFS was created in response to the 1990 SCC Sparrow ruling which affirmed the Indigenous right to fish for food, social, and ceremonial (FSC) purposes (DFO, 2012). This program aims to provide a management framework for FSC fisheries, as well as improving the capacity for fisheries management in Indigenous communities. AFGs are funded by the AFS and are given enforcement powers through the *Fisheries Act*; however, these powers exclude search, arrest, and use of force (National Indigenous Fisheries Institute, n.d.). AFGs function primarily to provide management capacity to Indigenous communities for FSC fisheries. Their roles include monitoring and data collection for fishing activities, fisheries, and fish habitats, enforcing communal licence conditions, as well as community engagement and outreach (National Indigenous Fisheries Institute, n.d.).

With a policy framework already in place, the Fisheries Guardian program could be well suited to monitoring and co-governing St. Anns Bank MPA. This program would act as an avenue for DFO to provide funding and capacity support for Mi'kmaw communities. As Aboriginal Fishery Guardians function within their communities, they could provide dual benefits of monitoring and community engagement. This would facilitate the application of Mi'kmaq ecological knowledge and provide a pathway toward Two-Eyed Seeing.

#### **5.1.9 Principle 9: Benefits to present generations do not compromise benefits to future generations**

The last highlighted distributional principle of equity was present in the agreements that outlined the co-governance framework for both GHNMCA and SK-B. Consideration for the benefits of future generations is inherent to Indigenous and non-Indigenous concepts of sustainability (Prosper et al., 2011). The concept of sustainability is not new, it has existed in non-Indigenous management frameworks for decades; however, the Haida and Mi'kmaq have been applying this principle since before the time of colonization. The six Haida ethics mentioned previously, are often compared with principles of the non-Indigenous concept of ecosystem-based management (EBM). EBM is a management framework that promotes conservation and sustainably integrates human uses in the environment (Curtin and Prellezo, 2010). Sustainability is based around harvesting natural resources to meet present needs without compromising the ability to meet future needs to generations, which is highly reflective of Principle 9.

This is quite similar to the Mi'kmaq concept of Netukulimk. This is a complex element of Mi'kmaq culture that comprises Mi'kmaq laws and guides individuals and communities in resource protection and management. This concept guides Mi'kmaq resource management through an emphasis of spiritual connectedness to their lands and waters and accountability. To the Mi'kmaq, Netukulimk is not just a concept to be applied, but rather it is a way of life. This concept pervades all interactions Mi'kmaw fishers have with the environment, decision making, and governance. Netukulimk guides Mi'kmaq harvesters to acquire resources based on their availability, following the dynamic and cyclical flows of the environment.

Netukulimk is well aligned with the foundational principles of MPAs, which include conservation and sustainability. The similarities the concept shares with sustainability, it also shares with Principle 9. These concepts and principles seek to ensure that natural resources and the benefits that they provide are available over long time frames. They rest on beliefs that overexploitation should be avoided, and future human generations should be considered in the present. While the distributional dimension of equity considers the allocation of costs and benefits across rights and stakeholders; this specific principle emphasizes the importance of applying this allocation across generations. Thus, this principle has been highlighted as a key principle of equity in the co-governance of SAB, due to the elements it shares with Netukulimk as well as the Haida ethics. Incorporating Netukulimk and Principle 9 into a co-governance agreement between the Mi'kmaq and DFO is essential to first recognize Indigenous values, knowledge, and culture, and second to ensure that management decisions are equitable across long timescales.

## **5.2 Recommendations**

### **5.2.1 Policy Recommendations**

In addition to recommending the implementation of the highlighted principles of equity, this research has produced three key recommendations for co-governance policy in SAB. First, support for Indigenous Guardians and stewardship initiatives should be implemented in SAB. This would have compounding benefits and could act as an application of several principles of equity. A program which funds Indigenous Guardians could act as a method that recognizes Indigenous Knowledge and values while simultaneously supporting capacity within Indigenous communities to self-govern. As seen in BC, Haida Watchmen and CHN Fisheries Guardians help provide monitoring and enforcement efforts for the protected areas. A Guardian program implemented in SAB would allow Mi'kmaq communities to gain further place-based experience in the region and could support the transfer of knowledge between generations, as well as engaging with local communities. This would further provide economic support to Indigenous communities through increased employment.



The second recommendation for policy is that financial support is provided for Mi'kmaq to participate in a co-governance agreement with DFO. Ensuring that all parties have adequate capacity to influence decision making is a key principle of equity. This would require that differences in capacity and power are recognized, and costs of participation are mitigated effectively. There are several methods that DFO could implement to address this. In addition to financial resources, knowledge-sharing of current research, monitoring, and enforcement activities could provide informational resources to enhance Mi'kmaq participation in co-governance. As well, DFO must ensure that meeting places and times are accessible to Mi'kmaq partners. This recommendation in addition to the first should be gradually implemented as a co-governance agreement is developed. This would provide a gradual transition into an equitable co-governance framework that benefits relationships and establishes resilient channels of communication and information-sharing.

The last recommendation is that the Government of Canada amends existing legislation to allow for a true sharing of power and co-governance. Under current legislation the non-Indigenous authority has the power to make the final decision. While co-governance has won out in practice, this still represents a significant obstacle for an equitable sharing of power. As seen in Haida Gwaii, the Minister of Fisheries can act against the recommendations of a joint decision-making board which led to costly and prolonged judicial procedures. If Canada wants to truly reconcile with First Nations, Canadian legislation must be amended to create a space for true Indigenous sovereignty over their lands and resources. This will not be an easy task, and will require trust from both sides; however, it is a necessary one if the Canadian government seeks to reconcile the historical injustices on Indigenous groups and truly affirm their rights to autonomy, sovereignty, and resources.

### **5.2.2 Future Research**

This research uncovered two areas that may require further investigation. Future research should further investigate the Sablefish fishery dispute in SK-B. This was a prolonged dispute between the Haida Nation and Canada. Importantly, the dispute was resolved using informal measures without requiring the need for a formal dispute resolution process. An investigation of this story may uncover important principles for conflict resolution between Indigenous and non-Indigenous

governments. As this process was informal, there is little publicly available information describing the issue, the resolution process, or the resulting impacts to relationships. This leads to the second recommendation for future research, which is to conduct semi-structured interviews with Indigenous rights holders and non-Indigenous stakeholders in all three study areas. These interviews could provide valuable insight into informalized co-governance practices and fill gaps in the available literature.

## **Chapter 6 – Conclusion**

### **6.1 Limitations**

There is one main limitation for this research. Data was limited to what was publicly available, including peer-reviewed literature, management documents, and co-governance agreements. While it is important to have management and governance principles described in writing, much of the actions and behaviours of practitioners is unwritten. Informal processes, initiatives, and support was not included as data in this study due to its lack of availability. This meant that the study may have only captured principles of equity that were favoured during the time that the analyzed documents were produced. The study would have benefitted from an analysis of unpublished government documents and interviews to further investigate principles of equity. Data from interviews was not collected due to the narrow scope of this study.

### **6.2 Assumptions**

To do this research, two major assumptions were made. First the research methodology assumes that both Gwaii Haanas and SK-B are equitably co-managed. While GHNMCA is often used as a model of co-governance, both sites may not be fully equitable. Equity may certainly have been a consideration during the development of co-governance agreements in GHNMCA and SK-B; however, there is no evidence that it was a primary priority for either party. Again, this assumption could be addressed through interviews with the individuals directly involved in development of co-governance agreements and their implementation. The research further assumes that the objectives, goals, and statements committed to in management documents and agreements were fulfilled, or that practitioners were working toward these commitments. There

is cause for this assumption, as major failures may have resulted in conflicts or disputes that would have been identified by the literature; however, an absence of evidence is not evidence of absence. This does not discount that principles of equity can be learned from the management of either site, but only showcases that further research may elicit increasing depth, detail, and evidence.

### **6.3 Conclusion**

Using two examples in Haida Gwaii, this research has identified nine principles of equity that should be considered when developing a co-governance framework in St. Anns Bank MPA. Indigenous communities have been stewards of their lands and seas from time immemorial. They have a legal and inherent right to self-governance and autonomy. While MPAs can have a wide range of impacts on Indigenous communities, equitable co-governance agreements can seek to reduce these impacts and distribute benefits accordingly. Equity requires us to be aware of the comprehensive social and environmental context when making decisions about resource management. An equitable framework of co-governance will provide compounding benefits and ensure that management decisions are made with our eyes open to context. Co-governance of MPAs is an excellent step toward reconciliation and remediating the infringements they may cause on Indigenous rights. These agreements should not lull the Government of Canada into complacency. The Crown has a self-proclaimed duty and honour to Indigenous peoples; upholding this is not a simple task. It is critical that co-governance arrangements show real, effective, and equitable steps toward including Indigenous communities in decision making.

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