ANKUKAMKUA'TU, 'DOING TREATY': AN ALTERNATIVE FISHERIES GOVERNANCE MODEL FOR MI'KMAQ ABORIGINAL AND TREATY RIGHTS TO FISH IN NOVA SCOTIA

by

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DEDICATION

This work is dedicated to my family
- Levi, Cayden, Big Guy (Levi Jr), Isabel, and Leightonand the Mi'kmaq Nation
"...their Heirs and the Heirs of their Heirs forever" (Treaty of 1752).

TABLE OF CONTENTS

LIST OF TAE	BLES	ix
LIST OF FIG	URES	x
ABSTRACT		xii
LIST OF ABI	BREVIATIONS USED	xiii
ACKNOWLE	DGEMENTS	xiv
CHAPTER 1	INTRODUCTION	1
1.1	Background	1
1.2	Purpose, Objectives and Boundaries of The Research	12
1.3	Theoretical Propositions	15
1.4	The Interdisciplinary Approach, Knowledge Systems, Two-Eyed Seeing and Social Justice	18
1.5	Research Motivation & Positionality	
1.6	Thesis Format	
CHAPTER 2	SETTING THE SCENE	38
2.1	Chapter Overview	
2.2	The Mi'kmaq: Pre-Contact to 1867	
2.3	Legal Landscape	
2.3.1	Mi'kmaw Legal Outcomes	48
2.3.2	Other Case Law Influencing Fisheries Management and Policy	
2.3.3	Summary of Legal Landscape	
2.4	Overview of Fisheries Governance in Nova Scotia	68
2.5	Factors Influencing Governance	73
CHAPTER 3	RESEARCH METHODOLOGY	78
3.1	Scope of the Research Project	78
3.2	Terminology	79
3.3	Theoretical Propositions, and Research Questions	83
3.4	The Research Approach: Two-Eyed Seeing as the Theoretical Framework	85
3.4.1	Education and Experience	87
3.5	Theories as Ways of Understanding Knowledge	
3.5.1	Mi'kmaw Knowledge System as Indigenous Theory	
3.5.2	Constructivism	
3.5.3	Critical Theory	
3.6	Interactive Governance Theory (IGT) as a Theory to Co-Produce Knowledge	
3.6.1	System-to-be-Governed	
3.6.2	Governing System: Governing Modes, Orders & Elements	
3.0	7.2.1 Governing Modes. Hierarchical, Sen-Ooverning & Co-Ooverning	50

_	6.2.2	Orders	
3.	6.2.3	Elements	
3.6.3	Gov	rerning Interactions	104
3.7	Resear	ch Design: Mixed Methods Approach	104
3.7.1		ective Use of Grounded Theory in Case Study Methodology	
3.7.2		ection of Case Studies	
3.8	The Kn	owledge Gathering Process	100
3.8.1		ics Applications & Community Approvals	
3.8.2		ruitment & Purposeful Sampling	
3.8.3		ni-Structured Interviews	
3.8.4		k-top literature review	
2.0			
<i>3.9</i> 3.9.1		analysisa Treatment and Content Analysis: Coding and Categorization	
3.9.2		llytical Strategy: Governability Assessment	
3.9.3		ss-Case Analysis	
3.10		ch Constraints & Limits to Conclusions	
3.10	neseui	CIT CONSTITUTIES & LITTLES to CONCIUSIONS	122
CHAPTER 4	1 MI	KMAW GOVERNING SYSTEMS AND ORGANIZATIONS	125
4.1	Chapte	er Overview	125
4.2	Mi'km	aw Governing Systems	125
4.2.1	San	te' Mawio'mi: The Mi'kmaq Grand Council	125
4.2.2	Mi'l	kmaq First Nation Governments	130
4.2.3	Ass	embly of Nova Scotia Mi'kmaw Chiefs	133
4.2.4	Nat	ive Council of Nova Scotia	135
4.3	Mi'km	aw Organizations	137
4.3.1		ntic Policy Congress of First Nations Chiefs Secretariat	
4.3.2	Kwi	Imu'kw Maw-klusuagn Negotiation Office (KMKNO)	138
4.3.3	Abo	original Aquatic Resources and Oceans Management Organizations	139
4.4	Releva	nce of Mi'kmaw Organizations to Governance of Mi'kmaw Fisheries	142
CHAPTER 5	5 <i>TA</i>	'N TEL-NESTM: AS I UNDERSTAND IT	143
Г 1	Chant	or Overview	1.1
5.1	Chapte	er Overview	144
5.2	-	pants' Perceptions of Challenges	
5.2.1		flicting Relations	
_	2.1.1	Mi'kmaq/Non-Mi'kmaw Fishers	
	2.1.2	Mi'kmaq/DFO	
_	2.1.3	Mi'kmaq/Mi'kmaq	
5.2.2		rginalizing Mi'kmaw Fishers	
5.2.3	-	outing the Legitimacy of the Governing System	
	2.3.1	Input Legitimacy: Inclusion of Rights Holders in Governing Processes	
	2.3.2	Throughput Legitimacy: Extent of Inclusion of the Rights Holders	
	.2.3.3	Output Legitimacy: Perceptions and Acceptance of the Governing Processes	
5.2.4		ring Loss of Mi'kmaq Identity	
5.2.5		ntifying Governing Gaps	
5.2.6 5.2.7		erating Challenges & Gapssiderations for the Development of an Alternative Governance Model	
_	.2.7.1	Mi'kmaq Perspective	
	2.7.1	Federal/Provincial Governing System Perspective	

5.2.7.3	Mixed Perspective	172
5.3 Part	icipants' Perceptions of Opportunities	172
	ddressing Governing Gaps	
	orging a [Treaty] Relationship	
5.3.3 F	ounding Governance on Mi'kmaw Knowledge System	183
	Ising Current Governance Processes	
	nhancing Operations	
5.3.6	Considerations for the Development of an Alternative Governance Model	192
	ceptualizing Mi'kmaq Aboriginal and treaty-Based Fisheries in Nova Scotia	
	Inkukamkewe'l and Mi'kmaw Traditional Governance	
	Inderstanding the Significance of Fisheries to the Mi'kmaq	
	letukulimk: The Mi'kmaw Way of Life	
	⁄li'kmaw Values	
5.4.5 li	mage of the Mi'kmaw Fisheries	206
5.5 Und	erstanding the Challenges as Directives for Governability Assessments	207
CHAPTER 6	RE-AWAKENING THE MI'KMAQ SPIRIT OF RESPONSIBILTIY: A CASE STUDY AS	SSESSING
	BILITY OF MI'KMAQ ATLANTIC SALMON, PLAMU, FISHERY	
6.1 Case	e Study Overview	209
	•	
	oring the Features of the Systems-to-Governed	
	he Natural System-to-be-Governed	
6.2.1.1		
6.2.1.2	1/	
6.2.1.3	,	
6.2.1.4	Vulnerability	
6.2.1.5	Summary of the Features of the Natural System-to-be-Governed	
	he Social Systems-to-be Governed	
6.2.2.1	· I	
	2.1.1 Number and Fisher Organizational Ability	
	2.1.2 Expanding and Competing Stakeholders	
6.2.2.2	i	
6.2.2.3	,	
6.2.2.4	Vulnerability	
6.2.2.5	Summary of the Features of the Social System-to-be-Governed	
6.3 Reco	ommended Mode of Governance Based on the System-to-be-Governed Propertie	s235
6.4 Asse	essing the Performance of the Governing Modes	236
6.4.1 S	afeguarding Provisions of Hierarchical Governing Systems	237
6.4.1.1	Laws, Regulations, & Case Law Governing Atlantic Salmon Fisheries	237
6.4.	1.1.1 Recreational Salmon Fishery	
6.4.	1.1.2 Mi'kmaq Salmon Fisheries	241
6.4.1.2	Policies	247
6.4.1.3		
	Contextualizing Provisions of Self-Governance Modes	254
6.4.3 L	earning and Coordinating Provisions of Co-Governing Modes	255
	essing Governing Interactions	257
6.5.1 N	legotiation	257
6.5.2 C	Consultation	261
	dvisory	
6.5.4 S	ummary of First Order Governing Interactions	269

6.6	Conclu	sion	270
CHAPTEI	R 7 "TH	HE RIGHT TO BE IN THE LIGHT": A CASE STUDY ASSESSING THE GOVERNABILITY	OF
MI'KMA	Q LIVELIH	OOD FISHERY FOR AMERICAN LOBSTER, JAKEJ	273
7.1	Case S	tudy Overview	273
		•	
7.2		ing the Features of the Systems-to-Governed	
	7.2.1.1	Diversity	
	7.2.1.2 7.2.1.3	Complexity Dynamics	
	7.2.1.3	Vulnerability	
	7.2.1.4	Summary of the Features of the Natural System-to-be-Governed	
		Social System-to-be Governed	
7.2	7.2.2.1	Diversity	
	7.2.2.1	Complexity	
	7.2.2.3	Dynamics	
	7.2.2.3	Vulnerability	
	7.2.2.5	Summary of the Features of the Social System-to-be-Governed Properties	
7 2	_	ommended Modes of Governance Based on System-to-be-Governed Properties.	
7.3		ning the Performance of the Governing Modes	
7.3		eguarding Provisions of Hierarchical Governing Systems	
	7.3.1.1	Laws, Regulations, & Case Law Governing Lobster Fisheries	
	7.3.1.1		
	7.3.1.1		
	7.3.1.1		
	7.3.1.1	11	
	7.3.1.2	Laws & Regulations Governing the Sale of Fish and Fish Products	
	7.3.1.3	Policies	
	7.3.1.4 7.3.1.5	Sanctions Summary of the Performance of Hierarchical Modes	
		summary of the Performance of Filerarchical Modestextualizing Provisions of Self-Governing Modes	
7.5	7.3.2.1	Ostrom's Design Principles for Self-Governing Common Pool Resources	
	7.3.2.1	Assessing Sensitivity: Methods of Gathering Information, Making Decisions,	321
	_	ng Cultural Practices, and Addressing Ethical Issues	337
	7.3.2.3	Summary of the Performance of Self-Governing Modes	
		rning and Coordinating Provisions of Co-Governing Modes	
7.4		ning Interactions	
7.4	_	otiation	
7.4		risory	
7.4	I.3 Sun	nmary of Governing Interactions	343
7.5	Conclu	sion	343
CHAPTEI	R 8 <i>TA</i>	'N WEJI-KINU'TMASIAP: CROSS-CASE ANALYSIS	347
8.1	Cross-0	Case Analysis & Identification of Patterns Across the Cases	347
8.2	Compo	arison of the Systems-to-be-Governed	348
8.2	-	nparison of the Natural System-to-be-Governed	
8.2		isiderations for the Natural System-to-be-Governed	
8.2		nparison of the Social System-to-be-Governed	
8.2		isiderations for Governance Mode for the Social-System-to-be-Governed	
0.3			
8.3	compo	arison of the Legitimacy of the Governing Systems	354

8.3.	1 Legitimacy of the Hierarchical Governing Mode	355
8.3.	2 Legitimacy of the Self-Governing Mode	356
8.3.	3 Legitimacy of the Co-Governing Mode	356
8.3.	4 Considerations for Enhancing Legitimacy	357
8.4	Comparison of the Effectiveness of the Governing System	358
8.4.	1 Effectiveness of the Hierarchical Governing Mode	358
8.4.	2 Effectiveness of the Self-Governing Mode	361
8.4.	3 Effectiveness of the Co-Governing Mode	362
8.4.	4 Considerations for Enhancing Effectiveness	362
8.5	Comparison of the Presence and Quality of Governing Interactions	363
8.5.		
8.5.	2 Consultation	365
8.5.	3 Advisory Committee	366
8.5.	4 Considerations for Enhancing Governing Interactions	367
8.6	Reconciling Governance Limits: Justification for an Alternative Governance Model	368
CHAPTER	9 ANKUKAMKUA'TU: DOING TREATY	371
9.1	Chapter Overview	371
9.2	A Proposed Fisheries Governance Model for the Mi'kmaq in Nova Scotia	373
9.2.	1 Meta-Order: Principles and Values Governance Orders	378
9.2.	2 Second Order: Focusing on Institutions of the Mi'kmaw Fisheries Governance Mode	l381
g	3.2.2.1 Second & First Order: Designing the Self-Governing Mi'kmaw District Fisher	
A	Association and Co-Governing Arrangement	
	Design Principle 1A. Clearly Defined Boundaries for Appropriators	
	Design Principle 1B: Resource Boundaries	
	Design Principle 3: Collective Choice Arrangements	
	Design Principle 2B. Congruence of Appropriation and Provisions	
	Design Principle 2A. Congruence with Local Conditions	
-	9.2.2.7 Design Principle 4A: Monitoring Users	
	0.2.2.8 Design Principle 5: Graduated Sanctions	
	Design Principle 4B: Monitoring the Resource	
	Design Principle 6: Conflict Resolution Mechanism	
	Design Principle 7: Minimal Recognition of the Rights to Organize	
	0.2.2.12 Design Principle 8: Nested Enterprises	
	3 Elements of Self-Governing	
	0.2.3.1 Image	
_	0.2.3.2 Instruments	_
9.2.	9.2.3.3 Action	
	<u> </u>	
9.3	Recommendations for Hierarchical Mode	405
9.4	Benefits and Challenges of Doing Treaty, Ankukamkua'tu	407
9.5	Recommended Path Forward: Test the Model	411
CHAPTER	10 CONCLUSION	414
10.1	Thesis Overview	414
10.2	Summary of Research Findings	415
10.3	Assessment of Theoretical Propositions	418

10.4	Refle	ection of Two-Eyed Seeing as a Methodological Tool	422
10.5	Cont	ributions and Applications of the Research	423
10.5		Feasible Path as an Alternative Governance Model	
10.5	5.2	Refinement of Two-Eyed Seeing as the Interdisciplinary Research Framework	424
10.5	5.3	Consideration of Cultural Context Important to IGT	425
10.5	5.4	Potential Implications for Bill C-15 UNDRIP in Canada	426
10.5	5.6	Application of the Model to Other Indigenous Contexts in Canada	427
10.6	Conc	luding Reflection	428
BIBLIOGR	АРНҮ.		432
APPENDIX	ΚA	Mi'kmaw Ethics Watch Approval Letter	470
APPENDIX	КВ	Dalhousie University Research Ethics Board Approval Letter	471
APPENDIX	кс	Interview Guides	472

LIST OF TABLES

Table 1	Demographics and number of individuals interviewed from each of the interviewee categories	115
Table 2	Governability assessment framework	120
Table 3	Population breakdown for Mi'kmaq First Nations in Nova Scotia	132
Table 4	Participants' perceptions of challenges showing frequency of focus codes	145
Table 5	Participants' perceptions of challenges showing frequency of focus codes	173
Table 6	Participants' suggestions for incorporating Mi'kmaq traditional governance approaches	200
Table 7	Breakdown of sub-category into focus codes	202
Table 8	Examples of Mi'kmaw traditional fishing practices	204
Table 9	Mi'kmaw values identified by participants	205
Table 10	Summary of the capacity of current First Nations as self-governing organizations to contextualize to meet the demands of the Mi'kmaw livelihood lobster fishery using Ostrom's design principles of CPR Institutions	322
Table 11	Summary of the sensitivity analysis of two community-driven lobster livelihood fisheries management plans	332
Table 12	Modified design principles	384
Table 13	TACIRIE' procedural principles	401

LIST OF FIGURES

Figure 1	Illustration of Two-Eyed Seeing as the interdisciplinary and social justice research framework	28
Figure 2	Map of Mi'kma'ki	41
Figure 3	Administrative regions of the Department of Fisheries and Oceans	69
Figure 4	Conceptualization of the governability framework for a societal system based on interactive governance theory (IGT)	96
Figure 5	The research design using governability assessments as case study research approaches	122
Figure 6	Summary of participants' perceptions of challenges as theoretical codes	170
Figure 7	Summary of participants' perceptions of opportunities as theoretical codes	193
Figure 8	Atlantic Salmon populations in the Maritimes Region based on designatable units (DU)	214
Figure 9	Range and distribution of Atlantic salmon in the North Atlantic Ocean	214
Figure 10	Salmon life cycle	216
Figure 11	Location of marine aquaculture	225
Figure 12	Nova Scotia salmon fishing area	240
Figure 13	Illustration of current governance of Atlantic Salmon in Nova Scotia	270
Figure 14	Distribution of American lobster in North America	279
Figure 15	Lobster fishing management areas in Canada	285
Figure 16	Proposed Mi'kmaq Governance Model for Mi'kmaq Aboriginal and treaty rights to fish displayed according to the governance order	375
Figure 17	Suggested structure for Mi'kmaq Inherent and Treaty Self-Governing Association	390

Figure 18	Suggested structure for co-governing arrangement for species of	
	high vulnerability	391

ABSTRACT

Despite the recognition of the Aboriginal and treaty right to fish, little movement toward enhancing governance occurred that respected the authority of both the Mi'kmaq in Nova Scotia and the Department of Fisheries and Oceans as a federal regulator of fisheries in Canada. Using a Two-Eyed Seeing research framework underpinned by Constructivist Grounded Theory, three perspectives of Mi'kmaq, Mixed, and Federal/Provincial were derived from interviews. A case study approach underpinned by Interactive Governance Theory and a social justice lens was used to assess the governability of the Aboriginal right to fish for salmon in Nova Scotia and the treaty right to fish for lobster for a moderate livelihood. The outcome of the research indicated that challenges faced by three perspectives were conflicting relations, disputing the legitimacy of the governing system, marginalizing Mi'kmaw fishers, identifying governance gaps, fearing loss of Mi'kmaw identity, and operating challenges and gaps. Based on the governability assessments, all three modes of governance – hierarchical, self-, and co-governing - were necessary to improve effectiveness and legitimacy of current fisheries governance. Using the categories of opportunities, forging a treaty relationship, founding governance on the Mi'kmaw knowledge system, using current processes, addressing governance gaps, and enhancing operations, and the results of the governability assessment, an alternative fisheries governance model for Mi'kmaq Aboriginal and treaty rights was developed. To improve the governance of Mi'kmaq Aboriginal and treaty fisheries in Nova Scotia, the model calls for 1) establishing a Mi'kmaw district-based self-governing fisher association with appropriate disciplinary tribunal with authority to act independent of Mi'kmaq First Nations; 2) establishing co-governing mode between the self-governing fisher association and DFO with responsibility delegated to the co-governing unit; 3) enhancing interactions between the Mi'kmaw fishers, the state, and industry using Two-Eyed Seeing forums; and 4) establishing relevant policies for Indigenous fisheries that take into consideration the treaty right to fish for a moderate livelihood. Contributions from the research suggest that IGT is a useful theory to examine governability, however, alterations to the predictive component of the features of the system-to-be-governed are needed to address legal pluralism arising from s.35 and s.52 of the Constitution Act.

LIST OF ABBREVIATIONS USED

AAROM Aboriginal Aquatic Resources and Oceans Management

ACFLR Aboriginal Communal Fishing Licences Regulations

ANSMC Assembly of Nova Scotia Mi'kmaw Chiefs

APC Atlantic Policy Congress

AFS Aboriginal Fisheries Strategy

CGT Constructivist Grounded Theory

CHP Conservation Harvest Plan

DFO Department of Fisheries and Oceans

FSC Food, Social, and Ceremonial

IFMP Integrated Fisheries Management Plan

IGT Interactive Governance Theory

KMKNO Kwilmu'kw Maw-klusuaqn Negotiations Office

MCG Mi'kmaw Conservation Group

NCNS Native Council of Nova Scotia

NSFA Nova Scotia Fisheries and Aquaculture

OLA Office of L'nu Affairs

RRA Rights Reconciliation Agreement

SARA Species at Risk Act

TOR Terms of Reference

UINR Unama'ki Institute of Natural Resources

UNDRIP United Nations Declaration on the Rights of Indigenous People

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CHAPTER 1 INTRODUCTION

1.1 BACKGROUND

Throughout Mother Earth, fisheries are a source of sustenance, economic opportunities, identity, and a source of conflict between those who depend on fishes as part of their identity, and ultimately as a source of livelihood (Cooke & Murchie, 2015; Denny & Fanning, 2016a; King, 2011). Within the geographical boundaries of what is now known as Canada, fisheries are becoming synonymous with the resurgence of Indigenous governance as Indigenous peoples assert authority, through solidarity, to both access and protect fisheries and aquatic resources using their own ways, laws, and political and intellectual traditions (von der Porten, Corntassel, & Mucina, 2019; von der Porten, Ota, Cisneros-Montemayor & Pictou, 2019). The concept of resurgence is apt given the long history of despotism of Indigenous peoples through Canadian legislation and regulations intended to divide, control, assimilate and even eliminate, Indigenous peoples (Palmater, 2014; Paul, 2006).

Without their consent and ignoring treaty obligations (Henderson, 1994), the governance of Indigenous peoples became the responsibility of Canada in 1867 and the lands reserved for them were deemed the exclusive legislative authority of the Parliament of Canada (s. 91(24) BNA, 1867). Many of the national policies regarding their governance became consolidated into the *Indian Act* administered by the Department of Indian Affairs. *The Indian Act* displaced cultural forms of governance with electoral processes, divided nations into communities as First Nations and reserves, created residential schools, outlawed cultural practices, discriminated against women and their children,

excluded Indigenous peoples from economic prosperity (Battiste, 2008; Paul, 2006) and created social division (Huber, 2009; Palmater, 2000). Currently, the *Indian Act* reinforces community autonomy as legal entities recognized by the Government of Canada, however, the Mi'kmaq Grand Council did not surrender their sovereignty nor their land (Henderson, 1997; 2016; McMillan & Prosper, 2016). Similarly, the creation of the *Fisheries Act* in 1868 not only outlawed the Indigenous way of life, but it also empowered the minister of fisheries as the sole decision-maker for fisheries resources. Furthermore, the creation of the *Fisheries Act* privileged individuals owning vessels thus effectively eliminated Indigenous fishers from the fishery (McGraw, 2003).

In Canada, managing fisheries for sustainability is a desired goal but one that is difficult to achieve considering climate change and the governance regime impacting effective management. Threats to the sustainability of fisheries globally are numerous but, as reflected by Costello and Ovando (2019, p. 196), there is a relationship between fisheries that are in good health versus those that are in poor health, and how well they adapt to climate change,

...climate change and lack of governance are likely to be the two most dramatic.

These interact because well-managed fisheries can be climate-resilient, and poorly-managed fisheries can be devastated by climate change. Available evidence suggests that good governance...is probably the best way for a country to insure against the negative effects of climate change on its fisheries.

Based on statement above, governance has a pivotal role in the effective management and of sustainability of fisheries and the people who rely on them, including Indigenous peoples.

Current fisheries governance in Canada is based on western epistemology that relies heavily on single sector and single species assessments to inform decision-making (Holling, 2001). Generally, such decision-making is hierarchical, 'command and control', and paternalistic (Fanning, Mahon, & McConney, 2011). Alternate models of governance that not only contribute to more effective fisheries management but are better suited to address and adapt uncertainties arising from climate change are needed (Lee et al., 2019; Marushka et al., 2019; Young et al., 2018). Specifically with regards to fisheries, the development of alternative governance models is a research gap that has been identified in fisheries management (Bundy, Chuenpagdee, Jentoft, & Mahon, 2008; Campbell & Salagrama, 2000; FAO, 2009). However, and as a response to Indigenous resurgences, alternative governance models are needed that reflect legal obligations of the Crown to Indigenous peoples while understanding the importance of fisheries nationally, provincially, and locally and the socio-economic significance of fishes to Indigenous peoples. Clearly, this is a difficult challenge when Indigenous peoples are unjustly excluded from accessing fisheries resources, participating in fisheries governance, and prosecuted for participating in fisheries that are integral to Indigenous identity that are in decline due to overexploitation (von der Porten, et al., 2019).

In Canada, alternative models are needed that promote and integrate Indigenous sovereignty and the elevated legal position of Indigenous people recognized in the Canadian Constitution, treaties, jurisprudence, and international law. As legal scholar Stacey (2018, p. 683) explains, the recognition of Aboriginal and treaty rights in s.35 of the *Constitution Act* (1982) is the "emergence of sovereignty as a central element of s 35 rights" and the understanding that the Crown must act in a fiduciary manner with respect to Aboriginal peoples,

The Crown's assertion of sovereignty prevented Indigenous nations from exercising their pre-existing political sovereignty, even if it did not formally extinguish it. It follows that the honour of the Crown requires it, perhaps among other things, to make room for the exercise of residual, unextinguished Indigenous sovereignty. (Stacey, 2018, p.684).

Addressing outstanding issues of unextinguished Indigenous sovereignty requires making room for another governing authority, or authorities as Indigenous self-governments.

Canada has yet to reconcile current Canadian federalism with rightful recognition of Indigenous self-governments as the founding nations and cultures (Macklem, 2016; Stacey, 2018). Yet, sovereignty isn't meant to be granted by Canada. As noted by scholars Palmater (2014) and Poelzer & Coates (2015), sovereignty and the right of self-government rests with the assertion of Indigenous sovereignty by Indigenous peoples.

Webber (2016), in his attempt to shed light into the terminology surrounding sovereignty, described one of the four concepts surrounding sovereignty as the law and rights to self-government that originate from Indigenous traditions. Here, notions of sovereignty are more closely aligned with Indigenous actions of "grounding of governmental authority in

one's own institutions and traditions" and recognizes the powers of both Indigenous and non-Indigenous sources (Webber, 2016, p.82). Importantly, he argues this concept of sovereignty is most closely aligned with Indigenous views of sovereignty and one that can be achieved without having full decision-making authority, full statehood, or a statelike structure of authority.

Within Canada, fisheries are segregated as commercial, recreational, and in 1990 and upon recognition of the Aboriginal right to fish for food, social and ceremonial needs (R. v. Denny, 1990; R. v. Sparrow, 1990), another category of fisheries emerged in Canadian law – Aboriginal fisheries. The recognition of the Aboriginal right to fish for food, social, and ceremonial needs is the Canadian Supreme Court's interpretation of how fish as a resource fulfils the needs of Indigenous peoples and if, and when, legislation can interfere with an existing Aboriginal right (R. v. Sparrow, 1990). The Supreme Court of Canada's interpretation also extends to whether claims to Aboriginal rights are those practices, customs and traditions that were integral to the culture prior to contact (R. v. Van der *Peet*, 1996, para 59-60). This 'frozen in time' perception of Aboriginal rights has expanded to include a generic range of rights that are to be afforded the full range of modern interests of both Aboriginal and non-Aboriginal interests (Slattery, 2016). Slattery (2016) provides a tentative list of what he refers to as generic Aboriginal rights based on "the current state of jurisprudence." (p. 105). The list includes the rights to an ancestral territory, cultural integrity, conclude treaties, customary law, honorable treatment of the Crown and the right to self-government (Slattery, 2016). The term 'inherent' is often used with 'Aboriginal' as in 'inherent Aboriginal right' or as 'inherent

right' as it recognizes the historical and cultural significance of fishing to Mi'kmaq existence prior to colonization and during colonization, and the role of Mi'kmaq peoples as self-governing through their own laws and powers within their traditional jurisdictions (Battiste, 2016; Henderson, 1994). While many Mi'kmaq and Indigenous peoples alike prefer the use of the term 'inherent' to describe their historical, cultural, and legal connection to traditional territories, I will refer to the current Canadian legal reference to the Aboriginal right to be synonymous to the inherent right.

In contrast to Aboriginal rights that are based on historical occupancy and governed through Indigenous customary law, treaty rights are negotiated between two nations or multiple nations. Both Aboriginal and treaty rights have the ability to "constrain the exercise of legislative authority" (Macklem, 2016, p. 27; Slattery, 2016). This constraint is legal pluralism and occurs when s. 35 is read with s. 52 of the *Constitution Act* (1982) which states that "any law that is inconsistent with the provisions of the Constitution is of no force or effect." As such, and as tested in the Supreme Court of Canada via the *Sparrow* decision (1990), federal and provincial laws have limited application to Aboriginal rights (Henderson, 1994; *R. v. Sparrow*, 1990). The same applies to treaty rights where "The prerogative treaties recognized and empowered the dual legal systems and mutual rights of self-determination. This was a first principle of treaty federalism." (Henderson, 1994, p. 252). Summarized as the application of law differently to the same actors in the same jurisdiction (Bavinck & Gupta, 2014), legal pluralism implies challenges for abiding by law, as treaty federalism united independent First Nations

under one Crown, *but not under one law* (Henderson, 1994 p. 252, emphasis is original).

As Henderson (1994, p. 269) summarized,

By any normal rule of law and by section 35(1) of the Constitution Act, 1982, each Aboriginal nation and the Crown is bound only by what it has agreed to in the treaties. They are not bound to unwritten customary law, to written constitutional norms or to imposed domestic law of each party. The treaty delegations to the Crown established the limits of Parliament and of the legislative assemblies. Additionally, the promises and terms of the treaties created a fiduciary duty in the Crown to protect the right of Aboriginal self-determination.

Importantly, legal pluralism also implies the ability to make law (Kleinhous & MacDonald, 1997 in Macklem, 2016). Reconciling Indigenous sovereignty requires amendments to the *Constitution Act* (Stacey, 2018). Macklem (2016, p. 33) contends,

For the ethos of legal pluralism to restart animating relations between Indigenous peoples and Canada, constitutional recognition of Indigenous governments sovereign within their spheres of authority, capable of exercising exclusive and concurrent law-making powers formally equivalent to their federal and provincial counterparts, would need to occur, ...

This, however, is not to say that legal pluralism and the elevated legal position of Indigenous peoples in the *Constitution Act* cannot be used to advance the governance of Indigenous fisheries in the interim, or that Indigenous self-governance cannot be realized within the context of natural resources, including fisheries, by creating another governance model built on a foundation of recognized sovereignties, thus animating relations between Indigenous peoples and Canada and grounding governance in

Indigenous institutions and traditions. While it is important to have legal support underpinning change, such as s.35 of the *Constitution Act* (1982) as thrust for recognition and reconciliation, change is anthropogenic. Change comes from political and societal agency. This includes Indigenous peoples' capacity to "resurrect Indigenous legal norms" (Macklem, 2016, p. 34). Thus, Indigenous peoples' agency is, in fact, as important as a Constitutional amendment to develop their own form, or forms, of governance in their quest to be recognized as sovereign.

Governance, as I have come to learn, is not synonymous with government or law. While many equate governance to government, and more specifically to the role of law in government, governance, however, is "the capacity to get things done without necessarily having the legal competence to command that they be done" (Czempeil, 1992). Herein lies the opportunity for innovation and revitalization of concepts of shared sovereignty between Canada and the Mi'kmaq, the use of political and societal will, and the current legal framework for improving current governance, especially through learning and developing new approaches (Bavinck & Gupta, 2014). For Canada, this is of increasing importance given the June 21, 2021 assent of the *United Nations Declaration on the Rights of Indigenous Peoples Act*¹ into Canadian law.

The *United Nations Declaration on the Rights of Indigenous Peoples Act* commits the Government of Canada to the tall order of developing an action plan to implement the

¹ See Implementing the United Nations Declaration on the Rights of Indigenous Peoples in Canada https://www.justice.gc.ca/eng/declaration/index.html

objectives of the Declaration in consultation and cooperation with Indigenous peoples. The order includes ensuring the laws of Canada are consistent with the Declaration, prepare and implement an action plan to achieve the Declaration's objectives, address injustices, prejudice and eliminate all forms of violence, racism and discrimination against Indigenous peoples, promote relations, and create forms of accountability for Canada to report on its progress on the action plan. Admittedly, the Department of Justice² (2021, p. 4), in the context of fisheries, states

While the *Act* itself does not immediately change any operations, policies, or laws related to the Department of Fisheries and Oceans or the Canadian Coast Guard, implementing the Declaration means building off our current processes, partnerships, and collaborative arrangements with Indigenous peoples to look for other ways in which we can work together on key fisheries and aquatic resource issues in a manner that gives a voice to the Declaration.

As such, having well established processes, partnerships, and collaborative arrangements, in other words improved governance, between Indigenous peoples and the Department of Fisheries and Oceans (DFO), and more broadly with the Government of Canada, may facilitate cooperative efforts to implement the Declaration. Despite the recognition of Aboriginal and treaty rights, Canada, through its Department of Fisheries & Oceans, is only just consulting with the Mi'kmaq peoples on matters related to fisheries and marine governance in the past decade (Denny & Fanning, 2016a).

https://www.justice.gc.ca/eng/declaration/about-apropos.pdf

9

² See United Nations Declaration on The Rights of Indigenous Peoples Act

Underpinning poor government–Mi'kmaw relations and poor settler-Mi'kmaw relations are the lack of recognition of Mi'kmaq sovereignty by Canada and legal pluralism which, ironically, reinforces Mi'kmaq sovereignty. Legal pluralism on its own creates governance challenges such as incoherence, power struggles over access, competition, and social conflict in fisheries (Bavinck & Gupta, 2014). The lack of a mutually beneficial governance approach or approaches that reflect the Indigenous sovereignty and the elevated legal position of Indigenous peoples in Canada's Constitution Act (1982) are noted (Coates, 2003; Ladner, 2005; Wiber & Milley, 2007; Bavinck & Gupta, 2014; McMillan & Prosper, 2016; Stacey, 2018). Presently, efforts are on-going between the Mi'kmaq of Nova Scotia and federal and provincial governments to negotiate the terms for which a moderate livelihood fishery can occur - one that fulfills conservation, economic benefits, and cultural requirements for consumption, communal needs, spirituality, and the recognition of Mi'kmaw sovereignty. While much of the political and societal focus has been the need to define the 'moderate' of a moderate livelihood, the larger issue of how to govern the treaty right to fish for a moderate livelihood prevail, regardless of whether a monetary value of moderate is indeed defined (Fanning & Denny, 2020).

The implementation of Mi'kmaq Aboriginal and treaty rights to fish will be challenging in today's overfished fish populations, threat of climate change to marine ecosystems and the current governance framework that both denies Mi'kmaq sovereignty and lacks effective processes to address legal pluralism. Only 24% of Canadian marine fish and invertebrate stocks are considered healthy. Legislation intended to protect species

(Species at Risk Act, 2002) is under-utilized and the status of many fisheries stock are still unknown yet continue to be exploited (Baum & Fuller, 2016). As evidenced in the collapse of the cod fishery, the current governance framework fails to respond timely to declining stocks with appropriate governance modes (Fanning, 2000). The question then becomes how best to govern Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia when the current mode of fisheries governance is not only mismatched to the task but denies the rightful recognition of Mi'kmaq sovereignty.

This research project is part of a larger, pan-Canadian project that looks at understanding western and Indigenous knowledge systems and explores how the different processes by which knowledge is acquired, transmitted and used can be harnessed to enhance Canadian fisheries policy and decision making. Funded by the Social Sciences and Humanities Research Council (SSHRC), the participatory research project aims to identify the commonalities and differences in Indigenous knowledge systems in four distinct, Indigenous coastal communities across Canada's three coasts. The project also seeks to understand how Indigenous and western knowledge systems can be used to improve the sustainability of fisheries in Canada. The research focus in Atlantic Canada is to identify and address the fisheries governance needs of the Mi'kmaq in Nova Scotia. It is under the umbrella of Fish-WIKS that the research need was identified by community leadership and advisors and subsequently addressed through this research.

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³ For more information on Fish-WIKS, please refer to https://www.dal.ca/sites/fishwiks.html.

1.2 Purpose, Objectives and Boundaries of The Research

The purpose of this research is to reconcile current challenges surrounding the development, implementation, and governance of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. By exploring the interface between Western and Mi'kmaw⁴ Knowledge systems and current fisheries governance, the goal of the research is to develop an alternative fisheries governance model that allows for the successful governance of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia while understanding there are larger issues at play in Canada. Specifically, the recognition of Indigenous sovereignty that requires amending the Canadian Constitution to legalize the distribution of authority and jurisdiction to Indigenous nations, including the Mi'kmaq (Henderson, 1994; Macklem, 2016; Slattery, 2016).

Using the recommended social science approaches for studying processes or interactions and enhancing understanding of events in context (Creswell, 2013), the study intends to answer the overarching research question, *how can Mi'kmaq Aboriginal and treaty rights to fish be governed in Nova Scotia*? The study serves to deepen our understanding of the potential and experiential opportunities for, and challenges faced by the Mi'kmaq, federal and provincial governing institutions when implementing Mi'kmaq Aboriginal and treaty rights to fish for a moderate livelihood. Using Western and Indigenous knowledge

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⁴ Mi'kmaq and Mi'kmaw are often used interchangeably. Mi'kmaq is the plural of Mi'kmaw and thus refers to more than one, or to the nation as a whole. Mi'kmaw can also be used as the adjective for example Mi'kmaw fisheries or Mi'kmaw nation. https://novascotia.ca/abor/docs/links/Use-of-Words.pdf

systems for the benefit of all as an approach for the research, referred to as Two-Eyed Seeing (Bartlett, Marshall, & Marshall, 2012), the objectives of the research are to:

- describe Mi'kmaq fisheries based on the Aboriginal and treaty rights to fish in Nova Scotia from the perspective of the Mi'kmaq in Nova Scotia;
- identify the opportunities and challenges to current governance (federal, provincial, Mi'kmaq) that both facilitate and hinder implementation of Mi'kmaq Aboriginal and treaty rights to fish (*R. v. Sparrow*, 1990; *R. v. Marshall*, 1999) in Nova Scotia, using a case study research approach that examines two concurrent fisheries undertaken by Mi'kmaq in Nova Scotia; and
- supported by the understanding of Two-Eyed Seeing, recommend an alternative fisheries governance model that addresses current governance limits to successfully govern Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia.

The proposed outcome is to develop an alternative fisheries governance model based on historical and current legal and political landscapes. While recognizing there are challenges created by more than a century of systemic racism embedded in current legislation that prevents a true Mi'kmaq sovereign governing regime within Canada at present, there are limitations to what the research can address within the scope of the research question. The first, the focus of the research is limited to the current *Indian Act* (1985) definition of Mi'kmaq citizenship as Indian Status and consequently membership to autonomous entities created and administered through the *Indian Act* (1985). The *Indian Act* (1985) is the legal mechanism that continues to create challenges by imposing identities on Aboriginal peoples yet excluding Aboriginal peoples based on blood quantum which do not reflect cultural identities (Palmater, 2009). While there are current

efforts to redefine Mi'kmag citizenship in communities such as Membertou First Nation⁵ to reflect what it means to be Mi'kmaq beyond blood quantum, these processes are not yet complete. Given the absence of completed processes for determining Mi'kmaq citizenship in Nova Scotia beyond the *Indian Act*, I will use the definition of Mi'kmaq as individuals who are the beneficiaries of Aboriginal and treaty rights as those who are status Indians under s. 6(1) and 6(2) of the *Indian Act* (1985) and registered with a Mi'kmaq band regardless of whether they live in Mi'kmaw communities or off-reserve, or in urban environments. Second, I will refrain from including communal commercial fisheries currently undertaken by Mi'kmaw communities as a fishery based on Aboriginal and/or treaty rights. These fisheries operate under an agreement with DFO regime and in concert with the commercial industry, although the mechanisms for authorization and policies differ. As these fisheries are not based on an Aboriginal or treaty right, asserted by individuals, governed by communities, or incorporate Mi'kmaw governance or fishing strategies, they will not be the focus of the research. As such, references to the fisheries undertaken through the exercise of Aboriginal and treaty rights to fish in Nova Scotia excludes the communal commercial fisheries. Lastly, the thesis focuses on identifying the challenges and opportunities facing the Mi'kmaq food, social and ceremonial needs (FSC) and livelihood fisheries in Nova Scotia in order to contribute a feasible approach for an alternative fisheries governance model. To that end, the thesis addresses Mi'kmaq Nation sovereignty, authority, jurisdiction and governance over territory and fisheries based on Mi'kmaw laws and powers to the extent that is relevant to the research focus. It

⁵ Membertou First Nation's code is currently in development (Cheryl Knockwood, pers. comm.)

is not the intent of this thesis to conduct a thorough analysis of these issues but rather to ensure that these important elements are recognized and set the context as needed for this research.

1.3 THEORETICAL PROPOSITIONS

Given the focus of this research is based in a complex historical, cultural, and legal context that, until 1982, disregarded the rights of the Indigenous peoples, solving governance issues requires an understanding of the potential and experiential opportunities for, and challenges faced by the Mi'kmaq, federal and provincial governing institutions when implementing Mi'kmaq Aboriginal and treaty rights-based fisheries for a moderate livelihood. Thus, a theory guiding insight into governance that recognizes the importance of social justice issues and subsequent effectiveness of fisheries governance was deemed necessary to underpin the research. While untested within a Mi'kmaw context, Interactive Governance Theory (IGT) was identified to be most appropriate for exploring an alternative governance model for the Mi'kmaq Aboriginal and treaty rights to fish as it focuses on three recognized modes or styles of governing as hierarchical, cogoverning, and self-governing and the need to consider the appropriateness of each mode in order to achieve effective governance (Kooiman, Bavinck, Jentoft, & Pullin, 2005). Furthermore, IGT does not "assume parity, equity, and justice" and the need to improve governability may require a shift in power relations (Jentoft & Chuenpagdee, 2015, p. 729). Described as a combinatory theory, IGT provides a broad theoretical framework that attempts to focus on understanding the functionality of social and environmental interdependence (Partelow et al., 2020), including the investigation of the role of power as it enables and restricts governance functions (Jentoft & Chuenpagdee, 2015).

Furthermore, IGT is problem focused, centers learning as an important feature, and provides an analytical framework for assessing and improving the overall capacity for governance, referred to as governability (Kooiman, Bavinck, Chuenpagdee, Mahon, & Pullin, 2008; Partelow et al., 2020). To do this, IGT focuses attention on examining the compatibility between the governing system and the system-to-be-governed, where the degree of compatibility determines the governability of the systems, understood as the overall capacity for a system to be governed (Kooiman, Bavinck, Jentoft, & Pullin, 2005). Capacity itself is dependent on whether the governing system can act as enforcer and hold those being governed accountable (Jentoft & Chuenpadgee, 2015). In other words, whether the governing system has the power and legitimacy to make governance effective. Contributing to governability are the system properties of those that govern (the governing system), the system-to-be-governed (both natural and social systems), and the nature of interactions between the governing system and the system-to-be-governed. Within each of the components, an examination of power and power relations must also be examined.

Governability, however, is contextual. What may be high governability at a given time or place may be low governability at another; what may be effective governance at one place may be ineffective at another. The interactive governance approach assumes that the conditions of governability of any system is continuously changing in response to external and internal factors. As the context of the research is dependent on evolving Aboriginal law and Supreme Court case outcomes as Aboriginal and treaty rights continue to be tested under Constitutional law, it is conceivable that the current

governance of Canadian fisheries is not adequate for fisheries undertaken through the exercise of Aboriginal and treaty rights. Additionally, proponents of IGT have noted that structures limit or widen agency through frameworks such as culture, law, or agreements (Kooiman & Chuenpagdee, 2005), as well as those arising from ecological uncertainty and power relations (Chuenpagdee & Jentoft, 2009; Jentoft, 2007; Kooiman, Bavinck, Chuenpagdee, Mahon, & Pullin, 2008; Jentoft & Chuenpagdee, 2015). Based on the compatibility of IGT to social justice frameworks, IGT not only can provide a means to examine governability but provide where to look and what to look for when governance challenges and low governability arise due to social justice issues.

Guided by IGT and an understanding of the current governance context surrounding Mi'kmaw fisheries decision making, the following propositions provide the theoretical underpinning for the research:

- 1. The homogeneity of the western governance bureaucratic theoretical model seems at odds with the Mi'kmaw knowledge systems;
- 2. Understanding the challenges and opportunities arising from the interplay of these different knowledge systems can lead to mutually beneficial outcomes for both parties, including the effective management of the fisheries; and
- 3. Implementing a self-governing arrangement for Mi'kmaq Aboriginal and treaty rights to fish is more likely to be successful using values and beliefs from both Western and Mi'kmaw knowledge systems and addressing issues of social justice such as marginalization, equality, and representation.

The question of, how can Mi'kmaq Aboriginal and treaty rights to fish be governed in Nova Scotia, is addressed by assessing the governability of current Mi'kmaw fisheries as an expression of Aboriginal and treaty rights. Within the governability concept, the system properties of diversity, complexity, dynamics and vulnerability cannot be resolved unilaterally (Chuenpagdee & Jentoft, 2015; Jentoft & Chuenpagdee, 2015). Instead, according to IGT, understanding these properties of the natural and social system-to begoverned lends itself to identifying more suitable modes of governing (Jentoft & Chuenpagdee, 2015). For this reason, finding more suitable modes of governance can empower small scale fishers, enhance representation, and reduce marginalization, improve governability and address social inequalities. By understanding the challenges and opportunities that exist among institutions, the quality of interactions among governing actors, and the degree of fit between the mode of the governing system to the system-to-be- governed, the validity of the assumptions underlying the above three propositions can be tested. This task requires an interdisciplinary approach underpinned by a social justice framework to integrate the relevant disciplines needed to create a common understanding and innovative solutions to the task at hand (Repko, Szostak, & Buchberger, 2016), and for enhancing governability (Chuenpagdee & Jentoft, 2015).

1.4 THE INTERDISCIPLINARY APPROACH, KNOWLEDGE SYSTEMS, TWO-EYED SEEING AND SOCIAL JUSTICE

Interdisciplinary approaches are broadly defined as those that integrate more than one discipline and methodology to create new knowledge necessary for solving complex problems where single discipline approaches are not equipped (Repko, 2008). As such, Interdisciplinary studies are

a process of answering a question, solving a problem, or addressing a topic that is too broad or complex to be dealt with adequately by a single discipline and draws on disciplinary perspectives and integrates their insights to produce a more comprehensive understanding or cognitive advancement (Repko, 2008, p. 12).

The interdisciplinary approach encompasses several aspects:

- (i) disciplines as the foundation of the knowledges;
- (ii) the 'contested space', as the area of disagreement, between disciplines; and
- (iii) the action taken on those insights, referred to as integration.

Taken collectively, these create a newer and enhanced understanding of the problem or solution to the problem, when compared with a disciplinary approach (Repko, 2008).

Interdisciplinary approaches are often confused with or considered as multi-disciplinary approaches; however, they are not synonymous. Although both are concerned with multiple disciplines, the difference lies in how the resulting new knowledge is produced. For example, multi-disciplinary approaches integrate knowledges from the results of several separate disciplines at the end, whereas interdisciplinary approaches integrate epistemologies and methodologies throughout the research process, i.e. from beginning to end (Raymond, Fazey, Reed, Stringer, Robinson & Evely, 2010).

The application of interdisciplinary approaches is not new to governance research and they are, in fact, interdependent (Edelenbos & van Meerkerk, 2016). As an inherently complex issue, governance research involves more than one discipline and methodology as the standard for enhancing understanding of, and responding to, the complexities

within the realm of natural and environmental governance (Jentoft & Chuenpagdee, 2009; Repko et al., 2016). Such is the case for fisheries governance. For example, fisheries policy-related research requires an approach to integrate multiple disciplines with the expertise of industry and stakeholders for an enhanced understanding and insight (Phillipson & Symes, 2013; Repko, 2008). Furthermore, as current fisheries paradigms have approached their utility, they are shifting toward more decentralized forms that recognize the need for inclusion of a wider pool of expertise. Interdisciplinary approaches offer the opportunity for something new through the integration of insights that would not be possible in single disciplinary methods yet rely on well-established disciplines as the foundation of its approaches (Phillipson & Symes, 2013; Raymond et al., 2010; Repko, 2008). The assumptions of an interdisciplinary approach are:

- Reflects real-world challenges and opportunities that is currently beyond the scope of disciplines;
- 2) Disciplines are the foundation for interdisciplinary studies;
- 3) Single disciplines are inadequate to address complex problems;
- 4) Interdisciplinarity offers the ability to reveal more of the reality; and finally,
- 5) Integrating insights will produce new knowledge that would not be possible in single disciplinary methods (Repko, 2008).

Governance theory also recognizes the challenges associated with single disciplines and knowledge where "no single actor has all the knowledge, resources, and capacities to govern alone in our complex and fragmented societies" (Edelenbos & van Meererk, 2016, p. 4). Embracing "a holistic and comprehensive form of interactive governance" requires

drawing from a variety of knowledges to overcome barriers of integrating social and natural scientific and local and Indigenous knowledge (Chuenpagdee and Jentoft, 2015, p. 9) and thus promotes interdisciplinarity at its core. Overcoming barriers of integrating different sources and types of knowledge, as an interdisciplinary area of inquiry, requires an understanding of 'knowledge.'

Knowledge is more than "what" is known. From a knowledge system perspective, knowledge is comprised of many components—the knowledge itself, practices, adaptation, and transmission—which are informed by values derived from their underlying belief system (Giles, Fanning, Denny, & Paul, 2016; Whyte, 2013). A knowledge systems perspective goes beyond understanding and working between and among different epistemologies and subsequent philosophical assumptions underpinning those epistemologies to actively exploring the contested space of values and belief between knowledge systems. This is especially pertinent to the role of shared values and beliefs to enhancing the opportunity to influence decision-making in the context of governance (Fanning, 2003). Given the current governance context surrounding Mi'kmaw fisheries decision making in this research and building from the propositions identified in the previous section, the knowledge bases identified are broadly described as western and Indigenous knowledges. Further elaboration on specific disciplines and knowledge underpinning the interdisciplinary approach are found in Chapter 3.

Western knowledge, as social and natural sciences and their applied professions, is known for formalized research methodologies and methods specific to its disciplines and are underpinned by their respective epistemologies (Creswell, 2013; Raymond et al., 2010). Western knowledge is referred to as science-based knowledge (Kuhn, 1996) that is derived through a systematic verification process to test questions from observations and designed to reduce bias (Hurlbert, 1984) or to declare them (Creswell, 2013). Generally, scientific knowledge "refers to any systematic recorded knowledge or practice" that forms the foundation for the scientific method described as the components of hypothesis, design, execution, analysis, and interpretation (Raymond et al., 2010, p. 1768).

Noting that Indigenous and non-Indigenous scholars lack a shared understanding of what Indigenous knowledges are (Latulippe, 2015; McGregor, 2004; Raymond et al., 2010), it is important to recognize and address this deficiency as the consideration of Indigenous knowledge in decision-making is now part of Canada's fisheries legislation (*Fisheries Act*, 1985, c.14, s.3). First, it is necessary to understand that there are many Indigenous knowledges, each of which contain unique ways of knowing that are distinct from western knowledge (Giles et al., 2016; Strega, 2005). As noted by Giles et al., (2016, p.168)

The ultimate source of knowledge for many Indigenous people is the land itself (Simpson, 2014; Turnbull, 2009; Wildcat, McDonald, Irlbacher-Fox, & Coulthard, 2014). Some scholars have noted that while colonization has systematically displaced many Indigenous nations from their homelands, their knowledge systems remain deeply rooted in their ancestral territories, intertwining spirituality, culture, beliefs, environmental knowledge, and social code into

practices in all aspects of life (Corntassel 2012, Wildcat *et al.* 2014). For the Mi'kmaq, this non-compartmentalized approach to knowing provides important ecosystem knowledge and frameworks for thinking about natural resources. A considerable amount of management knowledge is held within the Mi'kmaq's languages, beliefs, practices, and the way knowledge is transmitted (Barnhardt & Kawagley, 2005).

A second area for understanding is recognizing that any particular Indigenous knowledge is not about relationships, but rather Indigenous knowledge "is the relationship" (McGregor, 2004, p. 394, emphasis in original). Indigenous peoples did not just live on the land; they believed they were part of an extended family of the natural landscape (Thomlinson & Crouch, 2012). Contrary to western depictions of Indigenous knowledge as a 'what' or a noun, Indigenous peoples view their knowledge as being action orientated and derived from relationships with the natural world; it is described as what is done (McGregor, 2004), thereby an Indigenous knowledge system is conceptualized as a verb rather than a noun. It is here where the living and nurturing of relationships at individual, family and community levels with the natural world distinguishes it from local knowledge (McGregor, 2004). An Indigenous knowledge system encapsulates "a distinct way of knowing and being", thus implying governance is derived from an understanding of the relationships with the natural world (Latulippe, 2015, p. 123). For example, the Mi'kmaw knowledge system describes this relationship as *Msit no'kmaq*.

The phrase Msit no'kmaq encapsulates the concept of kinship. Recognizing an existence beyond one's physical self and the understanding of interdependence with each other, non-humans, and non-life sources were key to their survival. Their relationship is especially closely linked to animals. As revealed in the Mi'kmaw Creation Story, animal life is respected and not taken selfishly for fear their behaviour will be disapproved by other animals. This relationship is best expressed through the Mi'kmaq phrase, "Msit no 'kmaq" which means 'All my relations.' To honor relations, the practice of offering and giving thanks is the respectful way so all may live in harmony as the goal of the Mi'kmaw order (Battiste, 2016; Giles, Fanning, Denny, & Paul, 2016; Leblanc, 2012; McMillan & Prosper, 2016). Reinforcing the concept of Msit no'kmaq, LeBlanc (2012) also referred to the Mi'kmaw worldview as "...rooted in actions of being which of necessity include others" (p. 75). This, as well as beliefs and values evident in the Mi'kmaw Creation Story, is expressed in the Mi'kmaw language. The centrality of the verb in the structure of the Mi'kmaw language creates a very different cosmological framework based in characteristics of interaction (Henderson, 1997; LeBlanc, 2012), relations (Iwama, Marshall, Marshall, Mendez, & Bartlett, 2007; Sable & Francis, 2012), fluidity and adaptability, inclusivity, and spiritually connected way of life (Sable & Francis, 2012). Mi'kmaw relationship to their territory is one that supports them physically, economically, and spiritually, and is foundational to their identity and governance.

McGregor (2004), and later Latulippe (2015), reflect those Western perceptions of Indigenous knowledges are often limited to place-based environmental or ecological

knowledge that can be extracted from the culture and used to supplement resource management. Here, the limited view of knowledge as the 'what' is reflected but also the perception of inequality of Indigenous knowledge to other forms such as western knowledge. Because of this, Indigenous knowledges suffers from marginalization and is viewed as lacking value beyond supplemental knowledge for resource management (Latulippe, 2015). Similarly, efforts to integrate Indigenous knowledges into Canada's fisheries decision-making model of science-to-inform-resource management are at odds, as the former does not easily fit into current scientific assessment models or processes (Denny & Fanning, 2016a). Thus, researching the interface between knowledge systems with attempts to integrate both knowledge systems are met with challenges and tension arising from conflicting values and beliefs (Giles et al., 2016). As result of the tension, this leads to the creation of a contested space where differing values and beliefs can be explored together rather than just focusing on or sharing a collection of facts (Repko, 2008). These barriers must be overcome for enhancing understanding of, and responding to, the complexities within the realm of natural and environmental governance and is a key feature in integrating knowledges in the interdisciplinary approach.

The integration of knowledges captured in the concept of Two-Eyed Seeing, also referred to as *Etuaptmumk*, developed by Mi'kmaq Elder Albert Marshall is the chosen research framework. A review of Two-Eyed Seeing as methods and methodologies for western researchers revealed inconsistencies in how Two-Eyed Seeing was applied and the need to thoroughly describe their methods so that other researchers may benefit (Wright, Gabel, Ballantyne, Jack & Wahoush, 2019). However, how Indigenous researchers,

including myself as a Mi'kmaw researcher, utilizes and works within a Two-Eyed Seeing Framework is yet to be reviewed. Elder Marshall speaks to the need to harness both western and Indigenous knowledges to broaden our understanding to find solutions that benefits all; both humans and the environment (Bartlett, Marshall, & Marshall, 2012). Two-Eyed Seeing is:

The gift of multiple perspectives treasured by many aboriginal peoples and explains that it refers to learning to see from one eye with the *strengths* of Indigenous knowledges and ways of knowing, and from the other eye with the *strengths* of Western knowledges and ways of knowing, and to using both these eyes together, for the benefit of all (Bartlett et al., 2012, p. 335; emphasis in original).

Its principles of collaboration and co-learning as the essence of Two-Eyed Seeing have been applied in multiple disciplines. For example, as a model for education (Bartlett et al., 2012; Hatcher, 2012; McKeon, 2012), a design for co-management (Denny and Fanning, 2016a; Giles et al., 2016), a framework for environmental decision-making (Denny & Fanning, 2016b), a fisheries management framework (Reid et al., 2021), and a model for research with and for Indigenous peoples (Battiste, 2000; Marsh, Cote-Meek, Toulouse, Najavits, & Young, 2015). The concept of Two-Eyed Seeing, however, relies largely on understanding western and Indigenous knowledge epistemologies.

Furthermore, clarity is needed to understand the underlying values and beliefs pertinent to each knowledge system and the roles of potentially shared values and beliefs in influencing decision making (Fanning, 2003). Thus, Two-Eyed Seeing in the context of this research, is the use of both Indigenous and western knowledge systems to develop

the research process, the tool for understanding multiple perspectives, and ultimately, develop a solution by integrating knowledges. In this application, Two-eyed Seeing is adequately suited as the interdisciplinary framework chosen to address the research question. Furthermore, Two-Eyed Seeing can also be used as a social justice framework to use the process to achieve a transformative outcome for both 'eyes', together to address power imbalances between knowledge systems and transformative change. Social justice framework, while they may take many forms, is an ally to Indigenous methodologies (Kovach, 2009). As researchers Ohajunwa & Mji (2021, p. 183) note, social justice is a broad concept that is "both a goal and a process" to address power imbalances, representation of marginalized peoples, and fair and equitable distribution of resources. This concepts also aligns with IGT in the study of governability where the focus is on representation, participation, justice, and effectiveness of laws, policies, and governing tools.

Based on the above description, the Two-Eyed seeing methodology as the interdisciplinary approach and as a supporting social justice framework was developed for this research and is illustrated in Figure 1.

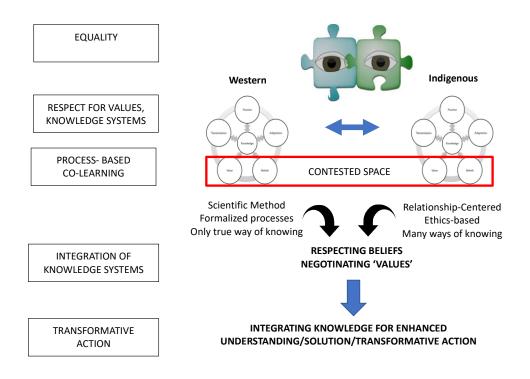


Figure 1 Illustration of Two-Eyed Seeing as the interdisciplinary and social justice research framework.

Despite the relevance and potential benefits of Two-Eyed Seeing in both Indigenous and western societies, the concept and action of "knowledge integration" denotes further oppression or assimilation by the western knowledge system given the dominance of the scientific approach in fisheries science and management (Reid et al., 2021; Vigliano Relva & Jung, 2021) and Eurocentric scholarship (Varghese & Crawford, 2021).

Certainly, this may be viewed as a disadvantage, but it does not necessarily have to be the case. In Two-Eyed Seeing, the incorporation of values and beliefs as part of the knowledge system is key, and while Indigenous peoples value their own knowledge system, there is considerable value held within the western knowledge system as tools for exploration. This is not to say that the entirety of the western knowledge system will be adopted with open arms or vice versa, but there are potential opportunities for the

recognition of the values brought forward by both 'eyes' and how they can be used for mutual benefit. Two-Eyed Seeing via the recognition of the use of both knowledge systems implies the desire, or at the very least interest, to cooperate. Collaboration may not always be possible, as a shared vision is required, but cooperation is possible by advancing the shared values of both parties as common ground. Another critique of Two-Eyed Seeing is that it can be processes-based rather than outcome-focused despite the opportunity to co-learn. In such instances, an Indigenous knowledge system is not normally, without effort, incorporated in the realm of the western knowledge system and does not necessary imply its use (Reid et al., 2020). Importantly, issues of power imbalance underpin Two-Eyed Seeing as a research tool. Thus, the need to integrate decolonizing approaches to counteract western dominance in both research methods and methodologies are the responsibility of the researcher (Varghese & Crawford, 2021). As noted in Bartlett et al., (2012), conceptualizing Indigenous knowledge in a society that favors reductionist approach to understanding ecology may result in overlooking of nuances that are specific to Indigenous knowledge, described by Latullipe (2015) as western perceptions of Indigenous knowledge that can be extractive and unintelligible.

The focus that I bring to the application of Two-Eyed Seeing to this research is my ability to weave between both knowledge systems while understanding the power I hold as a researcher. My approach to the research design, interpretation, and proposing a solution is based on the premise that in Two-Eyed Seeing, both western and Mi'kmaw knowledge systems can be integrated. This does not mean suppressing evidence, suggesting what is the easiest to do, resorting to a single position, or choosing one knowledge system over

the other. While there may be shared perspectives, there will be differences that will enhance my understanding of the context as a tool for examining western and Indigenous perspectives, understanding where the power imbalances lay within and between knowledge systems, and importantly, to derive a solution that recognizes the values and beliefs of both knowledge systems for transformative action. By using both knowledge systems, I hope to enhance the credibility of the research outcomes to both western and Mi'kmaw knowledge systems.

1.5 RESEARCH MOTIVATION & POSITIONALITY

My research is part of an overarching umbrella of a larger, participatory action research project that aims to improve fisheries governance by understanding how knowledge systems of Indigenous peoples in Canada can improve the decision-making regime (Fish-WIKS, 2016, para 2). A key feature of the participatory action approach situates the communities as equal partners in all aspects of the research from question development and project governance to inclusion of community scholars in publication (Fish-WIKS, 2016). As the eastern unit of a four-region project (Atlantic, Central, Arctic and Pacific), the Indigenous peoples of interest for this research are the Mi'kmaq who reside in Nova Scotia.

As both a research partner and doctoral student for the Fish-WIKS project, I have been fortunate to have both provided guidance to the participatory research process and sought guidance as a student. My professional interests in Mi'kmaw fisheries are related to my role as Director of Aquatic Research and Stewardship at the Unama'ki Institute of Natural Resources which has been an asset to the project and has helped to direct my

research focus. For the past decade, I learned by working with Mi'kmaw fishers and elders in the traditional district of Unama'ki (Cape Breton Island, Nova Scotia) about Mi'kmaw values when fishing.

First and foremost, I am L'nu ⁶. I was raised by my grandmother Isabel Stevens (her nickname was Gussie) in Potlotek First Nation (also referred to as Chapel Island First Nation). My mother, Roseanne, who married non-Mi'kmaq, was not permitted to live in our reserve and so purchased property as close to the reserve as possible. I lived with my mother for a couple of years but after having a serious illness, my grandmother suggested that I live with her. Living and being raised in a home that rarely spoke the English language, I was encouraged by my grandmother to learn English. She said it would help me in school and later as an adult to support myself. I'm part of the generation who understands Mi'kmaw fluently but speaks English. I certainly wish I still spoke Mi'kmaw but I understand my grandmother's choice as she came from a generation where it was very difficult to be L'nu.

Being L'nu, I often describe my professional experience as 'conflicted.' Educated in natural sciences and hired because of my education in marine and fisheries ecology, I understood that there is more than one way of knowing and viewing the world. I saw value in my education as a scientist but there was no room for other ways of knowing in natural science. Researching an outstanding issue in Nova Scotia – reconciling current

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⁶ L'nu is the word Mi'kmaq people use to describe themselves; it means 'the people.' See https://www.csc-ns.ca/wp-content/uploads/2020/06/CSCNS-DLJ-Glossary-of-terms.pdf

challenges surrounding the development, implementation, and governance of Mi'kmaq Aboriginal and treaty rights for their fisheries in Nova Scotia— is one that resonated with me.

I worked in the aquatic sector most of my career. I was hired in Eskasoni First Nation during the early years following the *Sparrow* (1990) decision to develop and compare oyster grow out techniques for Eskasoni First Nation's aquaculture project in River Deny's Basin in the Bras d'Or Lakes, Nova Scotia. I took a break from the project to mentor university students in the Mi'kmaw Science Advantage Program at Cape Breton University and was in English class with my students and the professor, the now late Wilfred Cude, when the landmark *Marshall* decision was reached on September 17, 1999. At the time, Professor Cude and myself were astounded at what this could mean for the Mi'kmaq. But what followed the Marshall decision were stories of conflict between the Mi'kmaq, government, industry, and settler society. Despite the conflict and challenges that ensued, there was also hope in Mi'kmaw communities for better opportunities and a brighter future. I made a career from the Marshall Response Initiative by working with the Eskasoni First Nation under the guidance of the late Charlie Dennis to build western science capacity in the community. For that opportunity, I am grateful. I understand now that science was not the only capacity we needed as Mi'kmaq people at that time. We needed to understand fisheries from all aspects including governance and fisheries management, rather than just fish biology and the science that may or may not support fisheries management decisions.

Thirty years has passed since the *Sparrow* decision and, in Nova Scotia, I see Mi'kmaq being able to be Mi'kmaq – fishing, sharing, and providing - and a society that is more accepting of Mi'kmaq rights to acquire fish for FSC needs, but there are still significant governance challenges of which this thesis assesses. More than twenty years have passed since the *Marshall* decisions and I see communities benefitting from commercial fisheries but little has been done to support the livelihood fishery as many fishers, at the time of my research, were not supported by their communities and were asserting their right to fish as a Mi'kmaw individual. Also evident is a non-Mi'kmaw society that appears to be having difficulty comprehending the Mi'kmaq right to fish for economic gain⁷ and continues to retaliate through conflict and vandalizing of Mi'kmaw fishing operations⁸. The law supporting Aboriginal and treaty fisheries to support a moderate livelihood is here in Canada *now* and has been for two decades. What is lacking is the process.

My approach to looking for the answer to my research question is influenced by several experiences. First, I am L'nu. Many might think that would create a state-focused approach to how oppressive legislation and policies could be improved or even removed. However, while I am partial to finding a solution for my people, the Mi'kmaq, I also

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⁷ Indigenous fishermen sell lobster from Digby wharf to make statement on treaty rights. See https://www.cbc.ca/news/canada/nova-scotia/indigenous-fishery-digby-commercial-lobster-1.5308376

⁸ Police investigating 'suspicious' fire of Membertou commercial boat. See https://www.capebretonpost.com/news/police-investigating-fire-of-membertou-commercial-fishing-boat-363201/

want Mi'kmaq to succeed. To succeed, I realized that we can't govern as we have previously governed and must take a critical look at ourselves in addition to DFO. Because of this, I approached my research with room for improvement on the side of the Mi'kmaq as well as DFO. Second, in Nova Scotia, there is a willingness for the Mi'kmaq and governments to work together. Many advances were made through cooperation, and this was not done by receding our values but rather by embracing values and ways of knowing and bringing it to the forefront despite our differences. As such, I am influenced from a position of working together, as difficult as it may be at times. This is also attributed to my professional experience. I have seen and been involved in positive experiences of Mi'kmaq and DFO cooperation, one of which is discussed in this thesis (Chapter 6), although improvements to current governance are necessary. Third, I do purport a treaty mindset. Another one of my motivations comes from the Treaty Education video, We are All Treaty People⁹. The video portrays a message of hope and cooperation; to tell our story but "move forward, together." Like treaties, there must be mutual benefit to our relationship. Lastly, I am influenced by the Mi'kmaq Creation Story. As one of the roles of Mi'kmaw women, in particular Kluscap's mother, was to have the strength for understanding and cooperation so the Mi'kmaq can live in peace with one another. My bias, then, is one that supports cooperation through Two-Eyed Seeing where values and differences are made explicit and opportunities to reconcile differences are possible. As my thesis was in review, Bill C-15 supporting a framework

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⁹ We are All Treaty People. Treaty Education Nova Scotia. See https://www.youtube.com/watch?v=TePIVr2bgCY

for the implementation of UNDRIP in Canada was accepted. As a result, Canada's laws will be examined, and a governance model that addresses Indigenous rights, sovereignty, jurisdiction and Aboriginal title may be in the future. However, given that the time between UNDRIP's development and its acceptance in Canada is on the scale of a decade, interim solutions that recognize and protect Mi'kmaw rights are needed now while recognizing the necessity to work toward a longer-term solution to address Mi'kmaq sovereignty as the rightful authority of their territory.

This quest is both professional and personal. To have the opportunity to contribute to finding a solution to this pressing issue is both an obligation and an honor. Thus, the aim of my research is to reconcile current challenges surrounding the development, implementation, and governance of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia using Two-Eyed Seeing. Current fisheries governance fails to address the legal pluralism that exists in Canada with respect to Indigenous peoples and the need for alternative governance models that are better suited to address Indigenous knowledges, Mi'kmaq sovereignty, Aboriginal and Treaty rights, and ecological uncertainties. This research is not about the collection of Mi'kmaw knowledge, or solving the many issues created by the *Indian Act* and systemic racism, which clearly need to be addressed. Rather, it is about exploring the interface between western and Mi'kmaw knowledge epistemologies in the context of fisheries governance in Nova Scotia. As such, the goal of this research is to develop an alternative governance model that reflects opportunities and addresses current challenges that are context-specific, thereby providing a feasible

alternative for the governance of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia *now*.

1.6 THESIS FORMAT

The thesis is a compilation of ten chapters. Chapter two examines the historical and legal landscape of Mi'kmaq in Nova Scotia, and current fisheries governance in Canada and more locally in Nova Scotia. Chapter three focuses on the interpretive framework based on Elder Albert Marshall's concept of Two-Eyed Seeing and the current literature on governance, theories and practice relevant to the research question, namely how can Mi'kmaq Aboriginal and treaty rights to fish be governed in Nova Scotia? The research approach and design are illustrated, the governability assessment framework and case study methods and criteria for selecting cases are discussed in the context of case study methodology. Chapter four discusses the current Mi'kmaw governing systems and Mi'kmaw organizations involved in fisheries in Nova Scotia. Chapter five presents the challenges and opportunities of Mi'kmaq Aboriginal and treaty rights to fish and an image of the Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. Chapters six and seven present the analysis of governability assessment of the two cases studies regarding the implementation of the Sparrow (1990) and Marshall (1999) decisions as the primary case law influencing federal fisheries policies. Chapter eight provides a cross case analysis and considerations for the development of an alternative fisheries governance model to successfully allow for governance of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia based on the analysis of identified challenges and opportunities. Chapter nine is devoted to the presentation and description of the alternative governance model. Chapter ten provides a critical assessment of the

theoretical propositions, identify limitations experienced during the research process, contributions and applications of the research, and provide concluding statements of the research.

CHAPTER 2 SETTING THE SCENE

Resource access and management are not simply scientific, legal, or economic problems.

They are complex conundrums that arise because many groups, communities, or nations can all have unique ties to a specific place simultaneously.

-Sarah J. King (2013, p. xiv)

2.1 CHAPTER OVERVIEW

Indigenous nations span within and across provincial, territorial and international boundaries, creating a jurisdictional puzzle for Indigenous sovereignty and resource management on Turtle Island, also known as North America. There are over 50 sovereign Indigenous nations each with their distinct language and cultures, laws, and governing practices¹⁰. According to the latest census data (2016), there are over 1,673,785 people who identify as Aboriginal of which 59% are First Nations¹¹. Collectively, Indigenous peoples comprised 5.7% of the population in Canada. In Nova Scotia, of those who identified as Indigenous, 50.2% (25,830) were First Nations people, 45.3% (23,310) were Métis, and 1.5% (795) were Inuit. Within the First Nations population, there are registered (status) and non-registered Indians (non-status). In Nova Scotia, the Mi'kmaq First Nation population comprised 1.7% of the population in 2016. Of these, 59.3% (15,320) has Registered Indian status, as defined under the *Indian Act*. Nova Scotia is

¹⁰ Information as of April 11, 2021. https://www.rcaanc-cirnac.gc.ca/eng/1100100013791/1535470872302

¹¹ StatsCan (2016). Statistics on Indigenous People. https://www12.statcan.gc.ca/census-recensement/2016/rt-td/ap-pa-eng.cfm

exclusively Mi'kmaw territory and the Mi'kmaq are the only rights-bearing Indigenous group.

To understand the context of the Mi'kmaq in Nova Scotia relevant to the scope of this research, this chapter provides the Mi'kmaw historical and legal landscape as their unique ties to place in Nova Scotia, an overview of fisheries governance in Canada and Nova Scotia, and factors influencing current governance. Furthermore, as the research centers on understanding and co-producing knowledge through Two-Eyed Seeing, relevant theories are discussed. Theories as ways to understand knowledge that were deemed relevant to this thesis are Indigenous theory, constructivism, critical theory, and as ways to co-produce knowledge, Interactive Governance Theory.

2.2 THE MI'KMAQ: PRE-CONTACT TO 1867

Indigenous nations have distinct views about what the world is like, what it consists of and why, known as a worldview (Strega, 2005). Indigenous people did not just live on the land; they believed themselves to be part of an extended family of the natural landscape (Thomlinson & Crouch, 2012), and the Mi'kmaq also held this belief. The Mi'kmaw creation story reveals teachings about the creation of the Mi'kmaq and their relationship to the earth and others. Human-life originated from non-humans – soil, water, fire, wind, grass, rocks – to carry out special roles that emphasizes the skills and strength of providers, wisdom for guidance and leadership, and maintaining relations and

cooperation to ensure survival. Women had a place in Mi'kmaw society and were valued for their wisdom and as teachers of cooperation, understanding, and diplomacy¹².

The Mi'kmaq Nation's sovereign territory includes parts of what is now knows as the Gaspé region of Quebec, eastern New Brunswick, northern Maine, and all of Nova Scotia and Prince Edward Island. Within Mi'kma'ki are seven distinct districts that span over present-day provincial and international boundaries (Figure 2). Two of the districts, Kespe'keweg (Last Land) and Siknikt (Drainage Area) span across current New Brunswick and neighboring of Quebec and Nova Scotia provincial boundaries respectively. Kespe'keweg also spans into present day northern Maine, USA. Epexiwitk (Lying in the Water) Aqq Piktuk (the Explosive Place) refers to present day Prince Edward Island and a part of the mainland of Nova Scotia. Districts occurring exclusively within the boundaries of Nova Scotia are Unama'kik (Cape Breton; Land of Fog), Eskikewa'kik (Skin Dressers Territory), Sipekne'katik (Wild Potato Area), and Kespukwitk (Land Ends) (Paul, 2006). While not a traditional Mi'kmaw district, there is historical evidence that the Mi'kmaq frequented the Magdalen Islands, St. Pierre and Miquelon, and southern Newfoundland as part of their foraging expeditions. Permanent communities in southern Newfoundland were established in the nineteenth century (Martijn, 2003).

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¹² Mi'kmaw Spirit. (2016). Mi'kmaw Creation Story. Retrieved from http://www.muiniskw.org/pgCulture3a.htm



Figure 2 Map of Mi'kma'ki. Source: Mi'kmaw Spirit, 2016; http://www.muiniskw.org/pgCulture1b.htm

Mi'kmaw society and language is distinct from other indigenous nations (Sable & Francis, 2012). The Mi'kmaq occupied vast territories as they moved inland from the coast in the fall and winter in smaller familial groups to hunt based on the availability of plants and animals for sustenance and thus privileged customary rights of families living in each territory (McMillan & Prosper, 2016; Wicken, 2018). It is estimated that as much as 90% of the Mi'kmaw diet was derived from the ocean and rivers (McMillan & Prosper, 2016). Alliances with the neighboring nations were formed with Wolastoqiyik, Peskotomuhkati, Penobscot and Abenaki (also known as the Wabanaki Confederacy) for economic and trading advantages as well as to strengthen the defense of their territories through combining militaries (Paul, 2006; Wicken, 2018).

Historically, the *Sante' Mawio'mi*, the Mi'kmaq Grand Council, was the traditional socio-political governing body of the Mi'kmaq. It was thought to have arisen in response to a need for social, ecological, economical interactions internally and externally with other nations (Berneshawi, 1997; McMillan, 1996). Leading the *Sante' Mawio'mi* was the Grand Chief, supported by the governing executive council consisting of *KjiKeptin* (Grand Captain), the *Putus* (messenger and keeper of the Wampum¹³), and a War Chief (McMillan & Prosper, 2016). Each district was headed by a district Chief who was selected to be the representative and had to earn the right to lead by justifying why he would make a great leader (Metallic, 2016; Paul, 2006). Women, in particular, were thought to have an important role in selecting the Grand Council (Doyle-Bedwell, 2003)

Sante' Mawio 'mi had many roles but providing subsistence was essential (McMillan, 1996). The Grand Chief assigned areas to district chiefs and district chiefs would assign hunting and fishing territories to local chiefs. Other important functions carried out by the Grand Council were to act as leaders and decision-makers in matters of external affairs (Henderson, 1997; McMillan, 1996; McMillan & Prosper, 2016). Decision-making, however, expanded to include the wisdom of others such as elders who provided advice and guidance and were considered an essential part of the decision-making process (McMillan & Prosper, 2016; Paul, 2006). Self-control and family authority were notable means that maintained Mi'kmaw order and decisions were not implemented until ratified by families and the Santee' Mawio'mi (Henderson, 1997; Metallic, 2016).

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¹³ Wampum is a record of agreements with other nations using symbols to represent its context (Indigenous Affairs Cape Breton University, 2021b)

The primary means for maintaining relationships with the earth's resources was, and remains so today, described through many concepts, including the concept of *Netukulimk*. *Netukulimk* describes the interconnection between sustainability of self, both physically and spiritually, to the natural environment which guided hunting, fishing, and gathering practices to live in harmony with Mother Earth (Prosper et al., 2011). In the modern context, it is used to refer to conservation (King, 2011) or, as others have described through a western lens, as resource management (Berneshawi, 1997). In simple terms, it is a way of life that takes into consideration the needs of those generations yet to be as a guide to prevent one from being overly indulgent or greedy. Elders describe *Netukulimk* as "take only what you need" (Barsh, 2002, p.17). This concept, as *Msit No'kmaq* et al. (2021) reflects, it is more than western concepts of resource extraction and that "*Netukulimk* reminds us of greater responsibilities and humility in our relations within ecologies" (p. 852).

The Mi'kmaq have been interacting with Europeans for many centuries before engaging in treaty making, *ankukamkewe'l* (McMillan & Prosper, 2016). Of historical significance is the role of the *Sante' Mawio'mi* during European contact in establishing relations.

The *Sante' Mawio'mi* was politically active in the 18th century with neighboring nations

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¹⁴ The Sante' Mawio'mi is a respected and integral body within Mi'kmaw culture that continues to provide spiritual and cultural leadership for the Mi'kmaq Nation. They have an active role in Treaty Day commemorations in Nova Scotia and are recognized by the Mi'kmaq and the government of Nova Scotia as another Mi'kmaw government despite a lack of legal recognition under the Indian Act.

and were the signatories to the treaties to make peace and secure their alliance with the British Crown (McMillan, 1996). However, the Mi'kmaw interpretation and intent of the of treaties were ignored by the British. As pacification mechanisms, the British continued to enter into peace and friendship treaties with the Mi'kmaq while continuing to provide incentives to scalp Mi'kmaq (McMillan & Prosper, 2016; Paul, 2006). The treaties are an important cornerstone to the foundation of Nova Scotia and consequently Canada and to Mi'kmaq sovereignty, and "...possess formal constitutional status" (Macklem, 2016, p.27).

A series of treaties negotiated in 1725-26, 1749, 1752, 1760-61 and others are referred to as the covenant chain of treaties (Battiste, 2010). Negotiated between the British and the Penobscot, Mi'kmaq and Wolastoqiyik, the intent of the treaties were to end war and establish peace and friendship, protect trade and commerce, protect hunting and fishing grounds and harvesting strategies, release prisoners of war, and resolve conflict using British law (McMillan, 1996; McMillan & Prosper, 2016; Paul, 2006; Wicken, 2018).

In general, the act of treaty making recognized the political communities of Indigenous people and thereby reinforced collective identity of kinship, shared culture and history, and ultimately, their nationhood as a sovereign nation (Cornell, 2015). The Treaty of 1752 fostering "peaceful co-existence between nations" is of significance to the Mi'kmaq in Atlantic Canada (McMillan, 1996, p.70; Wicken, 2018). The Treaty of 1752 included a specific trade clause that recognized the pre-existing power of the Mi'kmaw peoples for "free liberty of Hunting and Fishing as usual...shall have free liberty to bring for Sale to

Halifax or any other Settlement within this Province, skins, feathers, fowl, fish or any other thing they shall have to sell..." (*R. v. Simon*, 1985, para 6.). These acknowledgements were re-affirmed in the Treaty of 1760-61 and became the foundation for Supreme Court of Canada decisions in 1985 and onward. The treaties are also a legal recognition of Mi'kmaq sovereignty and independence, thus acknowledging Mi'kmaw laws and governing structures over Mi'kmaw traditional territory.

As settlers began to outnumber the Mi'kmaw peoples, violation of the treaties and changes to the social and political structure of Mi'kmaq ensued (Barsh, 2002; McMillan, 1996). Extirpated from their traditional hunting and fishing grounds, disease, poverty and starvation took a toll on the Mi'kmaw population and their ability to sustain themselves (McMillan & Prosper, 2016). The treaty relationship was replaced with centuries of suppression and violation of treaty rights through imposed legislation without their consent (Palmater, 2014; Paul, 2006). The following section discusses the current legislation, case law, and potential of the United Nations Declaration on the Rights of Indigenous Peoples to shaping the exercise and implementation of Mi'kmaq Aboriginal and treaty rights in Nova Scotia.

2.3 LEGAL LANDSCAPE

Once Canada was created in 1867, the federal government gave itself exclusive jurisdiction over Indians and lands reserved for the Indians under section 91(24) of the *British North America Act* (1867). Pursuant to this federal jurisdiction, the federal government enacted the *Indian Act* in 1876 to control Indians and administer Indian affairs through the Department of Indian Affairs. In particular, the *Indian Act* interrupted

traditional forms of governance with electoral processes, divided nations into tiny Indian bands (now known as First Nations), reduced their vast territories to small parcels of reserve lands and outlawed cultural practices. Indian women and their children were targeted for exclusion from their bands through gender discrimination (Palmater, 2014). The act also set up barriers to economic prosperity by limiting how the Mi'kmaq could support themselves, including enfranchisement when attending a post-secondary education (Battiste, 2008; Paul, 2006). This resulted in the creation of social division within the Mi'kmaq as registered (Status) and non-registered (Non-status) Indians (Huber, 2009; Palmater, 2000). Currently, the federal government continues to exercise substantial control over Indians through *Indian Act* provisions from membership to death, land acquisition, surrender and use. The ability of the Band Council to enact by-laws specific to activities are restricted to on the reserve (*Indian Act*, 1985, s. 81(1)). Furthermore, those legally entitled to exercise the treaty right to fish and sell it were Status Indians who were members of a band. This had the effect of excluding Non-Status Indians, non-band members, and their representative political organizations from federal negotiations, leaving Non-status further marginalized from commercial fishing arrangements (Palmater 2000).

Not long after the creation and control through the *Indian Act*, in 1868 the *Fisheries Act* was another tool to privilege non-Indigenous fishers and exclude Indigenous peoples through exclusion and dispossession (Castañeda et al., 2020; McMillan & Prosper, 2016). For the Mi'kmaq, the *Fisheries Act*, became the mechanism to criminalize the Mi'kmaq

through state control for living their way of life as they have for time immemorial (Castañeda et al., 2020).

The Mi'kmaq had fought for many decades to prove the existence of their treaty rights. As an example, the late Grand Chief Gabriel Sylliboy, with strong affirmation that the treaties were still alive, hunted for muskrats. However, in 1927, he was charged for hunting muskrat and possessing pelts out of season. While convicted in 1929, he had faced racism and discrimination from the court system and felt that he had disappointed the Mi'kmaq. The late Grand Chief was exonerated in 2017 with a free pardon for his wrongful conviction¹⁵.

Resilient and persistent, the Mi'kmaq pursued to have their treaty rights recognized provincially, nationally, and internationally (Henderson, 2016). In Canada, it was not until 1982 that Aboriginal and treaty rights became protected in the *Constitution Act*, 1982 (s.35). This protection, with s.52(1) states "The Constitution of Canada is the supreme law of Canada, and any law that is inconsistent with the provisions of the Constitution is, to the extent of the inconsistency, of no force or effect." As such, the Constitutional protection of Aboriginal and treaty rights reinforces a state of legal pluralism when the exercise of Aboriginal and treaty rights is inconsistent with federal

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¹⁵ See Nova Scotia. (2017). Press Release Pardon, Apology, for Late Grand Chief Gabriel Sylliboy. Feb. 16, 2017. https://novascotia.ca/news/release/?id=20170216004

and/or provincial legislation (*Constitution Act*, 1982, s.52). Legal pluralism, discussed in Chapter One, in fisheries governance has the potential to create challenges for managing fisheries (Jentoft and Bavinck, 2014).

In addition to the Constitutional protection of Aboriginal and treaty rights, an overwhelming quantity of case law supporting Aboriginal and treaty rights and title exists across Canada that reinforce the necessity to reconceptualize fisheries governance.

Treaties, by their nature, reinforce Mi'kmaq sovereignty as the Mi'kmaq nation. Several noteworthy cases were judged in favor of the Mi'kmaq in Nova Scotia which set precedence for other Aboriginal and treaty rights battles between other Indigenous nations and the state. Conversely, other legal battles won and lost by other Indigenous nations also set precedence for how Canada addresses Mi'kmaq Aboriginal and treaty rights. These two categories of case law will be discussed as Mi'kmaw legal outcomes and case law influencing fisheries management and policy.

2.3.1 Mi'kmaw Legal Outcomes

As affirmed in numerous Supreme Court decisions, the Mi'kmaq have both Aboriginal and treaty rights to hunt and fish. Treaty rights were not only recognized in 1999 in the *Marshall* decisions but were affirmed much earlier. The following section provides an overview of the legal cases supporting Mi'kmaq Aboriginal and treaty rights and the limitations arising from the Supreme Court decisions.

In the evolution the rights cases, the case of Stephen Isaac helped clarify the application of rights of status Indians to use reserve land and the limitations of provincial law to

federal land. In 1975, Stephen Isaac of Potlotek First Nation, was acquitted of charges of possession of a riffle contrary to s. 150 of the *Nova Scotia Lands and Forest Act*. In *R. v. Isaac* (1975), two important conclusions that support legal pluralism emerged. First, "the province lacks the legislative power to regulate the use of land on Indian reserves. Second, the Mi'kmaq have the right to enjoy the benefits of land use, including its resources, on reserves as an usufructuary right. This means that status Indians can derive benefits from using reserve land even if it does not belong to them. In this case law outcome, Mi'kmaq treaties were proven to exist and were protected under the *Indian Act*, but they are contained within the boundaries of the reserve. The application of Mi'kmaq rights was later expanded in 1985 with the affirming of the Treaty of 1752.

In *R. v. Simon* (1985), a Mi'kmaq from Indian Brook was prosecuted for carrying firearms that were regulated through the provincial act. The courts affirmed "that the Treaty of 1752 is of as much force and effect today as it was at the time it was concluded" (para 36). The outcome of the case affirmed that Mi'kmaq treaty rights have protection under the *Indian Act* (s.88) for descendants of the treaty and are exempt from prosecution under provincial regulations. As such, "...provincial legislation cannot restrict native treaty rights. If conflict arises, the terms of the treaty prevail" (para 60). Reference to Mi'kmaq descendants is broadly understood as those under the *Indian Act* rather than those living on reserve land and as such implies the extent of the treaty to those having Indian status. The courts chose to not address the constitutional protection of the treaty as s.88 of the *Indian Act* covered the issue. A few years following the *Simon* decision, the constitutional protection of Aboriginal and treaty rights was before the

courts. Here the focus switched from hunting to fishing, and a test to whether individual fishing outside reserve boundaries were also immune from the provincial and federal law.

In 1987, two Mi'kmaq individuals (Denny and Paul) were charged with fishing for food using gill nets in tidal waters outside their community of Eskasoni. They were found in possession of Atlantic salmon and Atlantic cod and did not have a licence, in apparent contravention to the *Fisheries Act* and the Nova Scotia Fishery Regulations. Tried as part of the same case, Sylliboy was not in possession of salmon but was charged for snaring salmon in a river that runs through his community of Paqntkek. The Provincial Court found that the Atlantic Fishery Regulations (1985), with the *Fisheries Act*, were inconsistent with the constitutional rights of those charged. Three important conclusions regarding Mi'kmaq Aboriginal and treaty rights were determined from the trial of Denny, Paul & Sylliboy in 1990. As the appellants were status Indians under the *Indian Act*, the following can be reasoned to apply to status Mi'kmaq. First, the Mi'kmaq have an existing Aboriginal right to fish for food in the subject waters. Secondly, s. 35 of the *Constitution Act*, 1982, provides the Mi'kmaq

with the right to an allocation of any surplus of the fisheries resource which may exist after the needs of conservation have been taken into account. This right is subject to reasonable regulation of the resource in a manner that recognizes and is consistent with the appellants' guaranteed constitutional rights. (*R. v. Denny*, p. 69).

Thirdly, the Mi'kmaq have limited immunity from prosecution under the provisions of the *Fisheries Act* and Regulations due to the protection afforded by s. 35 (1) of the *Constitution Act*, 1982 to the Aboriginal right to fish for food. As the provisions under

"which they have been charged are inconsistent with the constitutional rights of the appellants, s. 52 of the *Constitution Act* renders them of no force and effect." (p.69). To summarize, the Mi'kmaq have a right to an allocation of surplus fish and are subjected to reasonable regulation but with minimal interference with the practice of the Aboriginal right, and with it, limited immunity from prosecution. Rights are not restricted to reserve lands and can be exercised beyond reserve boundaries. While the court decided that it was not necessary to determine whether the Mi'kmaq had a treaty right to fish, in less than a decade later, the treaty right to fish was taken to the Supreme Court of Canada.

The *Marshall* decision in 1999 (*R. v. Marshall*, 1999) was a significant legal victory for the Mi'kmaw people, and other nations as signatories to the treaties. Donald Marshall Jr. was charged for fishing eels without a licence during the closed season with illegal nets. Claiming that he had the Mi'kmaw treaty right to fish for sale and was fishing to support himself and his partner, he was subsequently charged. On September 17, 1999, Donald Marshall Jr. was acquitted, however, the *Marshall* decision limited treaty rights to securing necessaries, which is interpreted to be, in a modern context, equivalent to a moderate livelihood (*R. v. Marshall I*, 1999). Importantly, the treaty right was determined to not be the open accumulation of wealth. The treaty right, as protected under s. 35 of the *Constitution Act*, is therefore subject to restrictions if so justified. Accordingly, the treaty right, where justification is shown, is a regulated right and could be reasonably regulated through the use of catch limits to "provide a moderate livelihood for individual Mi'kmaq families at present day standards" (*R. v. Marshall I*, 1999, p.459).

The treaty right to fish for a moderate livelihood became further limited under *Marshall II*, much to the dismay of Mi'kmaq people and legal counsel (*R. v. Marshall*, Nov. 17, 1999). Following the outcry from the commercial fisheries sector, in particular, the lobster industry, the West Nova Fishermen's Coalition applied for a rehearing of the appeal and a stay of the judgment pending the rehearing based on concerns the outcome of the Marshall decision could impact the lobster fishery. The rehearing and a stay of the judgment was dismissed, however, further clarifications around the treaty right to fish and subsequent limitations to the exercise of the treaty rights were brought forward in *Marshall II* decision. As the most recent Mi'kmaq-specific legal case regarding the treaty right to fish, an emphasis on resulting limitations is provided.

Marshall II reinforces species specific justifications to limitations on the treaty right to fish (para. 18, 21). Regulatory prohibitions, including licencing restrictions, "are inoperative... unless justified under the Badger test" (para. 26) and justification for a licensing requirement is dependent on facts (para. 28), including the use of closed seasons (para. 30). Justification according to the Badger test is expected for regulatory limits that take catch below the quantities reasonably expected to produce a moderate livelihood or other limitations imposed on treaty right (para. 39). As stated in R. v. Marshall (1999), Aboriginal people are entitled to be consulted about limitations on the exercise of Aboriginal and treaty rights that extend to the treaty beneficiaries, although the nature and scope of the duty of consultation will vary with the circumstances (para.

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¹⁶ As noted in *R. v. Bader* (1996), a test identical to the *Sparrow* test (*R. v. Sparrow*, 1990), but for treaty rights. Both of the cases are described in 2.3.2.

43(d)). While the *Marshall* decisions (1999) affirmed the treaty right to fish for a moderate livelihood, *Marshall II* created boundaries around the treaty right in relation to the harvest of fish. These boundaries are further categorized as i) scope and access, ii) economic limitation via regulations, (iii) geographic boundaries, and (iv) conservation of the resource, and are discussed in relations to anticipated challenges based on the reality of the Mi'kmaq in Nova Scotia.

i) Scope & Access

As noted in paragraph 19-20 of the Court's decision (Marshall II), the assertion of broader treaty rights to resources gathered in a 1760 lifestyle must be based on historical evidence (para. 20). This implies that the treaty right to a moderate livelihood may not be widely applicable and may not extend to all fisheries. Furthermore, assuring equitable access to identified resources for the purpose of earning a moderate living does not imply first access as it does for Aboriginal rights (para. 38) and creates questions as to where treaty fisheries 'fit' into the hierarchy of priority of fisheries established under the Sparrow decision (1990). An appropriate fit could be to follow Aboriginal fisheries given the protection afforded to Aboriginal and treaty rights under s.35 of the Constitution Act. As such, the priority of access could be that treaty rights follow access for food, social, and ceremonial needs and held in priority over recreational and commercial fisheries. In situations, such as the lobster fisheries where there is no recreational access, the priority should be access to fulfil the Aboriginal right for food, social and ceremonial needs, access to resources to support fisheries based on treaty rights, and lastly, the commercial lobster fishery.

ii) Controlled Economic Benefits via Regulations

Also noted in paragraphs 36(a) and 37, treaty rights may be regulated on the grounds of quantities needed to satisfy necessaries such as the use of catch limits to produce a moderate livelihood without violating the treaty right. Regulations, according to *Marshall II*, could define treaty rights in terms that can be administered by the regulator and understood by the Mi'kmaq without impairing the exercise of the treaty right and thus do not have to meet the standard of justification under the Badger test (para. 37). As such, defining the monetary amount of 'moderate livelihood' and use to control harvest is likely to be ineffective as there is currently no legislative or regulatory means to control how much an individual can earn from fishing. Furthermore, catches, or landings, can vary and as a result, effort to attain a moderate livelihood will vary making regulating fisheries challenges within the context of current commercial fisheries.

iii) Geographic Boundaries

The *Marshall* decisions (1999) clearly established the geographic boundaries for treaty fishing. According to the Court, the community's collective right to fish or hunt is restricted to the community's traditional hunting and fishing grounds (Para 17). Given the exclusion of the Mi'kmaq from fishing for more than a century and continued exploitation and overexploitation of local fish resources from commercial fisheries, traditional fishing areas may or may not currently support fisheries. Furthermore, the creation of the reserve system and subsequent centralization authorized through the *Indian Act* creates additional challenges in identifying community fishing areas. For

example, individuals can reside in a community for which they do not have membership. Other challenges are those in which individuals living off reserve may or may not have community connections, thus fishing according to Mi'kmaq values such as *Netukulimk* may vary among individuals. Regardless, geographic boundaries may or may not coincide with community's traditional fishing areas, current reserves, or Mi'kmaq traditional districts.

iv) Conservation of the Resource

According to the clarifications provided in the *Marshall II* decision, the responsibility for conservation of the resource rests with the Minister, not the Aboriginal users of the resource and thus the Minister can act in the interests of conservation (para. 40(c)). Ministerial responsibility conflicts with current perspectives of Mi'kmaw responsibility for conservation and sustainability of the resources. Furthermore, how a fishery based on the treaty right is implemented may be limited on the grounds of vulnerability of the fishing resource, including small concentrations on vulnerable fishing grounds that may raise potential concerns for the sustainability of the resource (para. 42). For example, while Mi'kmaw fishers, and the Mi'kmaw population in general is small, concentration of fishing effort on vulnerable fishing grounds could be subjected to regulations despite the species not being vulnerable overall.

Despite being a successful case outcome for the Mi'kmaq people, albeit limited, efforts to implement the right based on Mi'kmaq self-government and traditional governing

principles were not successful (Steigman & Pictou, 2011) regardless of the recognition of Aboriginal and treaty rights in the *Constitution Act* (1982).

2.3.2 Other Case Law Influencing Fisheries Management and Policy In addition to Mi'kmaq-specific case law, other cases have set precedence for the interpretation of the exercise of Aboriginal and treaty rights and ways Aboriginal and treaty rights can be limited. Many of these case influence federal and provincial policy and are used to support enhanced governance. Given the broad and emerging case law pertaining to Aboriginal and treaty rights, the focus of the following discussion will be narrowed to those impacting current policy and interpretation of Mi'kmaq Aboriginal and treaty rights and impacts to fisheries governance. One of the more significant cases influencing federal Aboriginal fisheries policy is the *Sparrow* decision (1990).

In 1984, Ronald Sparrow, a member of the Musqueam Band in British Columbia, was charged under the *Fisheries Act* (s. 61(1)) for fishing with a drift net larger than specified in the band's food fishing licence. Sparrow contested that the net restriction was inconsistent with s.35(1) of the *Constitution Act* (1982) and thus not an infringement on his Constitutionally protected right (*R. v. Sparrow*, 1990). While a judgement was not reached initially and a retrial was recommended, the final *Sparrow* decision addressed the scope and extent of s. 35(1) by determining the responsibility of the state to justify infringements to the right, priority of access to the fish resource for more than food and include social and ceremonial needs, and reasons for justification (Asch & Macklem, 1991). The *Sparrow* decision propelled Canada into creating a legal framework for controlling and limiting the implementation of the Aboriginal right as the right to fish for

to include social, and ceremonial needs. In addition, the *Sparrow* decision clarified the words "recognition and affirmation" in the *Constitution Act* as

...the government's responsibility to act in a fiduciary capacity with respect to aboriginal peoples and so import some restraint on the exercise of sovereign power. Federal legislative powers continue, including the right to legislate with respect to Indians pursuant to s. 91(24) of the *Constitution Act*, 1867, but must be read together with s. 35(1). Federal power must be reconciled with federal duty and the best way to achieve that reconciliation is to demand the justification of any government regulation that infringes upon or denies aboriginal rights. (*R. v. Sparrow*, 1990, para 8)

As such, *Sparrow* also implies a sharing of power, or at the very least, the recognition that the power of Canada's federal laws may be substantially reduced. As a result, and as Elliott (1991, p. 30) clearly articulates, "Section 35(1) protects aboriginal rights from infringement by government regulation, unless government is able to justify the infringement." Importantly, the *Sparrow* decision calls for a new approach to address how fisheries resources for Indigenous communities are governed by enhancing the role of Indigenous peoples in fisheries (Wiber & Milley, 2007; Wildsmith, 1995). Besides establishing legal criteria for priority of access to the Aboriginal fishery over other resource users following the needs of the species, the *Sparrow* decision outlines the criteria to determine if federal infringement on the Aboriginal right is constitutionally valid. Furthermore, it determines the Crown bears the burden of justification of infringement, conservation measures, and demonstration of hardship, and importantly,

that Aboriginal rights cannot be unilaterally extinguished by governments and the need to consult regarding potential justification and infringements (Carlson, 2014).

Besides affirming the rights of Aboriginal peoples to fish for FSC needs, *R. v. Sparrow* (1990) also identified the priority of Aboriginal access over the commercial and sport fisheries, and the identification of justification of the infringements to the Aboriginal right to fish for FSC needs to include conservation, personal safety, and the safety of others (*R. v. Sparrow*, 1990). Whether this prioritization occurs in practice is, however, debatable. Following the Sparrow decision (1990) much of what followed in Supreme Court of Canada rulings concentrated on the nature and extent of the Aboriginal right.

Another significant case following the *Sparrow* decision occurred in 1996. The Sto:lo claim to fish for more than FSC use as supplementary sustenance, "...defined in terms of the basic needs that the fishery provided to the people in ancestral times" (para 318) was tested in *R. v. Van der Peet*, 1996. In this case, the appellant Dorothy Van der Peet was charged with selling 10 salmon caught under the authority of an Indian food fish licence contrary to s. 27(5) of the British Columbia Fishery (General) Regulations, SOR/84-248 that prevented the sale, "...barter, or offer to sell or barter, any fish caught under the authority of an Indian food fish licence." Her defence was based on the position the provincial regulations infringed on her existing Aboriginal right to sell fish and thus were invalid on the basis that they violate s. 35(1) of the *Constitution Act*, 1982. Conclusions arising from the outcome of the *Van der Peet* case also affirmed the right to fish for

commerce is a "limited" priority (para 319) and the priority to fish over non-aboriginal use of the resource, as noted in para 318:

- 1. The state may limit the exercise of the right of the aboriginal people, for purposes associated with the responsible use of the right, including conservation and prevention of harm to others;
- 2. Subject to these limitations, the aboriginal people have a priority to fish for food, ceremony, as well as supplementary sustenance defined in terms of the basic needs that the fishery provided to the people in ancestral times;
- 3. Subject to (1) and (2) non-aboriginal peoples may use the resource. Federal limitations were again in the forefront of the decision. First, and importantly, limits determining what the Aboriginal right is. The Supreme Court of Canada (SCC) determined that, to be recognized as an Aboriginal right, an activity must be "an element of whether the appellant has demonstrated a practice, custom, or tradition integral to the distinctive culture of the aboriginal group claiming the right" (para 46). Thus, focusing the scrutiny of activities, customs or traditions to prior to European contact fails to consider an adaptive nature of Aboriginal rights during contact, when treaties were not established yet Indigenous nations, as sovereign nations, were adapting to circumstances during the era of European contact. This assumption, and consequently the limit, is erroneous as it assumes that aboriginality does not exist post European contact. Second, the SCC decision also put forward that the ground for limitations includes societal peace or reconciliation (*R. v. Van der Peet*, 1996, p.521);

A government limitation on an aboriginal right may be justified, provided the limitation is directed to ensuring the conservation and responsible exercise of the

right. Limits beyond this cannot be saved on the ground that they are required for societal peace or reconciliation. Limits that have the effect of transferring the resource from aboriginal people without treaty or consent cannot be justified.

Legal scholars noted that while both the *Sparrow* and *Simon* decisions referenced the rejection of the 'frozen rights' approach, it was ignored in subsequent decisions such as in *R. v. Van der Peet* (1996) and those that followed. Furthering colonial limitations to Aboriginal rights following the *Van der Peet* decision were *R. v. Gladstone* (1996) and *R. v. Smokehouse* (1996). Collectively, these three cases are known as the Van der Peet

Aboriginal rights following the *Van der Peet* decision were *R. v. Gladstone* (1996) and *R. v. Smokehouse* (1996). Collectively, these three cases are known as the Van der Peet trilogy. These cases demonstrated that s. 35 of the *Constitution Act* was not an "iron shield" to First Nations but rather "a rope of sand" of inconsistent judgements that cannot be relied upon (Barsh & Henderson, 1997, p.1009). Judgements were not rendered in all of the cases; however, Aboriginal rights were further clarified. In the case of *R. v. Gladstone* (1996), it was found that what constitutes grounds for justification was contradictory to the *Van der Peet* decision.

Donald and William Gladstone, members of Heiltsuk First Nation, were charged with selling herring spawn on kelp under the Indian food fish licence that prohibited the purchase, sale or barter or attempt to purchase, sell or barter herring spawn on kelp under the authority of a Category J licence, which was the Indian fish licence, as per s.20(3) of the Pacific Herring Regulations, SOR/84-324.

...Because distinctive aboriginal societies exist within, and are a part of, a broader social, political and economic community, over which the Crown is sovereign, there are circumstances in which, in order to pursue objectives of compelling and

substantial importance to that community as a whole (taking into account the fact that aboriginal societies are a part of that community), some limitation of those rights will be justifiable. Aboriginal rights are a necessary part of the reconciliation of aboriginal societies with the broader political community of which they are part; limits placed on those rights are, where the objectives furthered by those limits are of sufficient importance to the broader community as a whole, equally a necessary part of that reconciliation. With regards to the distribution of the fisheries resource after conservation goals have been met, objectives such as the pursuit of economic and regional fairness, and the recognition of the historical reliance upon, and participation in, the fishery by non-aboriginal groups, are the type of objectives which can (at least in the right circumstances) satisfy this standard. In the right circumstances, such objectives are in the interest of all Canadians and, more importantly, the reconciliation of aboriginal societies with the rest of Canadian society may well depend on their successful attainment.

In *R. v. Gladstone*, the issue of whether other government objectives are as justifiable as conservation of the resource was not an issue. Rather *who* is permitted to benefit from extracting of the resource was the issue and those limits justifying why, although ambiguity existed around the nature and extent of the "right circumstances." Here, following conservation, "the pursuit of economic and regional fairness, and the recognition of the historical reliance upon, and participation in, the fishery by non-aboriginal groups may be objectives" (para 73) to justify infringements to the Aboriginal right as determined in *Van der Peet*, for societal peace and reconciliation. The

last case in the trilogy, R. v. Smokehouse (1996), a non-Aboriginal processor was charged and convicted for with selling and purchasing chinook salmon not caught under the authority of a commercial fishing licence, contrary to s. 4(5) of the British Columbia Fishery (General) Regulations, and with selling and purchasing fish caught under the authority of an Indian food fish licence, contrary to s. 27(5) of the Regulations. The chinook was purchased from the Sheshaht and Opetchesaht bands who were fishing under the authority of a food fishing licence. It was determined that the Sheshaht and Opetchesalt peoples have the right to trade fish for sustenance and the right has not been extinguished. Thus, the Aboriginal right, at least to the Sheshaht and Opetchesaht peoples, includes "sell, trade and barter fish for livelihood, support and sustenance purposes which is protected under s. 35(1) of the Constitution Act, 1982." (para 74). Thus, Aboriginal rights are viewed by the Supreme Court of Canada as those in which sustenance are included. For example, Aboriginal rights could encompass the right to a moderate livelihood. Based on the Van der Peet trilogy, First Nations continue to be subjected to oppressive case law limiting rights that pre-existed colonial settlements while at the same time, not reaping the benefits of Supreme Court decisions in government policy. While clarification of the "right circumstances" was not provided in the *Gladstone* decision, this caveat leaves First Nations at the mercy of a more powerful and larger society. For First Nations, this may result in a lack of fairness or equitable access to fishery resources and more largely through inconsistent interpretation of case law in the Canadian legal system.

Further to the concept of consultation, the need to consult Indigenous peoples in activities potentially impacting their Aboriginal and treaty Rights and Title is substantiated in other case law as the duty to consult by Crown, or provincial and territorial designates (*R. v. Haida, 2004*; *R. v. Taku River Tlingit, 2004*; *R. v. Mikisew Cree, 2005*). The duty of the Crown to consult is dependent on the strength of the case supporting the existing of the right or title and the seriousness of the potential adverse effect to the right or title claimed. The duty of the Crown to consult is a commitment to a meaningful and distinct consultation process and attempts to minimize adverse impacts on rights and/or title but is not under a duty to reach an agreement. The exception, however, is the requirement of consent from Indigenous nations with proven claims to Aboriginal title.

Aboriginal title is recognized in Canada. In 1973, Frank Calder and elders from Nisga'a declared their title to Nisga'a lands were not extinguished by treaty. While the claim remained unsettled, the case became the foundation for the Nisga'a treaty (Nisga's Nation, n.d.) and other nations claims to Aboriginal title (*Delgamuukw* v. British Columbia, 1997; *Tsilhqot'in Nation v. British Columbia*, 2014). The *Calder* case recognized that Aboriginal title existed at the time of the Royal Proclamation of 1763 and was acknowledged in Canadian law (*Calder v. Attorney-General of British Columbia*, 1973; Otis, 2014). Since then, *Delgamuukw v. British Columbia* (1997) provided further clarification on Aboriginal title as an Aboriginal right under s.35 of the *Constitution Act* (1982) and a test to determine if Aboriginal title still existed. The case also identified what provincially controlled activities are justifiable objectives to infringe the right to Aboriginal title (*Delgamuukw* v. British Columbia, 1997). More recently, Aboriginal title

was declared in a territory of British Columbia historically occupied by the Tsilhoqot'in Nation that may further cooperative and productive (inter)jurisdictional relations between federal and provincial and Indigenous governments across Canada (*Tsilhqot'in Nation v. British Columbia*, 2014).

The Tsilhqot'in Nation objected to a commercial logging licence issued on land considered to be part of their traditional territory sought a declaration to prohibit commercial logging. The Tsilhqot'in Nation amended their claim to include a claim for Aboriginal title to the land in question and were successful. Specifically, as noted in *Tsilhqot'in Nation v. British Columbia* (2014, para 83)

...the development of agriculture, forestry, mining, and hydroelectric power, the general economic development of the interior of British Columbia, protection of the environment or endangered species, the building of infrastructure and the settlement of foreign populations to support those aims, are the kinds of objectives that are consistent with this purpose and, in principle, can justify the infringement of [A]boriginal title. Whether a particular measure or government act can be explained by reference to one of those objectives, however, is ultimately a question of fact that will have to be examined on a case-by-case basis.

Despite the variety of justifiable objectives, and as stated in *Tsilhqot'in Nation v. British Columbia* (2014; para 76), consent of the Aboriginal title holders is required:

The right to control the land conferred by Aboriginal title means that governments and others seeking to use the land must obtain the consent of the Aboriginal title holders. If the Aboriginal group does not consent to the use, the government's only recourse is to establish that the proposed incursion on the land is justified under <u>s.</u> 35 of the *Constitution Act, 1982*.

What this means is that claims to Aboriginal title in Nova Scotia, i.e. land that was not surrendered to the British via treaty, including more broadly to Mi'kma'ki, may require consent from the Mi'kmaq for land development and extraction of resources, such as fisheries. Even without proven claims to Aboriginal title, other opportunities exist to support governance and use, control and develop traditional lands by the Mi'kmaq.

While not a legal requirement, soft law such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (United Nations, 2007) offers opportunities for individual and collective learning and establishing standards of behavior to influence national policy (Abbott & Snidal, 2000). The Declaration is considered by the United Nations to represent minimum standards for human rights and is the most comprehensive international instrument on the rights of Indigenous peoples (United Nations, n.d.). The declaration "establishes a universal framework of minimum standards for the survival, dignity and well-being of the indigenous peoples of the world" (United Nation, n.d., para 2).

Among UNDRIP's 46 articles, there are many which could redress the injustices the Mi'kmaq have been subjected to over many centuries. Further, the articles also could be used to support governance to maintain and strengthen their institutions and support current rights affirmed in the *Constitution Act* and case law. For example, the right to

self-determination (article 3) will enable the Mi'kmaq to determine for themselves how they want to partner or interact with the state, or how they decide to establish their own governing system. In article 8, the right not to be subjected to forced assimilation or destruction of their cultures can further support the Mi'kmaq right to their cultural fishing practices and management strategies. Article 18 regarding participation in decisionmaking matters affects their rights while the ability to develop their own Indigenous decision-making institutions could support alternative fisheries governance models. Importantly, in article 15, the right to have dignity and diversity of cultures reflected in education and the public education system could help prevent or at least restrict, the violence erupting between competing Mi'kmaq and non-Mi'kmaw fisheries by providing opportunities for learning about the Mi'kmaw culture, law, and treaties. Here, Canada could "take effective measures, in consultation and cooperation with Indigenous peoples concerned, to combat prejudice and eliminate discrimination..." (Article 15(2)). Of relevance to coastal resource management is article 26 which establishes Indigenous rights to the land, territories, and resources (26(1)), and "to own, use, develop and control their lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired" (26(2)). States are obligated to give legal recognition and protection "with due respect to the customs, traditions and land tenure system of the indigenous peoples concerned" (26(3)). For the Mi'kmaq, this would be monumental recognition that could substantially alter governance in Atlantic Canada as the treaties were Peace and Friendship and to secure trade, and not about surrendering land. A national commitment to implement the United Nations Declaration on the Rights of

Indigenous Peoples¹⁷ failed to be implemented as Canadian law in 2019 as proposed Bill C-292. This, however, has since changed and is now law in Canada as Bill C-15 (Government of Canada, 2021a).

2.3.3 Summary of Legal Landscape

Based on the review of some of the case law impacting Aboriginal and treaty rights, it is apparent that while the courts have provided legal recognition of Mi'kmaq Aboriginal and treaty rights, how the Mi'kmaq exercise their Aboriginal and treaty right is defined more by the SCC than by the Mi'kmaq themselves. Objectives for justifying the use of federal regulatory tool box for Mi'kmaq Aboriginal and treaty rights have gone from conservation and safety (*R. v. Sparrow*, 199) to defining the Aboriginal right as specific, pre-contact activities (*R. v. Van der Peet*, 1996) but with commercial potential (*R. v. Smokehouse*, 1996) to the consideration of economic and regional fairness and the recognition of historical reliance and participation in the fishery of non-Mi'kmaw and non-Indigenous citizens (*R. v. Gladstone*, 1996). Even further, apart from its economic limitation, restrictions on how the Mi'kmaq treaty right to implement a moderate livelihood was defined further limited its scope, access to resources, and geographic boundaries (*R. v. Marshall*, 1999).

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¹⁷ Listed as the first bullet outlining the priorities of the Department for Indigenous and Northern Affairs in the Mandate letter sent to Minister Bennett from Prime Minister Justin Trudeau. The full letter can be found at http://pm.gc.ca/eng/minister-indigenous-and-northern-affairs-mandate-letter.

Conservation is limited on the grounds of vulnerability of the fishing resource and concentration of fishing effort on vulnerable fishing grounds could raise potential concerns for sustainability of the stocks fished. Despite the restrictions, these cases continue to call for both the state and the Mi'kmaq, and other Indigenous nations, to work together to determine a solution, or solutions. Solutions where considerations on how Aboriginal and treaty rights to fish can be governed in Nova Scotia, and more broadly across Canada, must take into consideration history, culture, legal landscape, and the vulnerability of the fish resource.

Understanding that, in the future, laws and current fisheries governance should reflect an UNDRIP framework, Canada is not there yet. The outstanding issue of the lack of recognition of Indigenous sovereignty as part of Canadian federalism in the *Constitution Act* continue to legitimize federal authority in the eyes of the Canadian population (Henderson, 1997, Macklem, 2016) and hinder Indigenous peoples' self-determination (Burrows, 2016). The following section provides and overview of the current fisheries governance in Canada and more locally in Nova Scotia.

2.4 Overview of Fisheries Governance in Nova Scotia

Canadian fisheries are organized under a hierarchical mode of governance through the federal Department of Fisheries and Oceans (DFO) with limited jurisdiction extended to the provinces. The DFO is the lead federal department for Canada's three oceans through numerous acts such as the *Oceans Act*, *Species at Risk Act*, and the *Coastal Fisheries Protection Act*. It is also the lead department for the primary fisheries related legislation, the *Fisheries Act* that enable other regulatory interventions such as the Maritimes

Fisheries Regulations (Government of Canada, 2021b). The Department of Fisheries and Oceans is divided into six administrative regions: Newfoundland and Labrador, Maritimes, Gulf, Quebec, Central and Arctic, and Pacific, with central headquarters located in Ottawa (Figure 3) (DFO, 2016a). Responsibility for the fisheries is that of the federal Minister of Fisheries and Oceans who "may, in his absolute discretion, wherever the exclusive right of fishing does not already exist by law, issue or authorize to be issued leases and licences for fisheries or fishing, wherever situated or carried on" (*Fisheries Act*, s.7(1)).



Figure 3 Administrative regions of the Department of Fisheries and Oceans. Source: https://dfo-mpo.gc.ca/stats/commercial/cfs/2012/section5-eng.htm

Responsibility for fisheries and other wildlife within the boundaries of Canada's national parks are regulated by the *National Parks Act* and administered through Parks Canada (Thomlinson & Crouch, 2012). The province of Nova Scotia falls between two DFO regions, the Maritimes and Gulf regions (Figure 3) with some rivers under the jurisdiction of Parks Canada. Recreational fisheries and aquaculture are shared responsibilities with provincial and territorial governments (Government of Canada, 2020a). The responsibility for recreational fisheries is delegated to the Province of Nova Scotia as the authority for distributing licences for inland fisheries (DFO, 2001).

The primary hierarchical interventions for governance include legal instruments such as acts, policy, licences, regulations and variation orders, and management plans. Marine fisheries are regulated through the Maritime Provinces Fishery Regulations (1993).

Single species management is common in the Canadian fishery using fishery management plans as tools for implementation. The use of Integrated Fisheries

Management Plans (IFMP) are opportunities to include Indigenous knowledge but do not yet exist for all fisheries (Government of Canada, 2021c). Licence conditions contain legal provisions drawn from relevant regulations, acts and management plans. Other legislation applies to the fishing industry such as to regulate processing, inspection, human health, etc. are provincially regulated. Both the federal and provincial governments incorporate participatory process such as science advisory processes, fisheries advisory committees, review committees and other forums for communication and advice (Castro & Nielsen, 2001). Advisory committees comprised of fisher associations or management boards are established for many commercial and

recreationally fished species, especially high-value fisheries such as crustaceans (e.g. snow crab, lobster, shrimp), groundfish and Atlantic salmon, and provide opportunities for interaction between stakeholders and the state.

For First Nations, fisheries are regulated through the Aboriginal Communal Fishing Licenses Regulations with the caveat that the Minister may specify a licence condition in communal fishing licences from the Maritime Provinces Fishery Regulations (1993, s.5(1)). Aboriginal Communal Fishing Licences Regulations SOR93/332 was enacted to authorize Aboriginal organizations for the purpose of carrying on fishing and fishing related activities, and delegate responsibility to Aboriginal organizations to designate fishers and vessels. An Aboriginal organization includes an Indian band, an Indian band council, a tribal council and an organization that represents a territorially based Aboriginal community. Specific to providing access to First Nation communities, the primary intervention is using agreements and subsequent licence conditions. Here, the community, thus its membership, through *Indian Act* specifications of Indian Status or as designates, are licensed to fish named species at specified times and using specified methods. Often, these licenses accompany agreements as work plans for First Nation guardians, research, and other fisheries governance tasks and activities and provide First Nation communities with resources to carry out specified activities. Agreements, as Aboriginal Fisheries Strategy (AFS) Agreements, are administered by the community and negotiated annually with DFO (Wiber & Milley, 2007). However, it is the licence that restricts the harvest methods and times for specified species. For commercial species, licences are specific. However, for food, social and ceremonial purposes, licences are

multi-species with the condition of preventing the trade, sale or barter of identified species in most situations.

Interim agreements for significant commercial access arose following the *Marshall* decision where Mi'kmaq and Maliseet First Nation were provided with access, capital, training, and equipment with commercial communal licences for use for communal benefit¹⁸ referred to as the Marshall Response Initiative (DFO, 2021a). It should be noted that commercial communal licences are not moderate livelihood licences as they are not intended for individuals to obtain a moderate livelihood from fishing. Commercial communal licenses, although fewer, were also provided prior to the *Marshall* Response Initiative through the Allocation Transfer Program (ATP) in the early 1990's (DFO, 2012).

Clearly, access for both FSC needs and for communal commercial purposes is provided to First Nations via licences, albeit the level of access does not meet personal or communal needs. The livelihood fishery has always been undertaken by the Mi'kmaq but recognized in a limited way following the Supreme Court of Canada decisions. The moderate livelihood fishery, as an outcome of the *Marshall* decisions, has yet to be successfully implemented despite its recognition in 1999. By successfully implemented, I

¹⁸ See https://laws-lois.justice.gc.ca/eng/regulations/sor-93-332/page-1.html#h-953174

mean without prosecution, vandalism, threats, and gear loss as examples of the racism and conflict directed toward Mi'kmaw livelihood fishers. While decades have passed since the Supreme Court of Canada's monumental ruling affirming the right to fish for a moderate livelihood, it wasn't until 2007 that the Canadian government was mandated to negotiate with First Nations (DFO, 2021a). The following section provides an overview of the current actions of the federal government to address this outstanding issue.

2.5 FACTORS INFLUENCING GOVERNANCE

Efforts are on-going between the Mi'kmaq of Nova Scotia and the federal governments to consult and negotiate modern agreements to implement a treaty right. Similarly, Mi'kmaq First Nations in other Atlantic provinces are negotiating with the federal government independently of each other. Mandated in 2017, DFO is to "negotiate timelimited Rights Reconciliation Agreements (RRA) on fisheries..." to reflect the moderate livelihood fishing needs and interests, and to collaboratively and sustainably manage fisheries "for the benefit of everyone" (DFO, 2021a). In a recent statement, DFO indicated that it is working with communities to develop and implement livelihood fishing plans that will be licenced by DFO and independent of the RRA to allow for immediate access to fish resources (Government of Canada, 2021d). The caveat, however, is that the livelihood fishing plans must operate within the commercial fishing season with the justification of the use of fishing seasons to ensure sustainable harvest "and maintain orderly, predictable, and well-managed fisheries" (Government of Canada, 2021d). However, there is no evidence that the scale of removal of lobster, for example, through a livelihood fishery out of commercial season would impact the sustainability of lobster stocks (Bailey, 2020).

In the interim and possibly a negotiation tactic to a faster approach to achieving a livelihood fishery and encourage collaboration, DFO has unilaterally applied the conservation measure of seasons without consideration of the concerns and proposals of Mi'kmaq First Nations. In *Marshall II* (s.44(e)), it states;

The Minister has available for regulatory purposes the full range of resource management tools and techniques, provided their use to limit the exercise of a treaty right can be justified. If the Crown establishes that the limitations on the treaty right are imposed for a pressing and substantial public purpose, after appropriate consultation with the aboriginal community, and go no further than is required, the same techniques of resource conservation and management as are used to control the non-native fishery may be held to be justified. Equally, however, the concerns and proposals of the native communities must be taken into account, and this might lead to different techniques of conservation and management in respect of the exercise of the treaty right.

While this may affirm federal limitation to the exercise of a treaty right when justified, it certainly does not imply that the current federal toolbox of management tools and techniques, or use of fishing seasons, is the only way to manage fisheries. Here, Mi'kmaw practices for sustainability such as *Netukulimk* can be utilized. By demanding that livelihood fisheries must be aligned with the management measures of the commercial industry, DFO appears to be doing two things. First, DFO is ignoring concerns and proposals of Mi'kmaq First Nations and prioritizing a pressing and public purpose to limit the treaty right without justification. Second, DFO is recreating a similar

strategy to the Marshall Response Initiative and is in contradiction to s.35 and s.52 of Constitutional Act (1982) and the Marshall decisions. Here, the emphasis is on the use of Canadian fisheries management strategies as the legitimate strategy for Canadians under the Fisheries Act, yet not legitimate for Mi'kmaw fishers, or as a Constitutionally protected treaty right. The application of federal law to a treaty right is not the intent of s.35 when read with s.52. Licences, and the current fisheries management regime including the use of seasons, is based on privilege and Mi'kmaw fishers are being forced, coerced, and negotiated into privilege-based fishing strategies where there is no room for their own knowledge system, laws, or governing structures. By denying an opportunity to incorporate their own conservation and management techniques, the federal government again denies the Mi'kmaq their culture, practices, values, and beliefs, and use of their own knowledge acquired through fishing or from others. In other words, there is continued denial of the Mi'kmaq sovereignty and the use and integration of Mi'kmaw knowledge system to underpin fisheries and fisheries governance according to their own norms, practices, values, rules, or laws.

Given the legal significance of the treaties to the Mi'kmaq and Canada as indicated in the affirmation of Aboriginal and Treaty rights in *Constitution Act*, a new path that successfully implements Mi'kmaq Aboriginal and treaty fisheries arising from the Marshall decisions in Nova Scotia is needed for the Mi'kmaq, non-Mi'kmaw fishers, and the federal and provincial governments. A new path must align with case law outcomes, recognition of Mi'kmaq sovereignty and management strategies as practices within their knowledge system, and the Constitutional protection of Aboriginal and Treaty rights. It is

through the recognition of its historical treaties and cultural values, current case law, and ultimately, the exercise of Aboriginal and treaty rights of the Mi'kmaq in Nova Scotia that a new path may be offered for Mi'kmaw governance of Mi'kmaw fisheries.

How this is accomplished is challenging. First, as many legal scholars note, amendments are needed to the *Constitution Act* to reconcile Canadian federalism and a necessary path forward to recognize Mi'kmaw sovereignty. However, given the fact that the Constitutional protection of Aboriginal and treaty rights is proof of sovereignty and Mi'kmaw treaties did not surrender Mi'kmaw authority or jurisdiction, very little has changed regarding the recognition and affirmation of Indigenous rights in the *Constitution Act* since 1982. Secondly, reconciliation of law is only one piece of a very complicated legal, cultural and political landscape. Complementing current Constitutional protection of Aboriginal and treaty rights requires innovation through enhanced governance. As demonstrated by DFO's lack of recognition of the continued efforts of Sipeknekati'k¹⁹ and Potlotek²⁰ First Nation's to implement a self-regulated lobster fishery in 2020 and fall fishery in 2021 by confiscating traps, law on its own does not necessarily translate to successful implementation of the treaty right to fish for a moderate livelihood

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¹⁹ CTV News. (Dec. 10, 2020). Nova Scotia First Nation frustrated, ceases lobster fishery talks with feds. See full story at

https://atlantic.ctvnews.ca/nova-scotia-first-nation-frustrated-ceases-lobster-fishery-talks-with-feds-1.5225670

²⁰ CBC News. (May 3, 2021). Potlotek lobster traps seized for a 'variety of reasons,' says DFO. For full story see https://www.cbc.ca/news/canada/nova-scotia/potlotek-treaty-lobster-traps-seized-dfo-1.6011912

in Nova Scotia. The recent strategy employed by DFO and the traditional Mi'kmaw district of *Kespukwitk*, the southern area of Nova Scotia, which includes the communities Bear River, Annapolis Valley, Acadia, and Glooscap First Nations demonstrates commitment for cooperation through provisions of access for livelihood fishing that are authorized and managed by the community (APTN, 2021). By understanding both the Mi'kmaw and western knowledge systems, governance can then be designed to fit the current context to develop a solution to successfully implement Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. With this in mind, the following chapter explores theories as ways of understanding and co-producing knowledge in the context of Two-Eyed Seeing that informs my approach to address the research question.

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Scope of the Research Project

The goal of the project is to develop an alternative governance model that allows for the successful governance of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia through the exploration of the interface between western and Mi'kmaw epistemologies. This is researched by examining the overarching research question: *How can Mi'kmaq Aboriginal and treaty rights to fish be governed in Nova Scotia?*

Using the two examples as case studies of Mi'kmaw rights-based fisheries in Nova Scotia, the Aboriginal right to fish for FSC needs (as recognized in *R v Sparrow*, 1990) and the treaty right to fish for a moderate livelihood (as recognized in *R v Marshall*, 1999), the research examines each case study in the context of the governing arrangements that facilitate and/or hinder the expression of Aboriginal and treaty rights through fishing within the current governance regime. Given the significance of the cultural and legal context underpinning the research question and the Mi'kmaw and western epistemologies of participants and myself as researcher, the research question will be pursued from both Indigenous and western methodologies, as an interdisciplinary approach using Two-Eyed seeing as the research framework. The remainder of this chapter is devoted to describing the research approach. To ensure a common understanding of the concepts referred to in this thesis, a terminology section is provided, drawn from the literature also referenced in this thesis.

3.2 TERMINOLOGY

self-govern.

Aboriginal rights refer to rights of individuals or cultures based on historical occupancy.

The term 'inherent' is preferred over 'Aboriginal' as it recognizes the historical and cultural significance of fishing to Mi'kmaq existence prior to colonization and the right to

Action, as an element of governance, refers to the act of putting instruments into effect, such as through the use of policies or socio-political interactions that may emerge as a result of governing interactions between the governing system and the social system-to-be-governed.

Actor, in the context of governance, refers to a societal unit possessing agency or power of action.

Effectiveness is the production of the expected result.

Elements are the intentional components of Interactive Governance Theory that include the image, instruments and action that contribute to governability.

Fisheries Properties refers to the diversity, complexity, dynamics, and vulnerability of the system-to-be-governed that impacts governability.

Governance is defined as the interactive processes through which society and the economy are steered towards collectively negotiated objectives.

Governability refers to the overall capacity for governance of any societal entity or system.

Governing System refers to the total mechanisms and processes available for the guidance, control and steerage of the system to be governed. With the three realms of governance (state, market and civil society) there are specific governing characteristics and features identified as interactions, elements, orders, and modes. State refers to the political body organized for civil rule such as government; market refers to the arena where commodities are purchased for commercial benefit; civil society refers to the rest of society that is not government or market and includes families, community groups, non-governmental organizations and other groups that come together for specific purposes.

Indigenous refers to the first peoples of the land.

Image, as an element of governance, refers to the how and why of governance that is based in assumptions of epistemology.

Instrument, as an element of governance, refers to the design, choice and application of both soft and hard tools that link images to action.

Interactions are specific forms of actions undertaken prevent barriers from arising, remove barriers, and create new or different opportunities.

Interactive governance is defined as the whole of interactions taken to solve societal problems and to create societal opportunities; including the formulation and application of principles guiding those interactions and care for institutions that enable and control them.

Interactive Governance Theory posits that an effective relationship between the governing system and the system-to-be-governed is dependent on the compatibility and reciprocal responsiveness of the two systems in order to meaningfully improve governability.

Knowledge system refers to a system of knowledge where the components of the knowledge system – the knowledge itself, practices, adaptation, and its transmission- are unique to culture and place and informed by a specific underlying belief system and values.

Legal pluralism is the existence of multiple legal systems within the same population or geographic area.

Legitimacy is defined as the perception of a political action to be right and just by those who are involved, interested, and/or affected by it.

Orders, in Interactive Governance Theory, are those which refer to the close relationship of how people and their institutional structures solve problems (first order), the structures and institutions that determine the constraints and opportunities (second order) and the overarching principles and beliefs underpinning distinct knowledge systems (meta order).

Principle is the normative aspect to the societal system that is related to the effectiveness and legitimacy of the governing interactions.

Reconcile, in the context of the research, refers to making governance compatible in the context of Indigenous peoples and Canada where it implies the restoration of relationships in addition to the compatibility of views and beliefs systems.

Structures are frameworks under which actors operate that limit or widen their potential for agency.

System-to-be-Governed refers to the natural and social systems for which governance is expressed and in which both the natural and social systems are comprised of properties of diversity, complexity, dynamics, and vulnerability that impacts its governability.

Treaty refers to a negotiated, legal arrangement between nations.

Treaty rights are legal rights that are negotiated between two nations or multiple nations.

Treaty relationship is a relationship based in the legal, historical, and political landscape of Canada whereby the sovereignty of Indigenous peoples includes equal authority to govern their own fisheries. Similarly, there is the reciprocal recognition of Canadian sovereignty and authority to govern their own fisheries and in a manner that is consistent with s. 25 and s. 35 of the *Constitution Act* (1982).

Two Eyed Seeing is the concept developed by Elder Albert Marshall that recognizes the gift of multiple perspectives treasured by many Aboriginal peoples that refers to their ability to learn to see from one eye with the *strengths* of Indigenous knowledges and ways of knowing, and from the other eye with the *strengths* of western knowledges and ways of knowing, and to using both these eyes together, for the benefit of all.

3.3 THEORETICAL PROPOSITIONS, AND RESEARCH QUESTIONS

As described in Chapter 1, the theoretical propositions underlying the research reflect the fact that the western governance bureaucratic model is incompatible for governing Indigenous Aboriginal and treaty rights-based fisheries. Based on the results of existing governance theory, the following propositions are reiterated here:

- 1) The homogeneity of the western governance bureaucratic theoretical model seems at odds with the multiplicity of Indigenous knowledge systems;
- 2) Understanding the challenges and opportunities arising from the interplay of these different knowledge systems can lead to mutually beneficial outcomes for both parties, including the effective management of the fisheries; and

3) Implementing a self-governing arrangement for Mi'kmaq Aboriginal and treaty rights to fish is more likely to be successful using values and beliefs from both Western and Mi'kmaw knowledge systems and addressing issues of social justice such as marginalization, equality, and representation.

Based on the developed propositions, the success of the appropriate Mi'kmaw fisheries governance model is determined by the recognition of the importance of the multiplicity of knowledge systems to governance and their collective capacity to develop shared values and respect beliefs through interactive processes.

As such, the research question centers around the examination of the capacity and capability of the federal government to govern Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia in the context of legal pluralism, jurisprudence, and valid peace and friendship treaties in Eastern Canada. To study this, challenges and opportunities to current Mi'kmaw fisheries governance were studied extensively, taking into account the following assumptions:

- Challenges and opportunities to current fisheries governance can be characterized and described;
- 2) Knowledge systems shape values and create conflict when values are not shared collectively between or among knowledge systems;
- 3) The governability of Mi'kmaq Aboriginal and treaty rights to fish can be assessed; and
- 4) An image of the system-to-be-governed can be characterized and described.

In addition to the overarching research question, how can Mi'kmaq Aboriginal and treaty rights to fish be governed in Nova Scotia, the sub-questions used to guide data collection were:

- 1) From the perspective of the Mi'kmaq participants in the research, what are Mi'kmaq Aboriginal and treaty fisheries for a moderate livelihood?
- 2) Using salmon and lobster as case studies, what are the opportunities and challenges to current governance (federal, provincial, Mi'kmaq) that both facilitate and hinder governance of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia?
- 3) How can limits to governance be reconciled to govern Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia?

3.4 THE RESEARCH APPROACH: TWO-EYED SEEING AS THE THEORETICAL FRAMEWORK

Kovach (2014) reflects that selection of a theoretical framework reflects a personal belief system that "emerges from a particular cultural context and from a particular voice" (p.99). Regardless, research is a colonial tool (Reid, 2020). Much effort has been devoted to decolonizing research (Smith, 1999), articulating Indigenous methods and finding better ways to conduct research that respect Indigenous knowledge and worldviews (Kovach, 2009; Wilson, 2008). In this sense, Indigenous research is itself an example of Two-Eyed Seeing. The Mi'kmaq, and other Indigenous nations, value the concept of Two-Eyed Seeing as a way of working with contemporary society (Reid et al., 2021). The concept of Two-Eyed Seeing, also referred to as *Etuaptmumk*, was developed by Mi'kmaq Elder Albert Marshall. Two-Eyed Seeing is described as a philosophy that

could be used for co-learning as the foundation and pre-condition to creating new knowledge (Bartlett et al., 2012). As previously described in Chapter One, Two-Eyed Seeing is the use of both knowledge systems. It is practical, beneficial, and readily embraced by some Mi'kmaw elders (Bartlett et al., 2012) and enhances tribal and academic credibility (Kovach, 2009). Additionally, it could be, as a theory developed by an elder, used as one of the ways to guide interdisciplinary research (Repko, 2008) and as a social justice framework. To illustrate, in the context of this research, Two-Eyed Seeing, as a newly developed theoretical, analytical, and interpretive framework, is used to help acquire the knowledge needed to derive the solution as transformative action. Additionally, it is used to view perspectives and to sort challenges and opportunities experienced by Mi'kmaw and western knowledge systems as understood in the context of the fisheries examined. The challenge of Two-Eyed Seeing lies in the reality that different, and often incompatible ways of knowing, are sought to be brought together for "the benefit of all" but aspects of these different ways of knowing may in fact not be reconcilable. It is in this realm where beliefs and values create tension between knowledge systems and the opportunity for Two-Eyed Seeing to emerge. Here, understanding underlying beliefs of both knowledge systems and cooperating to not only respect values but to incorporate values of both knowledge systems to develop a path forward, as illustrated in Figure 1, Chapter 1, while recognizing and respecting human rights, power imbalances, and equal opportunities while striving for transformative action and change (Creswell, 2013).

In this approach, the design phase involves the subsequent identification of the research questions. Here, the use of an Mi'kmaw advisory committee to further refine the research purpose was employed as part of the participatory research process. The Mi'kmaw advisory committee was engaged to help understand the issues of concern that needed to be addressed and for which the research could meaningfully contribute. The committee consisted of Mi'kmaw elders and lawyers engaged in negotiations and consultations with DFO regarding the Mi'kmaw moderate livelihood fishery. Further to co-development of the research needs, research methodology was, as Kovach (2009) describes as key to tribal paradigms, in line with Mi'kmaw values and benefit the Mi'kmaq in Nova Scotia, federal provincial governments, and the fishing industry.

3.4.1 Education and Experience

As a doctoral student, I have focused my efforts on understanding the western methods for acquiring knowledge in biology, fisheries ecology, co-management, qualitative research methods, including qualitative methodologies, fisheries law, co-management, and public policy and decision-making. From the Indigenous perspective, I was raised in a Mi'kmaw speaking household, have two decades of experience in Aboriginal fisheries, and am often immersed in the challenges faced by the Mi'kmaq in fisheries governance. I am familiar with the influence of Mi'kmaq knowledge to fisheries sustainability, Mi'kmaw values, knowledge of Aboriginal rights, treaties and case law, and Mi'kmaw governance processes. I also participated in, and am knowledgeable of, Mi'kmaw traditional fisheries, data collection for scientific studies, and have participated in fisheries related consultation. I am also aware of what I do not know. As an interdisciplinary student, I am not a legal expert in Indigenous law, Mi'kmaw culture,

marine policy analyst, nor am I an expert in Mi'kmaw knowledge systems. The expectation is to have the relevant knowledge to address the research question and of this, I am confident.

3.5 THEORIES AS WAYS OF UNDERSTANDING KNOWLEDGE

Several orientations for interpretation are necessary to provide a holistic approach to understanding and addressing the issues associated with my research topic. Two-Eyed Seeing, in the context of this research, is the use of both Mi'kmaw and western methods informed by western and Indigenous theoretical lenses. Both orientations are necessary to understand how fisheries governance can be conceptualized to successfully implement Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. Furthermore, the use of multiple perspectives within Indigenous research is expected as decolonizing approaches do not adhere "to a specific research method or methodology" (Swadener & Mutua, 2008, p.33) and are reflective of the gift of multiple perspectives characteristic of Albert Marshall's Two-Eyed Seeing (Bartlett et al., 2012). Western methodologies, such as social theories, are useful to examine issues around power, highlight context over meaning in governing activities, and serve as a lens through which actors interpret policy problems (Turnbull, 2016). Thus, in the context of the research question, Two-Eyed Seeing is an approach that embraces both western and Mi'kmaw epistemologies. Given the scope of this research, the theories found most relevant to inform the research design are the Mi'kmaw knowledge system, constructivism, and critical theory.

3.5.1 Mi'kmaw Knowledge System as Indigenous Theory

Indigenous theory is described by Kovach (2017) as a "placeholder" that "...anchors your research in Indigenous teachings" (p. 223). Indigenous theory describes the experiences

of Indigenous peoples when dealing with a dominant settler state that are centered around relations, is self-defined and self-determined, and becomes a re-building strategy within and among Indigenous social relations for transformation (Kovach, 2009, 2017). As such, there is no single Indigenous theory. However, the practicality of theory is emphasized and the emotions needed for change; for within any given Indigenous theory, there are motivations referred to as the researcher's 'felt knowledge' which enable the researcher to strive for improved solutions (Johnston, McGregor, & Restoule, 2018; Million, 2014). Linked to Indigenous theory, Indigenous methodologies are described as "those that enable and permit Indigenous researchers to be who they are while engaged actively as participants in research processes that create new knowledge and transform who they are and where they are" (Weber-Pillwax, 2001, p.174). Ultimately, Indigenous methodologies can support research by and for Indigenous peoples using culturally appropriate techniques and protocols, thus empowering relationships, values, and ethics (Evans, Hole, Berg, Hutchinson, & Sookraj, 2009; Johnston et al., 2018; Kovach, 2009; Smith, 1999; Wilson, 2001). As epistemology is uniquely tribal, there may be as many Indigenous methodologies as there are Indigenous nations (Kovach, 2009).

In the context of the Mi'kmaq, a Mi'kmaw way of knowing reveals a dynamic reality that is based on relationships among the living and non-living for existence. Ways of knowing are based in experience and the experience of others through oral, written, and practical tradition from the land it arises. Both knowledge and reality are viewed as collective; no one person has all the knowledge, where interdependency, self-limitation, and adaptation are emphasized for existence and survival (Berneshawi, 1997; Denny & Fanning, 2016a;

Giles et al., 2016; Leblanc, 2012; McMillan & Prosper, 2016; Prosper, McMillan, Davis, & Moffitt, 2011; Sable & Francis, 2012).

3.5.2 Constructivism

Complementing Indigenous theory, the constructivist perspective embraces subjectivity and "acknowledges that their interpretation of the studied phenomenon is itself a construction" (Charmaz, 2014, p. 342). Constructivist grounded theory assumes multiple realities and seeks to understand the world through the participants' view of the situation as one that is shaped through interactions among individuals as a negotiated social and historical construct (Creswell, 2013). Furthermore, constructivism also acknowledges data are co-constructed through interaction and reconstructed to theory and are shaped by the researcher's background, values and priorities (Charmaz, 2009; Creswell, 2013).

Constructivist grounded theory methods are compatible within an Indigenous research paradigm and complement an Indigenous research approach (Kovach, 2009, 2014). For example, constructivist grounded theory allows for Indigenous epistemology to guide research and for Indigenous participation to guide interpretations. It offers an analytical technique that honors oral knowledge and allows for an integrationist and inductive approach to bring together groups and knowledge to support theory development.

Additionally, it supports the importance of knowledge of the subject area and provides for a pragmatic analysis leading to practical recommendations. Furthermore, the collaborative and participatory opportunities, establishment of relationships between concepts, flexibility in guiding the research, lack of hierarchy in the research process, and co-construction of theory serve to justify compatibility with Indigenous methodologies. It

is noted that the epistemological use of a method does not change the appearance or cause "erosion" of a grounded theory, and increases the likelihood of acceptance of the research product by those sharing the same epistemology (Greckhamer & Koro-Ljungberg, 2005, p. 738).

3.5.3 Critical Theory

Critical theory, in the context of Indigenous research, is devoted to addressing political issues of social justice and equality that lead to Indigenous objectives of emancipation and empowerment (Denzin & Lincoln, 2008). Ontology, the nature of reality, in critical theory is grounded in issues of power and identity that privilege or oppress individuals or groups based on race, class, gender, sexual orientation, or disabilities (Creswell, 2013). Methods to understanding reality from a critical perspective are to study and document power and identity struggles that become the foundational knowledge base needed to improve the reality of those oppressed. In critical theory, axiology (the role of values) focuses on the diversity of values emphasized from the participants' perspectives (Creswell, 2013). However, values must be decolonized when researching with Indigenous peoples.

A decolonizing approach reinforces cultural voice and identity and is grounded in Indigenous contexts of place, culture, and community. Furthermore, a decolonized approach focuses on the critique of western knowledge systems, empowers Indigenous communities in the research processes and outcomes, and encourages scholars to act and engage in research practices that honor Indigenous ways and knowledge (Denzin & Lincoln, 2008; Kovach, 2009; Wilson, 2008). To address structural changes and need for

decolonization in fisheries governance, the inclusion of a critical orientation to understand power imbalances and address power at multiple levels is recommended (Kooiman, 2013; Latulippe, 2015). I also recognize that this is necessary to examine within the critique of the Mi'kmaw governing systems as Mi'kmaq First Nations' governments are products of imposed, colonial forms of government that differ from traditional Mi'kmaw governance.

While it may appear that my western eye is heavy with western theory as ways of knowing, they are compatible and recommended for use for those who engage in Indigenous research and provide credibility with research participants and those sharing the same epistemologies. In other words, using the three theories identified here as relevant to this research have the advantage of fostering rigour and credibility among both the western and Mi'kmaw knowledge systems. This is important in Two-Eyed Seeing as the goal is to discern the values of each knowledge system in the research process so as to develop a feasible solution to successfully implementing Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. In addition to the above-described theories, Interactive Governance Theory (IGT) offers an opportunity to examine and codevelop knowledge specifically through a governance lens. The next section examines IGT that, as I demonstrate, has application in knowledge co-production and is compatible to a knowledge system approach. In particular, the emphasis on normative aspects underpinning governance theory and solutions.

3.6 Interactive Governance Theory (IGT) as a Theory to Co-Produce Knowledge

To help understand and thus acquire knowledge specific to the context of the research question and develop an alternative governance model as an outcome or solution,

Interactive Governance Theory (IGT) is used to interpret the data and propose explanations to the underlying context that is under examination.

How to better address governance needs is the question and outcome of this research and thus it is necessary to examine 'governance' in detail. Governance theories seek to understand "the production of ordered rule in our increasingly complex, fragmented and dynamic society" (Ansell & Torfing, 2016, p. 1). Governance theories are widely recognized as an analytical tool to explain outcomes of governing among or between multiple governing systems. Governance is also a process itself to be explained.

Emerging and evolving governance theories continue to offer explanations to new challenges and forms of governing and are important contributors to the need for interdisciplinary research. Previously conceptualized as solely the output of government, contemporary governance reflects the role of private and public actors in governing and is defined as "the interactive processes through which society and the economy are steered towards collectively negotiated objectives" (Ansell & Torfing, 2016, p. 4).

While there are numerous theories of governance applicable to natural resources and coastal systems (Partelow et al., 2020), few theories focus on normative aspects underpinning governance. Given the understanding that values and beliefs underpinning the knowledge system differ between western and Indigenous knowledge systems, such

as a holistic approach preferred by Indigenous knowledge system and a reductionist approach preferred by the western knowledge system, governance based in normative theory is another, albeit untested, approach to understanding and providing solutions for governance issues.

Normative theory, by its definition, emphasizes the prominence of values underpinning governance. Within normative theory lays the attractiveness of Interactive Governance Theory in its promise to address several of the challenges faced in today's complex and evolving society. Such challenges may include: enhancing effectiveness by connecting with multiple stakeholders, rightsholders, and networks to provide solutions to 'wicked' problems and address fragmentation; striving for efficiency by preventing conflict and minimizing veto power in networks to reduce costs in decision making; enhancing legitimacy by bridging the gap between societal actors and governments thereby creating acceptance for governance outputs and adding value to democratic or other governing processes; and, incorporating moral responsibility as a way to address social injustices and inequities (Edelenbos & van Meerkerk, 2016; Kooiman, Bavinck, Jentoft, & Pullin, 2005). However, and because of the *Indian Act*, social injustices and inequalities may also be present in current Mi'kmaw governing systems. Interactive governance has many definitions in the academic literature but largely focuses on the engagement of societies and actors, singularly or collectively, to engage in (inter) governmental processes and procedures associated with complex decision-making (Edelenbos & van Meererk, 2016).

Interactive governance is thus defined, as "the whole of interactions taken to solve

societal problems and to create societal opportunities; including the formulation and application of principles guiding those interactions and care for institutions that enable and control them" (Kooiman, Bavinck, Jentoft, & Pullin, 2005, p.17). Governability challenges us to think in a two-system interactive approach – the governing system and the system-to-be-governed, with the central feature of the interactions occurring between the systems. It forces us to examine whether the governing system and governing interactions meets the demands of the system-to-be-governed (Bavinck, Chuenpagdee, Diallo, van der Heijden, Kooiman, Mahon, & Williams, (2005); Jentoft, 2011; Kooiman, 2008; Kooiman & Bavinck, 2013; Kooiman et al., 2005; Partelow et al., 2020). The use of IGT as a theoretical framework to understand new forms of governance has only recently been explored (Hernes, Broderstad & Tennberg, 2021).

The development of an alternative fisheries governance model for Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia is examined within the context Two-Eyed Seeing. Interactive Governance Theory is used as both an analytical lens to assess governance and as a guide to design governance. Interactive Governance Theory is compatible with a knowledge system approach as a recognized theory as the 'western' eye of Two-Eyed Seeing in contemporary society. Moreover, IGT as a governance theory also provides credibility for self-governance as one of three recognized modes of governance in contemporary society. Importantly, IGT as normative based theory, considers values as drivers for governance and how governance is achieved. Herein lies opportunities for innovation to develop Mi'kmaw relevant governance using Mi'kmaw values that are not the current *modus operandi* of Canadian government. Thus, it is necessary to elaborate on

components of the governability framework as important considerations for assessing current governability and for developing an alternative fisheries governance model for Mi'kmaq Aboriginal and treaty rights.

The governability framework is conceptualized in Figure 4. Each of the components of governability is described below.

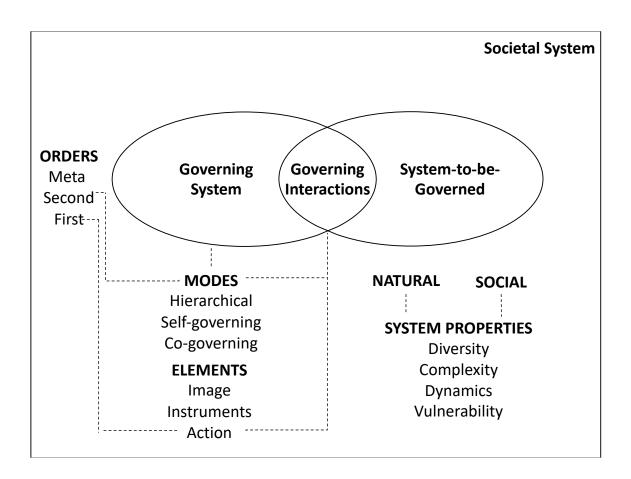


Figure 4 Conceptualization of the governability framework for a societal system based on Interactive Governance Theory (IGT). Dotted lines represent overlap between components of the governing system. Modified from Kooiman et al. (2005).

3.6.1 System-to-be-Governed

The system-to-be-governed is comprised of both natural and social components (Figure 4). Natural components are the resource and its environment, while the social components are concerned with how those who use the resource and interact with the natural component (Kooiman, Bavinck, Chuenpagdee, Mahon, & Pullin, 2008). As a system-to-be-governed, fisheries can thus be viewed as the interdependence of the social system with the natural system, each of which possess properties or features that are diverse, complex, dynamic, and vulnerable to varying degrees.

- Diversity refers to the characteristic(s) of fisheries system entities, especially
 regarding the nature and degree they vary, such as having different types of
 species and harvesting methods in the fisheries;
- Complexity describes the interdependency among parts of a system, and between
 the system and the environment, especially as more actors are involved, as in
 global fisheries;
- Dynamics are the tensions within a system or between systems associated with its ability to change, such as between and within ecosystem, markets, social, cultural, and political environments; and
- Vulnerability refers to the weakness of the natural or social system in response to the threat of a loss (Kooiman, 2008).

By understanding the system properties of the system-to-be-governed, an appropriate mode or modes of governance can be theoretically recommended to adequately address the needs of the system-to-be-governed and are foundational to governability assessments (Jentoft, 2007).

3.6.2 Governing System: Governing Modes, Orders & Elements Given that the Mi'kmaq, at the time of contact, were self-governing, identifying a governance theory requires consideration of self-governance as a recognized form of governance. Interactive governance theory is one theory that recognizes self-governance as one of the three main modes or styles of governing. Other modes include hierarchical and co-governing. Interactive Governance Theory also purports that specific governing modes are better at addressing different properties of the system-to-be-governed and, in most situations, all three forms of governance may be required for governance to be effective (Kooiman & Bavinck, 2005; Kooiman, 2008). As such, IGT can provide a way forward. Here the contextual nature revealed in the analysis of system-to-be-governed informs which governing mode, or modes, is better suited to address the properties of the system-to-be-governed. There are, however, additional considerations. In the case of this research, the state is a governing system and the Mi'kmaq, with Constitutionally recognized and affirmed Aboriginal and treaty rights, are a governing system from the perspective of the Mi'kmaq and a system-to-be governed from the perspective of the state. The governing system is comprised of modes, orders, and elements (Figure 4). Each component is discussed separately in the following section and its relevance to the research topic.

3.6.2.1 Governing Modes: Hierarchical, Self-Governing & Co-Governing Modes are defined as a category of interaction. The hierarchical governing mode is the most formal and vertically organized interactions known as interventions. Informal interactions, referred to as interferences, can be equated with self-governing. And lastly,

interactions that are more horizontal and semi-formalized are known as interplays in cogoverning modes (Kooiman & Chuenpagdee, 2005).

Hierarchical arrangements are expressed as interventions of laws and policies that are top-down (state to citizen) and are used as the steering and/or control functions for the state (Bavinck et al., 2005; Kooiman et al., 2008, 2005; Kooiman & Chuenpagdee, 2005). Direction is a key element of steering and is accomplished through interventions with societal parties. As the most common form of governance, hierarchical modes remain useful and are better suited to address fragile ecosystems such as those that are vulnerable or situations where the necessary knowledge of the system-to-be-governed is incomplete or unknown. Caution is demanded from the governing system and provisions to deal with caution are necessary to protect fish habitats, livelihoods and respect cultural rights (Jentoft, 2007). For example, in Canada, the federal Department of Fisheries and Oceans operates under hierarchical modes of interactions and is considered a hierarchical institution.

Kooiman and Chuenpagdee (2005) describe self-governance as "the most informal and fluid mode of governance...embedded within the societal realm of societal interactions, with individuals, families, groups, organisations, and even societal sectors governing themselves" (p. 334). Despite a lack of recognition of self-governance for fisheries in Canada as a valid form of governance due to the perception that governance is what more formal authorities do, it has a place in mature governance theory and place in interactive governance (Bavinck et al., 2005; Kooiman & Chuenpagdee, 2005).

Self-governance has an "inherent societal quality" and describes situations in which actors take care of themselves independent of government interventions (Kooiman & Chuenpagdee, 2005, p. 334). Self-governing is achieved as a decentralized mode in which organization, decision-making and implementation are made by those closer to the problem or opportunity, and the scale of the system-to-be-governed is smaller and local in origin (Jentoft, 2007). Self-governing as a mode of governance is of potential significance to the Mi'kmaq given they were exclusively self-governing until forced to become the 'governed' under assimilation policies and the *Indian Act* (Augustine, 2016; McMillan & Prosper, 2016; Palmater, 2014; Paul, 2006). Importantly, in self-governance, those being governed are also those governing (Kooiman et al., 2005).

Proponents of IGT define co-governance, the third mode of governing, as a style of governance "where societal parties join hands with a common purpose in mind and stake their identity and autonomy in the process" (Kooiman and Chuenpagdee, 2005, p. 366). Control is distributed among the actors through horizontal interactions of mutual impact referred to as interplays that include cooperation, coordination, and communication (Kooiman & Chuenpagdee, 2005). Inclusiveness and equality, or degrees of it, are the essence of a co-governing structure. Here, those who have the authority to make decisions and are impacted by the outcome are included in co-governing arrangements.

When improving governability, co-governing is appropriate and advantageous to address fisheries' properties of complexity and dynamics, such as conflict or tensions between

user groups, through interactive, overlapping yet independent systems. Here, natural, social and cultural component are again intertwined. Co-governing modes offers opportunities for flexibility and learning as spaces necessary for interactive learning and adapting to new knowledge (Armitage, Berkes, & Doubleday, 2007; Armitage, Berkes, Dale, Kocho-Schellenberg, & Patton, 2011; Berkes, 2009; Pinkerton, 1994) and ideally operate at many levels (Berkes, 2009; Jentoft, 2007).

Rather than envisaging governance as individual units that are separate in function, each mode can support other modes to enhance governance. Hierarchical, for example, can support and protect self-governing and co-governing initiatives by restricting their own activities and acting as the 'stick' to prevent undermining of cooperative efforts.

Similarly, self-governing takes advantage of societal forms of organization and collective action to address local issues. Self-governing can also support and protect its self-governing capacity by defining its scope. Lastly, co-governing can support initiatives that are beyond the scale of self-governing, thus bridging both hierarchical and self-governing for common purpose and enhanced governance (Kooiman et al., 2005). Each mode has qualities that are characterized by interactions specific to its mode, and are also ways to characterize current governance institutions, referred to as second order governance. This relationship is depicted in Figure 4 using the dotted line.

3.6.2.2 Orders

In IGT, governance is viewed as a series of interrelated human activities taking place in layers known as orders (Figure 4). The first order is the locale of interaction between actors and organizations to identify and solve problems and create new opportunities.

Second order governance refers to the institutions and arrangements where first order governance takes place. Here, institutions and arrangements denote a wide range of organizations, rules, agreements, laws, norms, beliefs, role, and procedures in which first order governance operates within and the place of interaction for those being governed. Third order, also referred to as meta-governance, is the core of the governing processes where norms and principles are formulated and deliberated to guide sound judgement, and necessary to bind the entire governing processes (Bavinck et al., 2005; Jentoft & Chuenpagdee, 2013, 2015; Kooiman et al., 2005; Mahon, Bavinck, & Roy, 2005). Each of the orders are relevant to assessing current governance and especially the design of future governance. For example, third order or meta-governance, is an opportunity to have Mi'kmaw beliefs, values and principles guide governance. Second order are opportunities to have Mi'kmaw specific structures based on history, law, and metagovernance. And lastly, first order are opportunities to design the interaction between actors and organizations. Here, Two-Eyed Seeing may provide the opportunity for enhanced understanding of issues and challenges among actors and organizations.

Kooiman et al. (2005) suggest applying principles, as meta-principles, to each of the orders as the criteria of performance to both guide behaviour and examine for their appropriateness, relevance and applicability (p. 278). As examples, performance principle would be effectiveness for first order governance, while legitimacy is an example of performance principle for second order governance. Moral responsibility, as a principle for third order governance, elaborates on the issues of ethics and moral dilemmas at the core of governance itself (Kooiman et al., 2005).

3.6.2.3 Elements

Of significant importance to all orders are the elements. Elements refer to the image, instrument, and actions that are needed for, and imply, interactions to achieve the image (Figure 4). Images describe where the fishery is and where it needs to be and informs governance design (Jentoft, Chuenpagdee, Bundy, & Mahon, 2010; Kooiman et al., 2005). Images may come from a wide range; "visions, knowledge, facts, judgements, presuppositions, hypotheses, convictions, end and goals" (Bavinck et al., 2005, p. 34). To get there, instruments provide the necessary tools and range from 'soft' (such as information, peer pressure or as a result of financial obligations), to 'hard' by applying "physical force" or using law (Bavinck et al., 2005, p. 25). Fisheries management plans are examples of powerful instruments but tend to focus on technical components such as gear control, license limits or quotas (Bavinck et al., 2005; Kooiman et al., 2005). In the governance context, instruments should be developed for the problem it intends to address. For example, instruments could be the development of rules through policy development that can facilitate an agreed understanding of acceptable fishing strategies. An example of this is the development of law by the Listugui Mi'gmaq government for their community members to guide how fisheries are to be undertaken (Listugui First Nation, 2019). Another example is having a memorandum of understanding describing roles and responsibilities, thereby assisting the governing mode to define its scope.

Actions are the implementations of instruments including implementing policies but can also include "mobilising other actors in new and uncharted direction" (Bavinck et al., 2005, p. 36). Thus, it implies the meeting of actors. Action can be further refined as one of two types: enabling action, such as through securing political will, capacity

development, and drafting regulations as examples; and implementing action which includes consideration of risks and uncertainty associated with fisheries management (Bavinck et al., 2005). Actions are the emerging governing interactions and the forum where interactive governance emerges.

3.6.3 Governing Interactions

While governing interactions may be conceptualized as processes influencing governance, interaction is defined as "a mutually influencing relation between two or more actors, possessing an intentional and structural dimension" (Kooiman et al., 2005, p.18). It is noteworthy to establish that both society and governance are never in equilibrium. Here, actors are both constrained within and by their structures and are, at the same time, altered and altering the outcome. The quality of the totality of the interactions between the governing system and the system-to-be-governed is also considered an interaction (Kooiman, 2008). Governing interactions are key areas where the enabling and restrictive role of power relations emerge between the governing system and the social system-to-be-governed, and within the social system-to-be-governed. As such, inclusiveness, representation, and participation are identified measures for examination (Jentoft & Chuenpagdee, 2015).

3.7 RESEARCH DESIGN: MIXED METHODS APPROACH

The intent of the research design is to provide the logic linking the data collected with the conclusions derived from the research. To address the research question, I have used a mixed methods approach. Creswell (2013) describes five qualitative approaches as narrative, phenomenology, grounded theory, ethnography, and case study that are each

suited for a particular research problem. As this study is not only solely inclusive of the Mi'kmaq since the federal governance practices are also assessed, ethnography is not applicable to the research context. Also eliminated as potential methodologies were narrative and phenomenology. Narrative approaches typically focus on the life of an individual(s) and retelling stories of individual experiences (Creswell, 2013). In contrast, phenomenology focuses on understanding the essence of a shared experience of a particular lived phenomenon while a case study approach provides for an in-depth description and analysis of activities to enhance understanding of contemporary issues (Creswell, 2013, Yin, 2018). Thus, the selection of relevant research methodologies as the means of inquiry to answer the research question were narrowed down to grounded theory and case study.

3.7.1 Selective Use of Grounded Theory in Case Study Methodology Grounded theory is a unique methodology situated within the realm of qualitative research that develops theory to explain a process or behavior that is shaped by the views of the participants and are thus grounded in "data" (Creswell, 2013). Modified grounded theory, also referred to as constructivist ground theory (CGT) assumes multiple understandings of the same realities, construction of data through interaction and reconstruction to theory with an emphasis on how the researcher's values, positions and priorities inform the work (Charmaz, 2009). Considered "a contemporary version of grounded theory that adopts methodological strategies such as coding, memo-writing, and theoretical sampling...but shifts its epistemological foundations and takes into account methodological developments in qualitative research", it embraces subjectivity and researchers "acknowledge that their interpretation of the studied phenomenon is itself a

construction" (Charmaz, 2014, p. 342). Constructivist grounded theory studies underpinned by Indigenous epistemologies are rare but are of growing significance to the field of grounded theory (Birks & Mills, 2011). However, and like Fish-WIKS scholar Nicole Latulippe, I applied CGT selectively (Latulippe, 2017), in particular, to the recommended number interviews, data treatment, and the use of constant comparison in coding to build categories. My understanding of the challenges and opportunities derived from the research interviews were derived from the use of CGT to code the data "from the ground up" (Yin, 2018, p.169). The use of gerunds, action words ending with -ing, commonly associated with grounded theory, is compatible and complementary with the Mi'kmaq knowledge system as Mi'kmaw language and way of knowing are verb-based and action oriented (Sable & Francis, 2012). In particular, coding the participants' responses provided the opportunity to view governance challenges and opportunities as action-based (verbs) rather than nouns.

Fundamental to interdisciplinary research is the use of other sources of knowledge, especially regarding providing insights to a particular context (Repko, 2008). To illustrate this, a case study research method was also chosen to illustrate the real life context experienced when fishing (Creswell, 2013; Yin, 2018).

3.7.2 Selection of Case Studies

As the research question was specific to the challenges and opportunities that facilitate and implement Mi'kmaq Aboriginal and treaty rights in Nova Scotia as recognized by the Supreme Court of Canada, two Nova Scotia fisheries related case studies were proposed for analysis based on the following criteria:

- One of the fisheries case studies must be related to the exercise of the Mi'kmaq Aboriginal right (as recognized in *R. v, Denny,* 1990 and *Sparrow,* 1990) in fishing, identified as providing fish for their personal or collective needs without sale, bartering or trade as benefit;
- One of the fisheries case studies must be related to the assertion of the treaty right
 (as recognized in *Marshall*, 1999) in fishing, identified as deriving personal,
 communal, and economic benefits through sale, barter or trade;
- the selected fisheries case studies must be those that are consistently identified and restricted in arrangements (i.e licence conditions) between DFO and communities for the purpose of conservation and to prevent the sale of a commercial species;
- the selected fisheries case studies must be drawn from Mi'kma'ki, the traditional territory of the Mi'kmaq (Nova Scotia, Prince Edward Island, Newfoundland, central to eastern New Brunswick, eastern Quebec, and northern Maine).

Based on the criteria identified above, the following fisheries case studies were selected:

- Atlantic salmon, exemplifying the Aboriginal right for food, social and ceremonial fisheries in Nova Scotia (as recognized in *Sparrow*, 1990); and,
- American lobster, exemplifying the treaty right to fish for a moderate livelihood in Nova Scotia (as recognized in *Marshall*, 1999) in Nova Scotia.

Each of the fisheries case studies selected have additional characteristics that make them ideal candidates as case studies for this research. For example, the selected fisheries examples focus on limited access provided in the licences by the Department of Fisheries

and Oceans. Here, access to Atlantic salmon and American lobster are "provided" to Mi'kmaq communities through communal licences for FSC needs but dependent on resource status. As the status deteriorates, so do the allocations provided to the communities. The lobster fishery for moderate livelihood, as a treaty fishery, remains contested despite the recognition of the treaty right to fish for a moderate livelihood as established under the Supreme Court ruling *R. v. Marshall* in 1999. As a food fishery, tags for the food fishery are provided to the communities in the AFS licence conditions but the caught and retained lobster are not to be bartered, traded or sold, thus preventing economic benefits from fishing. Both fisheries also support non-Mi'kmaw recreational for salmon and commercial fisheries and Mi'kmaw communal fisheries for lobster in Nova Scotia.

3.8 THE KNOWLEDGE GATHERING PROCESS

Particular to Indigenous methodologies, knowledge (rather than 'data') and gathering (instead of 'collected') is preferred terminology (Kovach, 2010). However, as there is a potential for confusion regarding the collection of Indigenous knowledge and studying the interface between epistemologies in fisheries governance as this research intends to do, the terms common to western scientific terminology as 'data' and 'collection' are utilized. While this is not meant to suggest a lack of respect for Indigenous preferred terminology, it reflects of my personal experience and formal education in natural sciences, and as common terminology in social science research. The research process describes the ethics applications required prior to data collection and the data collection process. The following section describes the activities undertaken to acquire data.

3.8.1 Ethics Applications & Community Approvals

Two ethics applications were required prior to data collection. The first is a requirement of the Mi'kmaw people and involves application to, and approval by, the Mi'kmaw Ethics Watch. The Mi'kmaw Ethics Watch, the appointed committee by the Sante' Mawio 'mi (Mi'kmaq Grand Council), established a set of principles and protocols to protect the integrity and cultural knowledge of the Mi'kmaw people (Indigenous Affairs Cape Breton University, 2021a). The second approval is required from Dalhousie University's Social Sciences and Humanities Research Ethics Board (REB) in accordance with Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (2nd Ed.). Approval from Dalhousie to interview Mi'kmaq participants is contingent on approval from the Mi'kmaq Ethics Watch Committee. Approval from the Mi'kmaw Ethics Watch was obtained on February 13, 2018 (Appendix A). A separate community approval was not required for Mi'kmaw participants who were interviewed, except for one individual. As the protocol was not followed, I removed the interview and the data from the analysis. When a community approval was necessary, it was waived following the submission of my recruitment letter and interview questions, and I was permitted to conduct the interview.

While the research received both Mi'kmaq Ethic Watch and Dalhousie University

Research Ethics Board approvals, this research did not solicit First Nations individual
community consent for the following reasons:

1) The research was developed with advisors for the Assembly of Nova Scotia Mi'kmaw Chiefs (ANSMC) who identified the needs and area of focus for the research. Given the focus of the research was not community-based, the ANSMC was approached

on the need for any community ethics processes. Having obtained approval from the Mi'kmaq Ethics Watch, the response from the ANSMC, who represented 11 of 13 communities, was that the communities were there to support the research.

- 2) It is important to note this was not a specific First Nation community focused research. The intent of the research was to obtain knowledge and experiences from individuals rather than seeking community-wide perspectives.
- 3) In order to protect anonymity of fishers who were asserting their rights, oftentimes without community support, communities could not be approached to identify potential interviewees. Rather, interviewees were identified by word of mouth from knowledgeable individuals.
- 4) Consent for Mi'kmaw participants from organizations representing multiple First Nations, like AAROM groups or employed in community fisheries, participants were asked to check with their supervisor before agreeing to the interview. As communities do not advertise whether there are requirements for leadership to permit their members to be interviewed, the requirement to check provided a mechanism to protect potential interviewees' employment.

Interviews with Mi'kmaw participants took place following the Mi'kmaw Ethics Watch Committee's approval. Approval from Dalhousie University Research Ethics Board was obtained October 25, 2017 (Appendix B) and was extended to October 2019. Final reports were submitted annually, and the ethics application was closed on September 11, 2019.

3.8.2 Recruitment & Purposeful Sampling

Participants were recruited using a variety of means. Recruitment letters were sent to individuals, organizations for posting and to be shared with those who may be interested or can contribute to the research. Many Mi'kmaw participants were recruited through the use of a condensed recruitment letter via social media (personal Facebook) and shared, although the majority of Mi'kmaw participants who were livelihood fishers were recommended by interviewed participants.

Selection of participants were conducted in accordance with case study criteria and Mi'kmaw cultural protocols. As per Mi'kmaq cultural value of reciprocity, participants, excluding the Sante' Mawio'mi, were offered a gift in return for their time and assistance The gift was a Mi'kmaq education/non-fiction book purchased locally²¹. Members of the Sante' Mawio'mi were compensated for their time with an honorarium. Flexibility in timing and duration of the interviews were incorporated and I made myself available for interviews in person.

The interviewees were identified through purposeful sampling, defined as the request to identify potential participants. The purpose of the data collection is to gain an enhanced understanding of the challenges and opportunities associated with salmon and lobster fishing and governance as case studies, thus the selection of the participants was not

²¹ Books were edited by Marie Battiste, *Living Treaties* (2016), published by Cape Breton University Press and *Visioning a Mi'kmaw Humanities: Indigenizing the Academy*

(2016), also published by Cape Breton University Press.

111

randomized or based on community sampling, or community representation or community participation. As the study relies on the integration of knowledge systems, representatives from Mi'kmaq, Indigenous, provincial, and federal organizations were approached for an interview. Among the research participants were the Sante' Mawio'mi, beneficiaries of Mi'kmaq Aboriginal and treaty rights, and those directly involved in community fisheries, Indigenous and Mi'kmaw fisheries and aquatic resource governance organizations at multiple levels (national, regional, provincial, local), Mi'kmaw historians, legal advisors, and scholars, knowledge holders with fisheries/fishing experience were included in the study, Mi'kmaw elders, and Mi'kmaq political leaders. representatives from commercial and recreational fisheries organizations harvesting species of interest to the Mi'kmaq.

3.8.3 Semi-Structured Interviews

The primary source of data was obtained through semi-structured interviews using the conversational method described by Kovach (2010). Three interview guides were developed (Appendix C). This was used to honor the relationality between researcher and knowledge holder in the co-creation of knowledge used in Grounded Theory.

Conversational method "...involves dialogic participation that holds a deep purpose of sharing story as a means to assist others. It is relational at its core" (Kovach, 2010, p.42).

Conversational methods can be one-on-one or in larger groups known as research circles. Similar to the western concept of semi-structured interviews and focus groups, conversational methods differ in power perceptions, purpose and is respectful of the protocols used when sharing information. The word "conversation" suggests an element of casualness to encourage flow of dialogue that does not limit or control contributions of

the participants (Stewart, 2007). In the conversational method, participants share their story in relation to the research question rather than only to responding to questions asked by the researcher to encourage a process which is more flexible, open, and uninterrupted. The participant controls what knowledge is given and when (Kovach, 2009). Using this approach, the research question was first presented for reflection prior to the interview, then participants were provided the opportunity for a free-flowing conversation or to go through the interview guide question by question. Often, the conversation addressed each of the questions, and were noted as having provided a response. However, the participant was offered another opportunity to add to their response at the end of the conversation. While the majority of interviews were held over the phone for non-Mi'kmaw participants, all but one interview was held in person for the Mi'kmaw interviews. Offers of food and drink were accepted, as well as the time needed to conduct the interview and build a relationship, and to offer additional time should they wish to have other discussions not specific to the interview.

The number of individuals interviewed were within the recommended 20 to 60 individuals required for a grounded theory study and as an inductive strategy for data analysis (Creswell, 2013; Yin, 2018) and is consistent with rigorous social science practice to achieve sample saturation (Guest, Bunce & Johnson, 2006; Palinkas et al., 2015). A total of 53 individuals were interviewed, however, one interview was withdrawn due to the potential of not ensuring anonymity and failure to seek community approval to interview membership, leaving 52 interviews from men and women from age 18 and over for analysis (Table 1). The total number of participants who agreed to be

interviewed was consistent with rigorous social science practice to achieve sample saturation (Guest, Bunce & Johnson, 2006; Palinkas et al., 2015).

Three participant groups were created: Mi'kmaq, Federal/Provincial Government, and Mixed. Mi'kmaq participants were of Mi'kmaq descent as beneficiaries or employed by Mi'kmaq or Indigenous-focused organizations; Federal/Provincial Government were non-Mi'kmaw individuals employed by federal and provincial fisheries governmental organizations. The third group, Mixed, was comprised of Indigenous individuals employed in non-Indigenous organizations and the Federal/Provincial Government, non-Indigenous employed in Indigenous-based organizations, and non-Indigenous individuals not affiliated with government or Indigenous organizations such as current or former commercial and recreational fishers. The Mixed perspective offered an opportunity to derive insights from the perspective of participants who are not part of the current processes or for participants who are involved in working within both western and Indigenous knowledge systems simultaneously, thereby enhancing understanding of challenges and opportunities shaped by working in both knowledge systems. Of the participants, only eight were female while the majority of those interviewed were males between the ages of 35 and 59 in each interviewee category. Within the Mi'kmaw participants, eight were fishers or had previously fished for salmon and/or lobster; two of which were female. Mi'kmaw participants from Nova Scotia identified as having membership to the communities of Eskasoni, Membertou, Pictou Landing, Paqtnkek, Annapolis Valley, Millbrook, Acadia, Sipekne'katik, and We'koqma'q. Other Mi'kmaw participants had membership in Listuguj, Quebec, Eel Ground and Elsipoqtoq in New

Brunswick, and Lennox Island, Prince Edward Island. Given my professional experience in the area of aquatic resources, I was aquatinted with many of the participants. Similarly, being Mi'kmaq and with professional experience working with Mi'kmaw fishers, organizations and governments, many of the participants I interviewed were existing acquaintances, distant relatives, colleagues, or were recommended by other individuals who had affiliations with other Mi'kmaw participants.

Table 1 Demographics and number of individuals interviewed from each of the interviewee categories.

	Mi'kmaq	Mixed	Federal/Provincial	TOTAL
FEMALE	5	0	3	8
35 to 59 years	5	0	3	8
MALE	23	9	12	44
18 to 34 years	3	0	0	3
35 to 59 years	12	4	10	26
60 years and over	8	5	2	15
TOTAL	28	9	15	52

All interviews were audio recorded and transcribed by the researcher or external transcribers. External transcribers signed confidentiality agreements. Transcriptions were reviewed by the lead researcher for quality control and sent to the participants for review. Participants were provided two weeks to review their transcripts for accuracy and the opportunity to remove statements or content they chose not to be included in the study. Records of previous transcripts were subsequently deleted. Interviews took place over 13 months beginning on December 19, 2017 and completed on January 14, 2019.

Transcripts were finalized on February 13, 2019 with no further revisions after February 27, 2019. Electronic files were backed up after each use and kept in a separate location.

Paper files and audio files were kept in a locked filing cabinet in a locked office in Eskasoni, Nova Scotia.

Permission was sought to use quotes in all cases and participants were provided with the context of the quote and thesis chapter as reference. It is worth noting that many participants who shared their knowledge during this research indicated that they wanted to be identified by name. This was accommodated as a sign of cultural respect despite the conventional western Research Ethics Board approval process which requires assurances of anonymity. Pseudonyms in the Mi'kmaq language are used for Mi'kmaw participants who chose to remain anonymous while English pseudonyms are used for non-Mi'kmaw participants.

3.8.4 Desk-top literature review

Other forms of data collection included reviews of desktop literature including federal and provincial laws, regulations, and policies, organizational materials such as proclamations, procedures, management plans, organizational and committee mandates and responsibilities, livelihood fishery policy and plans, and conservation guidelines.

3.9 DATA ANALYSIS

Data analysis consisted of data treatment and standard qualitative content analysis (Hsieh & Shannon, 2005), the analytical strategy using governability assessments, and crosscase analysis to develop key considerations for the development of an alternative fisheries governance model for inherent and treaty fisheries.

3.9.1 Data Treatment and Content Analysis: Coding and Categorization Interviews from audio recordings were transcribed as the primary source of data. The NVivo 12.0 content analysis software program²² was used for transcript storage, organization, and initial coding. As NVivo did not permit categorizing of codes following initial coding, codebooks containing initial codes were exported to Excel for sorting, and further coding was done, including theoretical categorization. Coding began following the completion of the interviews process. It was important to hear all perspectives prior to initial coding in preparation for Two-Eyed Seeing to fully appreciate the breadth and depth of the perspectives shared.

Data was sorted by participant group to ensure segregation of perspectives according to the Two-Eyed Seeing research framework and recognizing constructivism, as the participant's view of the situation is shaped through interactions.

Following the creation of the three participant groupings, the data were sorted as opportunities and challenges. For each of the challenges and opportunities files for the three groupings, a second round of coding was conducted using the grounded theory approach. Here, initial codes were grouped as focus codes which are more conceptual, and which advance the synthesis of the data (Charmaz, 2014). Focus codes were grouped into axial codes, also referred to as sub-categories, which were then used as the foundation of the theoretical categories in the final stage of coding. Axial coding

²² See https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home

specifies the properties and dimensions of a category to provide a deeper understanding of the analysis (Charmaz, 2014). As a recommended grounded theory method, the codes were compared with each other for each round of coding to identify the opportunities and challenges specific to each of the three participant groupings (Charmaz, 2014). Thus, the conclusions in terms of the challenges and opportunities derived from the research are evidenced-based and inductive, i.e. from the ground up, for each of the participant groups. The anonymized raw data from the participants who were interviewed are available for other researchers to verify the conclusions reached.

There was no weight provided to the participants' responses or the grouping they represented as the three perspectives were used equally to understand the nuances underpinning each of the categories that were derived from the interview data. All participants were considered as equal contributors to the research. Furthermore, Mi'kmaw interviewing techniques and reciprocity were integrated into the data collection process that were in line with Indigenous research methods.

3.9.2 Analytical Strategy: Governability Assessment

Following coding and categorization of the challenges and opportunities into themes, the nature of the identified challenges was, according to Interactive Governance Theory, indicative of common challenges arising from social justice issues. As such, the governability assessment requires an examination of the performance of the orders (Jentoft & Chuenpagdee, 2015). Two case studies examining Mi'kmaq Aboriginal and treaty rights to fish were conducted to assess the governability for each of the selected fisheries case studies. Documentation such as management plans or community products

available to the public were examined. Relevant policies, fisheries legislation and regulations, and community fishing or management plans were included in the case study analysis. Permission was sought from the community if the community fishing plan and policy was not publicly available, such as in the case of Potlotek First Nation.

To answer the research question aimed at understanding what the opportunities and challenges to current governance are that both facilitate and hinder implementation of Mi'kmaq Aboriginal and treaty rights to fish, the case studies were examined using the governability assessment framework. This framework examines the governing system, the system to be governed, and the governing interactions as detailed in Chuenpagdee & Jentoft (2013, p. 337, Table 2) to provide insights into what works and what doesn't. The system-to-be-governed was examined by conceptualizing it as a set of concerns/problems-opportunities (Kooiman, 2013). Using the results of the categories of challenges that emerged from the analysis provided support for where the governability assessment should be focused.

Table 2 Governability assessment framework. Source: Jentoft & Chuenpagdee (2015).

Assessment Step	Targets	Features	Measures
Step 1	Fisheries governance problem	Degree of wickedness of the fisheries problem	Stakeholders' images of the problem Existence of stopping rules The embedded nature of the problem Cost and reversibility of prescribed solutions
Step 2	Natural and social systems-to-be- governed Governing system Governing interactions	Prevalence of system properties (diversity, complexity, dynamics, scale)	Components Relationships Interactions Boundaries

Assessment Step	Targets	Features	Measures
Step 3	Governing system	Goodness of fit of the elements	Behaviour, decisions, mental models, institutional arrangements, implementation
		Responsiveness of the modes	Awareness, learning, sensitivity, conflicts
		Performance of the orders	Consistency, effectiveness, transparency, justice
Step 4	Governing interactions	Presence and quality of interactions	Information sharing, co- learning, adaptiveness
		Enabling and restrictive role of power relations	Inclusiveness, representativeness, participation

Using the governability assessment framework summarized above, four steps were undertaken to understand current governability for each of the cases. Step one began with identifying the problem's 'wickedness'. While wicked problems are not easy to discern due to their embeddedness in societal issues, multiplicity of perspectives on the issue at hand, and lack of stopping rules (solution), they are fundamentally the source of the governing challenges. Within this component, stakeholder images and the embedded nature of the problem are emphasised. In step two, system features (diversity, complexity, dynamics, and vulnerability) of the systems-to-be-governed were examined. At step three, the capability and capacity of the governing system were evaluated based on the performance of the orders. Lastly, an analysis of the governing interactions occupied in step four. Here, the presence and quality of interactions were evaluated in regard to representation and inclusiveness of participants and the role of power relations (Chuenpagdee & Jentoft, 2013).

3.9.3 Cross-Case Analysis

Cross-case analysis, also referred to as cross-case synthesis in Yin (2018), involves a case-based approach to examining and synthesizing within case patterns across the case studies while retaining the integrity of the cases in its entirety (Yin, 2018). As the last step in data analysis, the components examined in the governability assessment were compared and synthesized. The synthesis informed the key considerations for the development of the alternative governance model. A visual representation summarizing the design of the research, knowledge-gathering and analysis as described in this chapter is illustrated in Figure 5.

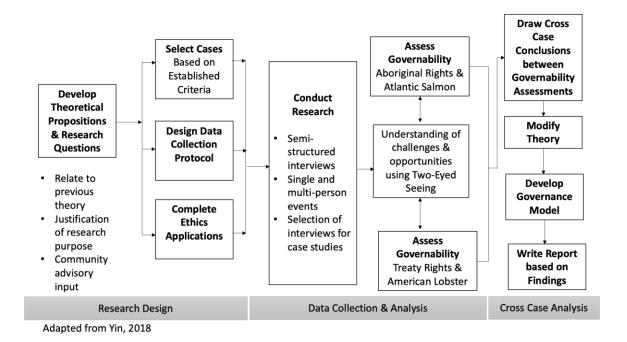


Figure 5 The research design using governability assessments as case study research approaches.

3.10 Research Constraints & Limits to Conclusions

Several potential constraints within the research process were identified. These related to language barriers, trust, recruitment, quantification of qualitative data between Mi'kmaw and non-Mi'kmaw participants, and interpretation due to differences between knowledge system. There were language constraints between fluent Mi'kmaw speakers and me, a fluent English speaker with Mi'kmaw comprehension. Language constraints included the ability of the research participants to express ideas, concepts, and emotions from Mi'kmaw to English, and for my interpretation, and the ability of the Mi'kmaw translator to translate their stories and experiences or concepts when told in the Mi'kmaw language. While Mi'kmaw words and sentences were translated into English, the concepts and emotions being expressed were not always able to be conveyed as intended using the English translation. Cultural sensitivity constraints were noted between me and the non-Mi'kmaw participants. For example, while many non-Mi'kmaw participants were interested in providing interviews, my identity as Mi'kmaq appeared to have caused some participants to be cautious in how they responded to the questions in order not to offend me. Recruitment constraints were noted through a general recruitment call. This enabled potential participants not to respond to the recruitment letter thus the research is dependent on what was shared by those willing to share. As a result, there may be gaps in experiences and knowledge that could have enhanced the research findings.

Quantifying qualitative data as descriptive statistics did present challenges. As Mi'kmaw participants used storytelling as one of the means to transmit their experiences, interviews were often two to three times longer in length and as a result, transcripts often differed in length. Subsequently, the number of codes encountered were much higher. This,

however, did not result in the creation of more categories. Furthermore, the use of quantitative data does present methodological challenges arising from qualitative methods. For example, as this was not a standardized survey and questions were presented slightly different in each of the interview guides, the quantification is not meant to be interpreted as the percent of respondents of a certain view, but rather the emphasis of the focused codes' contribution to the category for each of the three participant groupings.

Lastly, while I attempted to mitigate challenges, I noticed when interpreting non-Mi'kmaw interviews, I found it difficult to purport a non-Mi'kmaw perspective. I acknowledge that while I understand the non-Mi'kmaw knowledge system because of my formal academic training, there were constraints experienced during especially during the coding process. I found it difficult to be 'neutral' and to purport a non-Mi'kmaq perspective when I learned of the stories of the challenges and marginalization of the Mi'kmaq through the interviews.

In terms of limits to the conclusions drawn, it is conceivable that collecting the data at a different period or with a smaller or larger number of participants could potentially generate alternate or additional challenges and opportunities as these are clearly reflective of the policy environment at the time of data collection. However, this is a limit that faces all research. For this research, efforts to mitigate limits included ensuring the number and type of participants who were interviewed were representative and knowledgeable of the study focus (i.e. FSC and livelihood fishers in Nova Scotia, Mi'kmaw fisheries

organizations and leadership, non-Mi'kmaw fishers, and federal and provincial fisheries departments) and met the sample size according to content analysis methodology.

CHAPTER 4 MI'KMAW GOVERNING SYSTEMS AND ORGANIZATIONS

4.1 CHAPTER OVERVIEW

Given the complexities surrounding Mi'kmaq governments, organizations, off-reserve and on-reserve, and representation, this chapter serves to enhance understanding of the Mi'kmaw organizations and governments involved in fisheries and how decisions are made. As such, the chapter provides a synopsis of the Mi'kmaw governing systems and the Mi'kmaw organizations involved in Mi'kmaq fisheries and aquatic resources and in Nova Scotia.

4.2 MI'KMAW GOVERNING SYSTEMS

Four types of Mi'kmaw governing bodies exist in Nova Scotia. The following section provides an overview of the *Sante' Mawio'mi*, also referred to as the Mi'kmaq Grand Council, the thirteen Mi'kmaq First Nation governments with authority derived through the *Indian Act*, a consortium of Mi'kmaq First Nations in Nova Scotia to address matters of mutual concern, and the Native Council of Nova Scotia.

4.2.1 Sante' Mawio'mi: The Mi'kmag Grand Council

The traditional socio-political governing body of the Mi'kmaq is the Mi'kmaq Grand Council, the *Sante' Mawio'mi*. The *Sante' Mawio'mi* consists of hereditary and appointed leadership as local, district and Grand Chief, each with roles and responsibilities and reliance on the people for guidance and decision-making through consensus (Berneshawi, 1997; McMillan, 1996). Among the leadership structure is the executive comprised of Grand Chief (KjiSaqmaw), Grand *Keptin* (KjiKeptin) and the *Putus*, each appointed for

life with their roles as second in command and knowledge holder and story teller respectively (McMillan, 1996). Following the death of the Grand Chief or Grand Keptin, a new Grand Chief or Grand Keptin is elected from current keptins and voted by the Sante' Mawio 'mi following a year of mourning. While there is a recognition that the positions were, in the past, hereditary, replacing positions from within the family lineage is not always achievable. Mi'kmaw leadership, described by Battiste (2016), "was based on equality, self-reliance, and common hospitality and reject the notion of hierarchy and superiority" (p. 11). However, the Mi'kmaq Grand Council's ways of governing, authority, status and prestige were marginalized and were replaced by elected chief and councils and government coercion, including the use of legislation to control Indigenous peoples the "unauthorized creation of the Indian Act" (Battiste, 2016, p. 13; Henderson, 2016; McMillan, 1996). Considered the "ceremonial body responsible for Mi'kmaq spirituality", the Council continues to be politically, socially, and spiritually active in Mi'kma'ki (Battiste, 2016; McMillan, 1996, p. 113) and are recognized as the representative of the Mi'kmaq nation by the Mi'kmaq.

Cited by McMillan (1996), in an interview with the former Grand Chief Ben Sylliboy, he spoke of the Grand Council as representation of all Mi'kmaq; "Everyone belongs to the Grand Council. It is the Grand Council of the entire Mi'kmaq nation, the traditional seven districts" (McMillan, 1996, p. 134). These concepts, as institutional mandate and design influenced how Mi'kmaq governed, and how political legitimacy was maintained (McMillan, 1996). Within districts, cooperation, sharing and trust was the Mi'kmaw way.

KjiKeptin Andrew Denny, in his interview, shared how the role of families and cooperation were key to Mi'kmaw survival despite disagreements,

As Mi'kmaq, as families that helped each other, we helped each other When there was a run, and headsmen that you referred to were called, Nikanusk, they were called the head men. And it was trust that they would send out runners to communities to [tell them] that the salmon are running, or ...whatever species of fish were running. It was all trust knowing that we all lived the same way. We all lived and helped each other...[Keptin] Michaelo once said was, we're all standing outside and the sun is casting a shadow. We all take different forms. That means we all have different points of view and different ideas but still as family, as friends, we do whatever it takes to help each other, and that's that Mi'kmaw way....

Over the centuries, "the Grand Council's authority shifted from a political orientation to a spiritual authority based on its historical association with Catholicism" thus, fuelling the public perception of the *Sante' Mawio'mi* is that of merely spiritual advisors (McMillan, 1996, p. 165). Battiste (2016) explains such misunderstanding are associated with the assumption that the role of the Mi'kmaq Grand Council, through its alliance with the Holy See, devalued Mi'kmaw spirituality and teachings in favor of Catholicism.

However, it is the Grand Council who holds the teachings of Mi'kmaw ancestors, language, customs, and traditions (Battiste, 2016). Despite misconceptions, they continue to be key contributors to the resurgence of Mi'kmaw identity, symbolism and guidance for the Mi'kmaq. The *Sante' Mawio'mi* was instrumental in making submissions to the government and lobby for exemption from war duties, grievances to the United Nations

against Canada, and recognition of the treaties and Treaty Day (Battiste, 2016; Henderson, 2016). Well respected and understood to be the head of the Mi'kmaq nation, the *Sante' Mawio'mi* is representative for the Mi'kmaq nation in events held in Nova Scotia with the elected Chiefs and Councils.

The *Sante' Mawio'mi* meets twice a year to make decisions during traditional gathering in Potlotek around two religious' events, Pentecost Sunday (May-June) and St. Anne's Day (end of July) (Battiste, 2016), and again on Treaty Day (Oct. 1). The *Sante' Mawio'mi* meets in private and individuals who wish to have something addressed by the Grand Council communicate through a letter to be read at the meeting (McMillan, 1996) or through mutual concerns and support sought through a Grand Council *Keptin*. A notable exclusion are women from any position within the Grand Council or discussion while the *Sante' Mawio'mi* are in session (Doyle-Bedwell, 2003).

Within the *Sante' Mawio'mi*, there are tensions. While McMillan in 1996 described those tensions as spiritual, political and geographical, those tensions remain today. Spiritual tensions reside in the support of Catholicism rather than Mi'kmaw traditional beliefs, and the impact of residential schools and associated Catholicism on the Mi'kmaq causing some members to question their position within the Grand Council, especially following the discovery of the many unmarked graves of the children on former residential school property in 2021. Political tensions are between *Indian Act* band governments and traditional governance on who are the legitimate representatives for the Mi'kmaw people Without legal recognition from Canada and the federal government, the Mi'kmaq Grand

Council is displaced from their traditional roles and struggles to maintain relevance in today's society of hierarchical and authoritative governing regimes, including those legislated through the *Indian Act* and subsequently imposed on Mi'kmaq First Nations. Other political tensions are apparent in which government has jurisdiction regarding Aboriginal and treaty rights. While chief and councils have jurisdiction in reserve lands as legislated in the *Indian Act*, the *Sante' Mawio'mi* have not surrendered jurisdiction in Mi'kma'ki. Such conditions would require a collaborative or cooperative forum to for Mi'kmaq governments work together, however, hesitancy of elected Mi'kmaq First Nations to work with the *Sante' Mawio'mi* remain. Finally, geographic tensions arising between Cape Breton and Mainland Nova Scotia, and between Nova Scotia and other provinces that prevents coordination and agreement among the Grand Council. Keptin Colin Bernard shares his thoughts in his interview;

...if you are looking at how active the Grand Council is in Nova Scotia, it's more active than New Brunswick, more active than Quebec, I would say. But there needs to be more activity happen across all the districts together so we all are on the same page on where we are trying to go and what our roles and responsibilities are.

Even with tensions and disconnected the *Sante' Mawio'mi* remains an important link to a time where the Mi'kmaw were self-governing, and a reminder of the Mi'kmaw way and importance of language and culture to the Mi'kmaw identity. Furthermore, restoring relationships and the Mi'kmaq nation have renewed interest to continue to grow stronger as families, culture, and as a nation (Battiste, 2016). Presently, they have limited governing responsibilities associated with Mi'kmaq Aboriginal and treaty rights and

governance. For example, the *Sante' Mawio'mi*, as an ex-officio member, is included in the Assembly of Mi'kmaw Chiefs meetings (Denny & Fanning, 2016b) and is present within various advisory groups held by Mi'kmaq organizations but not as decision-makers. Other Mi'kmaw communities and Mi'kmaw organizations support the *Sante' Mawio'mi* by providing them with funds to support meetings to hold internal discussions to clarify their roles and responsibilities and provide input on such topics as fisheries and Mi'kmaq rights.

Currently *Sante' Mawio'mi*, unlike other Mi'kmaq First Nations and Mi'kmaw organizations, are not directly supported through federal or provincial funding. The ability to financially support their position and obligations as *Sante' Mawio'mi* members is necessary, which likely contributes to the disconnect among districts if there are no other financial means to support travel or rent venues for meeting space. The *Sante' Mawio'mi* is supported by external volunteer legal advisors and historians to gather the required information to support their efforts and decisions.

4.2.2 Mi'kmag First Nation Governments

Present day Mi'kmaq First Nations derive their authority and jurisdiction from the *Indian Act* (1985). The *Indian Act* contains by-law provisions for Indian band (First Nations) provided they are not "inconsistent" with the Act "or any regulation made by the Governor in Council or the Minister" (s.81). Specific to natural resources, by-laws can be made to preserve, protect and manage fur-bearing animals, fish and other game on the reserve (s.81(o)).

Other opportunities exist such as development of band membership rules (s.10). As Aboriginal and treaty rights are based in Mi'kmaw identity, and identity is legally derived from the *Indian Act*, how individuals identify as Mi'kmaq is a challenge. While some communities such as Membertou First Nation are working on community membership codes, Indian bands have their membership determined by s.11 of the *Indian Act* (1985), thus are a member of their registered band.

Thirteen Mi'kmaq First Nations, also referred to as Indian bands under the *Indian Act* (1985), are Mi'kmaw government in Nova Scotia. According to the registered Indian population latest data (2020), the majority of the Mi'kmaq registered population in Nova Scotia resides on-reserve (Table 3) with the exception of several mainland communities (Table 3). Further, Nova Scotia First Nation population makes up 27% of the Atlantic total of registered membership but 44% of the on-reserve population (Table 3). First Nation political leadership is chosen by electing a band council; five in Cape Breton and eight on the mainland. Each community varies in its population, vision for the community, and services. As institutions of governance, each First Nation has its own mandate. However, often the focus of community governments is on economic development and improving the lives of their members. For example, Membertou asserts their community values as "a strong focus on community growth through economic development, the spirit of Membertou is driven by its close-knit and vibrant people" (Membertou First Nation, 2020) while Millbrook's focus is "to be the economic engine for the benefit of Band Members" (Millbrook First Nation, n.d.). The larger First Nations in Nova Scotia are a result of government coercion to centralize Mi'kmaq into two

communities in Nova Scotia (Paul, 2006). Eskasoni, the largest Mi'kmaq First Nation, "strives to be culturally rich and respectful of its ecosystem based on concepts of shared responsibility" (Eskasoni First Nation, n.d.). Sipekne'katik First Nation, formerly known as Indian Brook and second largest Mi'kmaq First Nation in Nova Scotia, works "with Band members to continue building a strong, vibrant, healthy community that provides opportunities for all members to thrive" (Sipekne'katik, 2016).

Table 3 Population breakdown for Mi'kmaq First Nations in Nova Scotia. Source: Indigenous Services Canada (2021) (modified).

First Nation	Total	On-Reserve	Off-Reserve	% On Reserve
Acadia	1,725	242	1,483	14%
Annapolis Valley	304	124	180	41%
Bear River	359	112	247	31%
Eskasoni	4,681	4,015	666	86%
Glooscap	392	98	294	25%
Membertou	1,579	984	595	62%
Millbrook	2,050	960	1,090	47%
Paqtnkek	593	450	143	76%
Pictou Landing	673	512	161	76%
Potlokek	786	631	155	80%
Sipekne'katik	2,811	1409	1,402	50%
Wagmatcook	904	711	193	79%
We'koqma'q	1,038	954	84	89%
NS TOTAL	17,895	11,202	6,693	63%
Atlantic TOTAL	65,975	25,254	40,721	38%
NS relative to Atlantic	27%	44%	16%	

The governance system imposed by the federal government on First Nations is set out in the *Indian Act* elected chief and council system for bands that have their elections done pursuant to the *Indian Act*. The size of the council is dependent on the size of the community, with larger population having the option of having more council members, although not all do. Meetings of the chief and council vary between bands and could be weekly, monthly, or as needed to discuss and decide on community related issues. Under the Indian Band Council Procedure Regulations (C.R.C., c. 950) of the *Indian Act*, the use of band council resolutions are the legal methods by which the band decide to enter into a contract or provide official evidence of key local decisions (Indian Band Council Procedure Regulations C.R.C., c. 950).

Community fisheries departments are located within the band administration. Funded through DFO and the revenue generated from their commercial communal operations, First Nations have adopted different mechanisms for fisheries administration. For example, many communities employ one fishery manager to manage the FSC agreements and the commercial communal fisheries; others employ one manager for each; and smaller communities may share fishery managers between communities for both fisheries. Many Mi'kmaq First Nations are part of aggregate organizations, also referred to as tribal council or regional organizations, such as Atlantic Policy Congress, and the Assembly of Nova Scotia Mi'kmaw Chiefs to address issues of common concerns.

4.2.3 Assembly of Nova Scotia Mi'kmaw Chiefs

In 2008, the Mi'kmaw First Nations in Nova Scotia reorganized as the Assembly of Nova Scotia Mi'kmaw Chiefs (ANSMC) to provide a voice to federal and provincial

governments (ANSMC, 2008). As a collective political body, the ANSMC deals with matters concerning Mi'kmaq Aboriginal and treaty rights and title in Nova Scotia, including salmon fishing (Denny & Fanning, 2016b). Striving to balance collective identity with community autonomy in a united process to counteract the fragmentation of their identity as a nation, the Assembly of Mi'kmaw Chiefs "declares itself to be an institution of governance for the Mi'kmaq of Nova Scotia in respect of issues of common interest and concern" (Assembly of Nova Scotia Mi'kmaq Chiefs Resolution Respecting a Constitution for the Assembly, 2012) ²³ and on October 1, 2008, proclaimed and asserted Nationhood of the Mi'kmaq of Nova Scotia over their traditional lands and waters. ²⁴

The Assembly of Nova Scotia Mi'kmaw Chiefs claims to be the highest level of decision-making in Nova Scotia for its members. The ANSMC organizes their subject matter to be represented through portfolio leads. As leadership may change, an updated list can be found on mikmaqrights.com. Furthermore, membership may change. Once representing all 13 Mi'kmaq First Nations, the ANSMC now represents 10 Mi'kmaq First Nations in Nova Scotia. More recently, the loss of Membertou First Nation as members to the ANSMC are related to a lack of confidence in the ANSMC and unity among community as DFO continues discussions individually with DFO, but also for "...a number of

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²³ This document is not publicly available and is on file with the author.

²⁴ See https://vimeo.com/84985835 for a video recording of the proclamation at Nova Scotia's Province House, seat of the province's Legislative Assembly

internal matters that the chiefs need to address that are unrelated to the fishery."²⁵ The Assembly meets monthly to discuss, debate, and decide on issues that may impact Mi'kmaq rights and title and other general policy issues or challenges that may impact the Mi'kmaq as a whole. *Netukulimk* as a value within the Mi'kmaq knowledge system continues to play a role in guiding natural resource use and decision-making. The traditional governing body, the *Sante' Mawio'mi*, remains influential in decision-making and in providing spiritual and traditional guidance for resource management decisions within the ANSMC as a non-voting member (Denny & Fanning, 2016b).

4.2.4 Native Council of Nova Scotia

The Native Council of Nova Scotia²⁶ (NCNS) was created to represent the off-reserve Mi'kmaq/Aboriginal peoples in the province of Nova Scotia. For fisheries, the NCNS is supported through federal funding such as those provided to manage FSC fisheries and as an AAROM organization. Within NCNS, the *Netukulimkewe'l* Commission serves as the natural life management authority for the large NCNS Community of off-reserve Mi'kmaq/Aboriginal Peoples in Nova Scotia who are designated, registered and confirmed to harvest in accordance with the organization's harvesting guidelines. Thus, the organization provides support for aquatic resource management activities and FSC

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²⁵ See CBC New Oct. 20, 2020. N.S. assembly of chiefs co-chair steps down over fisheries dispute.

https://www.cbc.ca/news/canada/nova-scotia/n-s-assembly-of-chiefs-co-chair-steps-down-over-fisheries-1.5780443

²⁶ Community Harvest Guidelines were not found on the web. The author has a 2013 copy that was used to describe the Commission and processes.

fisheries. The *Netukulimkewe'l* Commission develops, advances and administers harvest guidelines and processes for harvesting natural life resources. Several mechanisms to encourage compliance are identified, including Mi'kmaq traditional governance and values to support harvest guidelines, written communication of guidelines and processes, and the use of a tribunal to address violations of the guidelines.

Described as a self-governing organization, it operates using six geographic zones within Nova Scotia based on Mi'kmaq districts. Membership is derived from the *Indian Act* definitions but residing off-reserve (NCSN, 2016). Each zone serves as a Regional *Netukulimkewe'l* Advisory Council (RNAC) with meetings to address concerns, experiences, issues, etc. The Commission is guided by the principles of *Netukulimk* for the maintenance of treaty rights, practices and customs for resource access and use for today and future generations. Operating in the spirit of the proclamation and direction of the Mi'kmaq Grand Council and collective rights, the *Netukulimkewe'l* Commission administers the orderly, sustainable and respectful access and use of resources throughout traditional Mi'kmaq territory in Nova Scotia and works to resolve problems that arise regarding the conservation of the fishery. A Community Harvest Guidelines booklet²⁷ serves as the code of conduct and contains harvest guidelines, messages from Mi'kmaq Grand Council, procedures, permitted equipment and seasons, personal safety, and educational material.

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²⁷ Community Harvest Guidelines were not found on the web. The author has a 2013 copy that was used to describe the Commission and processes.

4.3 MI'KMAW ORGANIZATIONS

Numerous Mi'kmaw and /or organizations representing Indigenous communities operate in Nova Scotia. The following section provides the mandate and organizational structure for the Atlantic Policy Congress of First Nations Chiefs Secretariat, *Kwilmu'kw Maw-klusuagn* Negotiation Office, Aboriginal Aquatic Resources and Oceans Management (AAROM) organizations *Unama'ki* Institute of Natural Resources and the Mi'kmaw Conservation Group. These organizations are described due to their relevance to the research topic as each has a mandate to specific to fisheries, consultation, and Mi'kmaq First Nations.

4.3.1 Atlantic Policy Congress of First Nations Chiefs Secretariat The Atlantic Policy Congress of First Nations Chiefs Secretariat (APC) operated out of Nova Scotia and serves multiple First Nations all over Atlantic Canada, including Labrador, and Eastern Quebec. The Atlantic Policy Congress of First Nations Chiefs is a policy research and advocacy secretariat serving the 31 Chiefs of Mi'kmaq, Maliseet, Innu, and Passamaquoddy communities in Atlantic Canada and Quebec. Their institutional design and mandate are derived from their relationship vision that centres partnership and cooperation, government to government relationships, dialogue and education, quality of life and self-determination to assist First Nations communities in making informed decisions (Atlantic Policy Congress, 2018a). The organization is governed by a board of directors, made up of the chiefs of the member communities. Currently, all the chiefs from the 13 Mi'kmaq First Nations are members of APC (Atlantic Policy Congress, 2018b).

Developing culturally relevant alternatives to federal policies on a variety of topics such as health, economic development, housing and infrastructure, climate change, renewable energy and communal commercial fisheries, policy input and review occur using working groups and/or third-party reviews²⁸. Their involvement in salmon is limited, however, their role in coordinating and communicating with First Nations organizations is through the Fisheries and Integrated Resources unit. As a policy-based organization, APC was one of the organizations involved in the Atlantic salmon policy review and update.

Responsible for research, analysis, policy alternatives and programs for all aspects of fisheries for member communities, they support and work cooperatively with First Nation Leadership, Treaty Tables, Tribal Councils, Aboriginal Aquatic Resources and Ocean Management (AAROM), organizations, Indigenous fisheries directors, academia, NGOs and Federal/Provincial Departments (Atlantic Policy Congress, 2020a). As the coordinating body for AAROM organizations in Atlantic Canada and Eastern Quebec, the APC also provides support services for the AAROM organizations on regional issues with impacts beyond specific watersheds (Atlantic Policy Congress, 2018a).

4.3.2 Kwilmu'kw Maw-klusuagn Negotiation Office (KMKNO)

The Kwilmu'kw Maw-klusuagn Negotiation Office (KMKNO) provides legal and administrative support to the ANSMC. As administrators of the tri-partite agreement

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²⁸ Conference Presentation APC Fisheries Update, Melissa Nevin, Director of Fisheries & Integrated Resources January 30, 2020. See https://fisheries.apcfnc.ca/fisheries-and-aquaculture/fisheries-conference-2020

outlining negotiation topics and process for formal consultation, referred to as the Terms of Reference (TOR) for a Mi'kmaq-Nova Scotia-Canada Consultation Process, they coordinate consultation that is "on-record and with prejudice" (Nova Scotia, 2010). However, as an aggregate for consultation, it does not represent all communities or the Mi'kmaq population in Nova Scotia. Two communities (Sipekne'katik and Millbrook), representing 27% of the Mi'kmaq First Nation population in Nova Scotia, have chosen to represent their individual community's interests in negotiations with the provincial and federal governments, independent of ANSMC and the support provided by the KMKNO. In the fall of 2020, We'koqma'q First Nation also left the KMKNO due to the division created within the community, lack of inclusion of grassroots and traditional leaders, and lack of communication from the KMKNO²⁹. Recently, Membertou First Nation also chose to represent their community's interests, leaving KMKNO to represent 9 of the 13 Mi'kmaq First Nations for consultation and negotiation (Googoo, 2020).

4.3.3 Aboriginal Aquatic Resources and Oceans Management Organizations

Funded through the DFO program, Aboriginal Aquatic Resources and Oceans

Management (AAROM), three AAROM organizations are located within Nova Scotia.

As a program developed in 2004 prior to the Duty to Consult case decisions requiring the

Crown to consult with First Nations, one of the expected roles of AAROM was to bridge

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²⁹ See The Reporter. Nov. 20, 2020. We'koqma'q First Nation leaves negotiation office. https://porthawkesburyreporter.com/wekoqmaq-first-nation-leaves-negotiation-office/

DFO advisory processes with community input. However, there was flexibility in creating or supporting collaborative management structures that contribute to integrated ecosystem/watershed management and planning processes.

The two organizations, the *Unama'ki* Institute of Natural Resources (UINR) and the Mi'kmaw Conservation Group (MCG) represent communities around a watershed. UINR represents the communities of Eskasoni, Membertou, Potlotek, Wagmatcook and We'koqma'q around the watershed of the Bras d'Or Lakes while MGC represents the communities of Millbrook, Sipekne'katik, Pictou Landing, Bear River, Glooscap, and Annapolis Valley in Nova Scotia, and Fort Folly First Nation in New Brunswick. The watershed of interest for these communities is the Bay of Fundy. The Atlantic Policy Congress, is partially funded through AAROM and as was previously mentioned, provides supporting services to eight AAROM bodies in the Atlantic region on regional issues that have impacts beyond their identified watersheds (DFO, 2018a).

The UINR was formed to address concerns regarding natural resources and their sustainability in 1999 and currently represents the five Mi'kmaw communities of *Unama'ki* but did not receive funding through the AAROM program until 2005. The goals of UINR are to 1) provide resources for Mi'kmaq equal participation in natural resource management in *Unama'ki* and its traditional territory; 2) strengthen Mi'kmaw research and natural resource management while maintaining our traditions and world views; and 3) partner with other groups sharing the same desire to protect and preserve our resources for future generations. UINR works primarily with government, academic

institutions, and other First Nations organizations to meet its objectives. Its board of directors are comprised of the five *Unama'ki* Chiefs. Using elders' councils as the primary means for input, UINR expanded its advisory capacity to include a process to address a governance gap in fisher participation to address fisher concerns adequately and confidently regarding salmon management and the Conservation Harvest Plan. UINR also coordinates the five *Unama'ki* communities' Aboriginal Fisheries Strategy (AFS) Guardian Program. The Guardian program aims to improve working relationship between the communities' Guardian programs and UINR, and their ability to participate and develop activities to restore, preserve, and protect the aquatic resources of Unama'ki (Atlantic Policy Congress, 2020b). The organization also coordinates another salmon initiative known as the Collaborative Salmon Initiative (CSI). The CSI meets twice a year to build relationships, communicate, and coordinate activities. The focus is centered on building relations and potential collaborations between UINR and the recreational fishing associations. The organization is partially funded through the AAROM program but also receives funding from other sources of revenue, including revenue derived from contracts, research, and other collaborative ventures. UINR participates in consultation when engaged by KMKNO and the ANSMC and recommends items, with justification, to pursue for consultation.

The Mi'kmaw Conservation Group (MCG) is structured differently than UINR. Currently a unit of the Confederacy of Mainland Mi'kmaq (CMM) whose mandate is "To proactively promote and assist Mi'kmaw Communities initiatives toward self-determination and enhancement of community...", MGC's mandate is "To Promote and

Restore the concept of Netukulimk in the Bay of Fundy Watershed" (Mi'kmaw Conservation Group, 2020). Their website provides information regarding several topics including species at risk, where general information is provided, and who to contact at DFO for further information. Like UINR and many other Mi'kmaw organizations, the board of directors is comprised of chiefs of member communities and one district chief from the Mi'kmaq Grand Council. Guiding MCG is an advisory board made up of community fisheries managers, community members, and elders. The MCG represents seven of the eight Mi'kmaq First Nations on mainland Nova Scotia and one in New Brunswick. MCG provides fisheries management support to one of their member communities (Millbrook).

4.4 Relevance of Mi'kmaw Organizations to Governance of Mi'kmaw Fisheries

Based on the synopsis of Mi'kmaw governing systems and the Mi'kmaw organizations involved in Mi'kmaq fisheries and aquatic resources and in Nova Scotia, it appears that there are more Mi'kmaw governing systems than organizations with mandates specific to fisheries and consultation. This likely creates confusion within the Mi'kmaq in Nova Scotia regarding responsibilities and mandates, and the state for interacting with communities at multiple levels and off reserve representation. While the Mi'kmaw organizations have relatively defined mandates (legal, technical, or policy orientated) and geographic boundaries to support mandates, all thirteen Mi'kmaq communities are fully represented by the two AAROM organizations in Nova Scotia.

CHAPTER 5 TA'N TEL-NESTM: AS I UNDERSTAND IT

The Coming of Ni'kanaptekewi'skw

One day, Kluskap was sitting near a fire, Nukumi was making clothing out of animal hides, and Netawansum was in the woods getting food. Then, a woman came to the fire and sat beside Kluskap. She put her arms around him and asked, "Are you cold my son?" Kluskap was surprised, and he stood up and asked the woman who she was and where she came from. She explained that she was his mother, and her name was Ni'kanaptekewi'skw (nee-gah-nap-de-gay-weeskw).

Kluskap waited until his grandmother and nephew returned to the fire, then he asked his mother to explain how she arrived to the Mi'kmaq world. Ni'kanaptekewi'skw said that she was a leaf on a tree which fell to the ground. Morning dew formed on the leaf and glistened while the sun began its journey towards the midday sky. It was at midday when Naku'set gave life and a human form to Kluskap's mother.

Kluskap's mother said that she was bringing all the colours of the world to her children. She was also bringing strength and understanding; strength to withstand Earth's natural forces, and understanding of the Mi'kmaq world, its animals, and her children, the Mi'kmaq. She told them that they will need understanding and co-operation, so they all can live in peace with one another.³⁰

³⁰ Mi'kmaw Spirit. (2016). Mi'kmaw Creation Story. Retrieved from http://www.muiniskw.org/pgCulture3a.htm

5.1 CHAPTER OVERVIEW

A key Mi'kmaw teaching is revealed in the above excerpt from the Mi'kmaw Creation Story on the coming of Kluscap's mother, *Ni'kanaptekewi'skw*. The Creation Story teaches many things, but this teaching in particular is relevant to the current research approach and questions; the importance of understanding the perspectives to co-exist. *Tan te'l-nestm* is a Mi'kmaw phrase that captures an understanding from one's perspective. Understanding different perspectives 'as colors of the world' and cooperation also underpins the knowledge system approach that is fundamental to my research approach as Two Eyed Seeing, and to the development of a solution to successfully implement Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. Using 'all the colors of the world' to guide my understanding, *tan te'l-nestm*, I share my understanding of participants' perspectives in relation to the questions guiding my research:

- Using salmon and lobster as case studies, what are the opportunities and challenges to current governance (federal, provincial, Mi'kmaq) that both facilitate and hinder implementation of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia? and,
- 2. From the perspective of the Mi'kmaq in Nova Scotia, what are Mi'kmaw fisheries based on Mi'kmaq Aboriginal and treaty rights?

The following section addresses the participants' perceptions of challenges and opportunities to current governance that facilitate and hinder implementation of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia.

5.2 Participants' Perceptions of Challenges

Challenges or concerns are referred to as meta-order governance issues that are embedded in social values, norms, and principles (Jentoft & Chuenpagdee, 2013). It is also noted that governability issues pertaining to the Mi'kmaq Aboriginal and treaty rights to fish are embedded in legal pluralism (Jentoft, 2011). From the interviews and subsequent analysis, six categories explaining the current challenges were identified: i) conflicting relationships; ii) marginalizing Mi'kmaw fishers; iii) disputing the legitimacy of the governing system; iv) identifying governance gaps; v) fearing loss of Mi'kmaw identity; and vi) operating challenges and gaps. Perspectives obtained from three participant groupings of interview respondents (Mi'kmaq, Mixed³¹, and Federal/Provincial Government) are discussed as derived from the data analysis. Table 4 contains the contains the participant groupings' perceptions of challenges. The frequency of codes is displayed as a percent to demonstrate the emphasis of sub-categories in relation to the theoretical code.

Table 4 Participants' perceptions of challenges showing frequency of focus codes. Values are expressed as percent. GS refers to 'governing system'; N=number of initial codes.

THEORETCAL CODES AND	MI'KMAQ	MIXED	FEDERAL/
SUBCATEGORIES	(N=861)	(N=216)	PROVINCIAL
			GS
			(N=370)
CONFLICTING RELATIONS	29%	35%	18%
Antagonizing Mi'kmaw Fishers	35%	24%	25%

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³¹ As described in Chapter Three, the Mixed participant group refers to interviews that were comprised of Indigenous individuals employed in non-Indigenous organizations and non-Indigenous employed in Indigenous organizations, and non-Indigenous individuals not affiliated with governments, such as commercial or recreational fisheries.

THEORETCAL CODES AND SUBCATEGORIES	MI'KMAQ (N=861)	MIXED (N=216)	FEDERAL/ PROVINCIAL GS (N=370)
Building Relations Challenging	0%	1%	40%
Competing With Government	2%	0%	0%
Dividing Mi'kmaq Voice	17%	7%	0%
Lacking Trust	15%	25%	21%
Lacking Understanding of Mi'kmaq Context by Non-Mi'kmaq	18%	0%	0%
Competing With Industry	14%	43%	13%
DISPUTING THE LEGITIMACY OF THE GOVERNING SYSTEM	26%	19%	29%
Conflicting Perspectives Regarding Authority	35%	25%	0%
Denying Mi'kmaq Rightful Recognition	12%	0%	0%
Fitting Mi'kmaw Fisheries into Western Model	20%	25%	17%
Lacking Alternatives for Governance	4%	5%	3%
Lacking Governing Capacity Within Mi'kmaq	0%	0%	9%
Pushing Limits of Law	10%	5%	0%
Seeing Inconsistency in Federal Governance	15%	10%	32%
Excluding The People	3%	0%	0%
Having Federal Authority to Govern Fisheries	0%	30%	39%
IDENTIFYING GOVERNANCE GAPS	6%	23%	27%
Lacking Processes for Adaptive Management	0%	0%	8%
Lacking Understanding of Current Governance Processes	17%	0%	0%
Understanding Current Processes Not Effective	0%	0%	9%
Lacking Understanding of Mi'kmaq Context By State	0%	47%	59%
Lacking Organization of Mi'kmaq	22%	0%	0%
Lacking Mi'kmaq Governance Capacity	31%	20%	0%
Lacking Processes for Integration of Mi'kmaw Knowledge	0%	2%	0%
Lacking Policy for Indigenous & Treaty Fisheries	2%	10%	5%
Lacking Interactive Processes	28%	20%	19%
FEARING LOSS OF MI'KMAQ IDENTITY	8%	<1%	0%
Lacking Understanding of Rights Within Mi'kmaw Society	15%	0%	
Losing Beneficiaries	1%	0%	
Losing Concept of Mi'kmaw Responsibility	59%	100%	
Losing Practice of Netukulimk	24%	0%	
MARGINALIZING MI'KMAW FISHERS	24%	20%	16%
Exerting of Authority by Government	31%	16%	0%

THEORETCAL CODES AND SUBCATEGORIES	MI'KMAQ (N=861)	MIXED (N=216)	FEDERAL/ PROVINCIAL GS (N=370)
Lacking Equitable Opportunities	11%	2%	0%
Marginalizing Fishers by Mi'kmaq Leadership	26%	9%	0%
Preventing Mi'kmaq from Benefitting from Fishing	13%	28%	42%
Privileging Industry	7%	12%	27%
Privileging Western Ways	0%	0%	7%
Relying On Government	5%	0%	0%
Seeing Industry as Powerful	4%	0%	0%
Valuing Western Science	3%	0%	0%
Relying On Science	0%	12%	0%
Creating Boundaries to Limit Rights as Fisheries Regulators	0%	21%	24%
OPERATING CHALLENGES & GAPS	7%	3%	9%
Lacking Adequate Capacity	16%	43%	35%
Lacking Adequate Resources	23%	0%	0%
Limiting Capacities for Mi'kmaw Fishing	47%	0%	0%
Moving Slowly in Government	14%	14%	26%
Reacting To Changing Natural and Legal Landscape	0%	14%	38%
Administering Rights Based Fisheries Challenging	0%	29%	0%
Grand Total	100%	100%	100%

5.2.1 Conflicting Relations

While relationships between Mi'kmaq First Nations and federal and provincial governments in Nova Scotia have been improving since the *Sparrow* decision (1990), significant challenges remain, especially in regard to the relations arising from the exercise of treaty rights affirmed in the *Marshall* decision (1999). As an identified theme, it was more prominent in the Mi'kmaq and Mixed perspectives than the Federal/Provincial Government (Table 4). This is largely due to the understanding of internal conflict and lack of solidarity among the Mi'kmaw communities and between traditional and elected Mi'kmaq leadership. Three types of conflicts are identified from

the analysis of the data: Mi'kmaq/non-Mi'kmaw fishers, Mi'kmaq/DFO, and Mi'kmaq/Mi'kmaq. Much of the tensions between cultures such as between Mi'kmaq and non-Mi'kmaw fishers and DFO were established prior to legal victories recognizing the right to fish for FSC needs (i.e. pre-1990) thus are rooted in history. Reasons underpinning conflicting relations were identified as antagonistic behaviour toward Mi'kmaw fishers, lack of trust, lack of understanding of the Mi'kmaq context, and competition for resources.

5.2.1.1 Mi'kmaq/Non-Mi'kmaw Fishers

Memories held by Mi'kmaw fishers of racist threats, physical violence and vandalism when carrying out their traditional fishing activities remain. The ability to retain salmon while the recreational fishery cannot and the use of fishing practices by Mi'kmaw fishers that are viewed as harmful to the conservation of salmon furthers poor relations between Mi'kmaq and recreational anglers. For the most part, stream-side relations between the Mi'kmaq and recreational salmon anglers are described as poor, with many Mi'kmaq harvesters reporting racist comments and criticism regarding their fishing methods. They identified misunderstanding of the Mi'kmaw context as one of the biggest challenges encountered when fishing. Traditional harvester Anoogwa Pictou reflects on one such challenge experienced during salmon fishing,

You'd meet up with some racially...some racial people while you're out fishing. If you were fishing in one area, so the non-native people they'd be like fishing spring time using a rapala lures, and there'd be the three prong hooks called the trebel hooks so the non-Aboriginal fisher, they will always make the complaint, 'yeah, your only supposed to use the one barbed hook onto these lures' and you're out

fishing using these three pronged hooks, they are always gonna complain about it...So, you'll definitely meet racist people who won't understand.

Working relations between Mi'kmaq, Mi'kmaw organizations and angler organizations were just as poor. *Kinisku'nej* recalls they were "terrible" remembering "that was the first time I experienced racism when I heard what they were saying." Traditional harvester Dan Paul explains, "But today, when we go to the rivers, we are threatened. We go on the oceans, we're ridiculed. It's not right."

While there is an acceptance of Mi'kmaq rights to fish for FSC needs, challenges remain when carrying out fishing for livelihood. Non-Mi'kmaw fishers retaliate against the exercise of the Mi'kmaq treaty right to fish for a moderate livelihood. As a result, tensions continue to be evident in the lobster fishery in Nova Scotia. Racism, unfair treatments, opposition to fishing using tactics such as lodging complaints, threatening fishers and vandalism are efforts to prevent Mi'kmaq from fishing. To protect themselves, fishers must hide despite having recognized treaty rights. Butchie McDonald recounts,

So, everything we do, we camouflage and we fish and hunt that way. We fish in [the] ocean at night only. We don't go out in broad daylight even though we have rights to do this but they'll always complain.

Hiding isn't the only option. Harvesting out of season provides protection for fishers' safety and gear. As Michael Stephens notes,

It's just easier to do it while they're not out there" and recalls, "It almost seems like it was easier back when I was a kid and they were just fishing under treaty before Marshall made everything public.

Similarly, many fishers reported that fishing was easier and there was acceptance for small scale Mi'kmaw fishing prior to the *Marshall* decision. Peter Francis, of Acadia, remembers,

And it was easier back in the day, ain't it? Not so many Europeans got mad with us... I know, sometimes I think it was better before Marshall won his case.

Competing for resources with the Mi'kmaq creates tension and an additional barrier to overcome when building relationships. Despite priorities of access outlined in the *Sparrow* decision (1990), fishers compete for the resource. Even in the lobster fishery that is currently experiencing record high landings (DFO, 2018b, 2019a, 2020b) perceptions regarding sharing resources are viewed as fully subscribed with no room for additional fishers. *Lobster*, a non-Mi'kmaw interviewee, shares this is one of the biggest challenges to having the livelihood fishery implemented in Nova Scotia --- the lack of desire to share resources between commercial fishers and Mi'kmaw livelihood fishers and using impacts to lobster sustainability as justification:

Well, I think the biggest one is that you've got a fully "subscribed fishery" where I think particularly you hear from the commercial fishermen that they're at full capacity and they can't possibly have any more pressure on the stock because of sustainability. So, I think that is probably one of the biggest challenges is that, right now, it is seen as an addition to the existing as, rather than changing the

perspective of 'no, this can be a part of distinct and a part of but not an addition to'. That's, I think one of the biggest challenges right now is the perception that, and maybe it's reality, I don't know enough about the state of fish stocks, yeah, not good, but that we can't possibly take any more pressure, which is true, and so therefore some people have to lose for the Mi'kmaq to gain and I think that's a big, big challenge.

5.2.1.2 Mi'kmaq/DFO

Relationships between DFO and Mi'kmaw fishers remain poor, despite recognition of the Aboriginal and treaty rights to fish. Dan Paul remembers the difficulties encountered with federal authorities when fishing:

I've had my instances. You know, I'd say about 90% of the fishing I've done has been a great experience. There's 10% which was, I think, pretty racist. Pretty scary. I'm glad it was me and not someone else they did it to because the situation would have got ugly, I think. I was held at gun point by DFO because I wear a knife on my chest waders and they thought it was pretty intimidating seeing a weapon hanging from... and I told them what it was for and I even took it off and put it on the vehicle for him but he still, you know, search me right there at gun point. I've been shot at 4 times in the river...

Mi'kmaw fishers are targeted because they are viewed not following fishing practices as outlined in the recreational fishery. Unfair treatment by federal authorities who have the power to remove traps at will results in loss of product for food or income and gear.

Butchie McDonald remembers,

So, they gave us 20 lobsters per each trap, so they said we each had 3 So, they gave us 60 lobsters each back. And they picked them out, the smallest ones and took the rest. I got pictures of it. And they dumped them all back in, wherever they did. They took them from us and they charged us. We went to court for two years and in February 2018, they dropped all the charges because they [had] no right charging us 'cos we were livelihood fishing.

As a result of court cases, unfair treatment, and harassment of Mi'kmaq fishers, building relations were identified as challenging by the Federal/Provincial Government participant group, especially following the *Marshall* decision (1999).

5.2.1.3 Mi'kmaq/Mi'kmaq

Conflicting internal relations are problematic, creating tension and preventing communities from collaborating, revealing division within the Mi'kmaq in Nova Scotia. Failure to reach agreement on issues that do not pertain to fisheries are known to affect working relationships. Stephen Augustine, *Keptin* of the Mi'kmaq Grand Council, implies the divides are between the number of Mi'kmaq First Nations communities found within Mi'kmaq traditional districts, and tensions linger in memories:

I'm going to be smoking and lighting up the pipe with the Cape Breton Chiefs and one of the issues that they were talking about ... how they're being out voted by mainland and yet they have the majority of the per capita funding, I mean all the way around. So, I mean that rift happened many years ago

Division in political organizations and leadership contribute to divisions among the Mi'kmaq First Nations in Nova Scotia. Lack of coordination and collaboration between some Mi'kmaq First Nations elected governments and the Mi'kmaq Grand Council,

conflicting relations between communities, and competition between Mi'kmaw organizations and communities to negotiate with DFO independently contribute to the division within Mi'kmaw society. *Ta'pitji'j* shares,

We're consistently battling. We're not getting on the same page and working together and making that process there, hold them accountable to move things, on behalf of their team. We're not gonna make progress and I can't stress that enough because I hear it, I see it, I live it day to day in my job. We can do what we can do here at the technical level but until that area, that box, what we call the next level, makes changes to improve or become stronger or stop playing favorites because it's becoming evident to the different leadership and they get frustrated and it's holding things up and just play the equal playing field, like don't..., be willing to work together. Stop being hard-headed because we're not going to progress and we can't have one piece of the puzzle not willing to make progress with the rest of us, especially when it's that important, of the puzzle, an important piece of the puzzle, so I think that's where we're stalled right now, in my honest, professional opinion.

5.2.2 Marginalizing Mi'kmaw Fishers

The theme of marginalizing Mi'kmaw fishers was one of the governance themes that had greater emphasis among the Mi'kmaw participants than the mixed or Federal/provincial participants (Table 4).

From the Mi'kmaq perspective, many efforts undertaken by the federal and provincial government, and industry, are directed at preventing Mi'kmaq from benefitting from fishing through their treaty right as affirmed in the *Marshall* decision (1999). Denying

access to fish and wharves, coercion by the government to prevent sale of lobsters, and emphasizing communal commercial access in lieu of individual access to fish resources are some tactics in which Mi'kmaw fishers identified as being employed by the federal and provincial governments and industry for that purpose. As a result, Mi'kmaw fishers feel powerless. As a minority and seeing the role of industry as being influential through its opposition and resistance to Mi'kmaq attempts to implement treaty fisheries, they lack equitable opportunities granted to other fishers. Current Chief of Membertou and former ANSMC Fisheries Portfolio lead, Chief Terry Paul shares,

The government itself is a difficult challenge because of its mindset even though this government has gone a lot further than other governments, but they still have to deal with the general public and what they call the public interest, and we're not really part of the public interest.

However, Mi'kmaw fishers are also a minority in their communities and are represented by their community with no opportunities to influence consultation or negotiation. Michael Stephens explains, "That's what is really difficult, is because we represent the minority even within our First Nation community." Perspectives of feeling marginalized by their community governments prevail. Other examples of marginalization include the use of knowledge to inform decision making as another example of power imbalance between Mi'kmaq and fisheries authorities. The use of science in decision-making for fisheries privileges technical capacity over Mi'kmaw knowledge, and limits Mi'kmaw capacity to participate and contribute knowledge in peer reviewed processes that inform decision-making.

The lack of process for the integration of Indigenous knowledge in decision-making is a challenge. While it is on the horizon, it has yet to be developed. *Perch* explains,

We haven't developed a formal framework in the science advice, and this is a national issue. A formal framework to incorporate Traditional Knowledge, whether it's from the commercial fisheries or the Indigenous group. We don't have a formal framework to deal with that so it's a bit ad hoc right now.

Specific to the Mi'kmaq perspective is their experience of government's denial of rightful recognition of the Mi'kmaq as a nation, the treaties, and Mi'kmaq cultural practices.

Further to this concept is the denial of a treaty relationship by DFO for governing fisheries with Canada. Rather than work with the Mi'kmaq as treaty partners through cogovernance, the authority of DFO is reinforced in current Canadian legislation.

5.2.3 Disputing the Legitimacy of the Governing System

As discussed in Chapter 2, legitimacy is conceptualized as "the ability of a political action to be perceived as right and just by the various people what are involved, interested, and/or affected by it" (Dehens and Fanning, 2018, p. 46). As a category, challenging the legitimacy of the governing system refers to a set of challenges which centers around perceptions and acceptance of the governing processes (output legitimacy), the extent of inclusion of the rights holders in governing processes (input legitimacy), and the quality of the rules and processes engaged for decision making (throughput legitimacy) (Dehens & Fanning, 2018). As an identified theme, this was prominent for both the Mi'kmaq and Federal/Provincial Government perspective

groupings as neither views each other's governance system as legitimate (Table 4).

Furthermore, from a Mi'kmaw perspective, who are Mi'kmaw governors is also disputed and contributes to additional legitimacy challenges within the Mi'kmaw. Several examples in which legitimacy is not achieved were provided by the participants.

5.2.3.1 Input Legitimacy: Inclusion of Rights Holders in Governing Processes

In general, input legitimacy in not achieved from the Mi'kmaq perspective. The lack of interaction between fishers and political leadership within their communities and other aggregate governance processes, such as Mi'kmaq consultation forums, or even with DFO were noted. Treaty fisher and harvester Michael Stephens of Millbrook also shares his concerns and expresses "I think that if anything they're probably creating more problems with these agreements that aren't being, that aren't having like any kind of formal consultation with communities."

Within Mi'kmaq society, there are conflicting perceptions regarding the legitimacy of who are the rightful governors. For example, there are conflicting perceptions of Mi'kmaq jurisdiction and governing authorities. *Keptin* Colin Bernard of the Mi'kmaq Grand Council recounts,

And right now, that's where jurisdiction comes into play that some people recognize

Chief and Council as the jurisdiction and some believe that Grand Council should

have some say, some jurisdiction over some of those decisions.

KjiKeptin Denny explains that Mi'kmaw families were their own governors in their districts.

But it's the connection of fishing and eeling and whatever species of fish that were in our areas. That was the way that they...Netukulimk. That's what it was about. Hunting, gathering, that's what it was about. Doing it a certain way, and those guiding principles that were passed down. It didn't have to be Grand Council. In my opinion, all of our people were Grand Councils. There was all the families. It was the families that keep those laws.

Conflicting perceptions of authority as who are fisheries governors and decision makers are noted in both mixed and Mi'kmaq groupings. *Lobster* shares,

...the issue of Grand Council is kind of an interesting question for us because it's trying to figure out - and I think even with the Mi'kmaq nation is trying to figure out - what's the relationship between the Grand Council as the traditional governance and Chief and Council.

KjiKeptin Denny elaborates on the role of cooperation between people and governments,

We're people. And they have to understand this. People have to work together to get
along, to do what is right. Nobody is more powerful than anybody else. Very
important that the governments look at the Grand Council as their partner, not their
subject and it's the same with our keptins. When you look at a government that
doesn't, that isn't recognized, they rather recognize the chiefs. But the Grand
Council is the national government of the Mi'kmaq...

5.2.3.2 Throughput Legitimacy: Extent of Inclusion of the Rights Holders
The elevated legal position requiring formal processes that recognize Canadian
jurisprudence such as the duty to consult exclude the people who are potentially directly
impacted in those discussions by the recreational salmon fishery. In Mi'kmaq First

Nation communities, participation in fisheries decision making is generally limited to the participation of leadership in formal consultation processes. Fishers are underrepresented when processes exist, and a general lack of within community processes are noted.

Michael Stephens shares their frustration on the quality of interactions, and the role of organizations representing Mi'kmaw needs;

They have, they consult on various matters within the community but a lot of the times the community itself is underrepresented and nobody, a lot of people, still don't even know what these organizations are or what they do and what their objectives are, ...and they had like one... session on, you know, lobster sizes or salmon or whatever it may be and only like five, six people show up to these meetings and then they end up endorsing and agreeing with the Provincial, with the Federal government, that lands the individual, some individual fisher who had no idea about the meeting or the organization or wherever it may be or about any kind of, you know, any kind of dealings that were worked out between those organizations who's out there actually fishing and living off the land and harvesting the resource. They end up with, they encounter the Provincial counterpart, the Federal counterpart and they end up in court fighting, saying, 'you're in violation of your community's food, social, ceremonial agreement'.

Similarly, Dan Paul of Membertou shares frustration over the lack of within community consultation, reliance on governments, and how decisions are made without the involvement of the people;

You look at all this terminology they're throwing around today. Consultation is the worst one. Why is consultation limited to only the Chiefs, when consultation should come to the people, because that's who it affects?

5.2.3.3 Output Legitimacy: Perceptions and Acceptance of the Governing Processes

From the Federal/Provincial Government and Mixed participant groupings, governing occurs through authoritative bodies using legal and prescriptive methods intended for the privileged majority. The current governing system is identified as being at odds with traditional Mi'kmaq ways. As hierarchical and controlling and through the use of legal instruments such as agreements, legislation, and regulations are viewed by these two participant groupings as ways to 'fit' Mi'kmaw fisheries into the current fisheries governance model. However, there are no processes for DFO or the community to interact with Mi'kmaq fishers. Decisions derived from community elected leadership as defined by the *Indian Act* (1985) are contested within communities and licence conditions are rejected by fishers in order to protect their rights and push the limits of legal agreements by testing whether such agreements could be used against the Mi'kmaq. The use of agreements with associated funding from DFO limits access to fish for salmon without Mi'kmaw consultation with Mi'kmaq fishers. Agreements are signed without adequate processes for input or communication and as a result, fishers feel their Aboriginal and treaty rights are impacted without their consent or knowledge and disregard agreements with the federal government.

Furthermore, agreements, as the rules for fishing, limits Mi'kmaq rights. Kerry Prosper provides an example of how agreements can be used against Mi'kmaq people and contradict the fishing order established under the *Sparrow* decision (1990).

...I really like the priority that Sparrow spells out that food is a priority. It lined it out. Recreational, commercial and it, and that's why the agreements came about is to have control over that priority and it showed itself when the boys got charged for fishing salmon in Cape Breton when they allowed that hook and release fishery and they used the agreement against them. So, that non-withstanding clause didn't hold any water at all and they used that agreement against them, you know, saying, 'you signed it, you can't fish, but we can allow catch and release fishery' so it put recreation over [the food fishery].

From the Federal/Provincial Government and Mixed perspectives, the authority to manage fisheries is under federal jurisdiction, with limited power delegated to provincial authorities for freshwater fisheries. Both Federal/Provincial Government and Mixed participants identified federal and provincial authority and responsibilities in the management of fisheries and unwillingness, or at least, the needlessness, to share authority. Much of the federal focus to manage Mi'kmaw fisheries is to limit the exercise of rights by creating boundaries around fishing such as restricting access to protect stock status, as in Atlantic salmon. In other words, from the Federal/Provincial perspective, the federal government has the legislative responsibility to manage fisheries with the legal tools to support its authority and responsibility. However, from the Mi'kmaw perspective, having the sole authority and jurisdiction of the federal government for fisheries deny

Mi'kmaq rightful recognition of their sovereignty and treaties. *Ta'pitji'j* furthers the notion of conflicting perceptions and denial of Mi'kmaq rightful recognition,

We've never given up our land, we've never given. Nobody owns the water but we're all responsible for protecting it. So, if nobody owns the water, why does one Minister have a say over all of it? So, and that's actually law. Nobody owns the water so how can you give somebody one person a say over that? It's makes no sense. It's contradictory. Those processes, those regulations, those laws themselves that were developed by individuals who lacked a true understanding of who we are as a people, will always act as a barrier to us, so until we can do what we need to do to educate those higher up, to change those laws, to change those processes, we're always going to be fighting to protect who we are.

The Department of Fisheries and Oceans (DFO) are viewed as failing to make the best decisions for fisheries management and are contributors to the current and failing state of Canadian fisheries, as evidenced in the number of healthy stocks continuing to decline and depleted populations that are failing to recover in Canada (Oceana, 2019). As a result, the Mi'kmaq fear the future and lack security to access their cultural fisheries for future generations. Different perceptions exist for Federal/Provincial Government and Mixed participants. The lack of governing capacity in Mi'kmaq organizations creates concerns surrounding legitimacy. In the absence of alternative fisheries models, DFO perceptions and acceptance of current governance processes as output legitimacy resides with the current model while Mi'kmaw perceptions and acceptance of the governing processes are viewed as failing to achieve legitimacy.

5.2.4 Fearing Loss of Mi'kmaq Identity

Fearing loss of Mi'kmaq identity through loss of practice, lack of recognition for sovereignty and treaties, and the dominance of western governance are evident from historical attempts to assimilate the Mi'kmaq (Paul, 2006). As a theme, the Mi'kmaq and Mixed perspective groupings highlighted this challenge (Table 4). Fears of loss of Mi'kmaq identity through loss of connection to the land and people and Mi'kmaq responsibility are evident. Dan Paul, traditional harvester, recounts,

But today, having been detached from that environment, from nature and from the resources for over a hundred years has created a certain mindset with our people, almost they're like defeated.

Within the concept of Mi'kmaq responsibility, abuse of rights is a significant concern and a current struggle for Mi'kmaw people. Selling resources intended for food for the Mi'kmaq is contentious within Mi'kmaq communities. *Keptin* Stephen Augustine notes,

...and some people don't. They continuously go out and say, 'I'll hunt and fish whenever I feel like it' and there are some that go ahead and they'll sell the moose meat. They'll sell salmon. They'll sell it to outside the reserve or even just to other reserves, to other Mi'kmaq people, or whatever,...

In particular, partnering of non-natives with Mi'kmaq to benefit from fishing was identified as a growing concern among the Mi'kmaq and deemed intolerable by the Mi'kmaq.

Disregarding Mi'kmaw values in *Netukulimk* also create challenges that are seen as abusing rights. Taking too many fish, fishing with individuals who are not Mi'kmaq, dishonoring Mi'kmaq ways, fishing without regard for conservation ethics and in a

manner that impacts future generations are concerning to the Mi'kmaq. However, the Mi'kmaq lack ways to address them that are culturally appropriate as they are ethical issues that cannot be addressed by the Canadian legal system. Intertwined with abuse of rights are the loss of Mi'kmaw values and customary practices such as prioritizing individual needs over collective benefits and the resulting impacts it has on communities. For example, communities themselves become victims due to harm caused by an individual or individuals who abused Mi'kmaw rights. Misunderstanding rights and the relationship to Mi'kmaq responsibility is a source of confusion within communities and many fishers feel as though the law doesn't apply to them. Elder Albert Marshall explains their role as Mi'kmaq,

...again, you know, I think I just talked about it a while ago, about rights. With rights comes responsibilities. If that responsibility aspect of it was factored, then people from other areas wouldn't be talking like that. How come you're denying me of my right? Am I a Mi'kmaq just as well as here as in Timbuktu, yeah you are but you're not from these areas, therefore, we know what's here and [if] we don't know it, right now, but we should know using the two sciences what's here, the status of this area and if there's a surplus, yes, we share, but our main objective is maintaining the integrity, ecological integrity of this area, that's our main objective here. So, it's not a question of denying anyone, you know what I mean?

5.2.5 Identifying Governing Gaps

While the Mi'kmaw participants did not identify governance gaps as did the other two perspective groupings this does not indicate that governance gaps are not important.

Rather, it could be assumed they are not as prominent, considering other challenges

currently facing the Mi'kmaw perspective. In contrast, the Mixed and Federal/Provincial Government participant perspectives emphasized capacity gaps in both the Mi'kmaq and Federal/Provincial Government (Table 4). The Federal/Provincial Government and Mixed groupings of participants identified governing gaps as being attributed to a lack of knowledge of the Mi'kmaq context. For example, a general lack of understanding on Mi'kmaq culture and practices, current governance, history, rights and intent of treaties are limited or absent in Federal/Provincial Government governing capacities. Processes for adaptive management are lacking and understanding that current processes used by governments are not effective were also identified by Federal/Provincial Government and Mixed participants. A lack of adequate capacity, lack of Mi'kmaq governing capacity and organization were noted by Mixed and Mi'kmaq participants. Common to all groups was the identification of a lack of policy for Indigenous and treaty fisheries and interactive processes between federal and provincial governing systems with the Mi'kmaq, and within the Mi'kmaq themselves.

5.2.6 Operating Challenges & Gaps

Operating challenges were noted among all participant groups. For both Federal/Provincial Government and Mixed participant groupings, the lack of adequate capacity for administrating rights-based fisheries was noted as a challenge. In particular, the human resources required to effectively address the Mi'kmaw context are not in place. In addition, the capacity required for the current governance to evolve to address the changing natural and legal landscape in a growing Mi'kmaq population was seen as overwhelming. *Squid* explains the challenges in the frequency of the issues emerging as

those related to Indigenous fisheries and the need for them to be addressed throughout the department;

it's a daily, it's an all-encompassing and it has changed over the last ten years. We used to get things, even in our group here, if anybody got a whiff of the fact that it might have something to do with an Indigenous nation, it would come here and it's now become impossible to sustain that. So, we're like, 'Okay, everybody, it's actually, it's the whole department's business.' So, if it's a resource management question, Resource Management has to figure out what the issues are and how to resolve them.

From the Mi'kmaq perspective, operational challenges were also evident. Operational challenges that were identified included lacking adequate capacity (such as not having adequate human resources) and the capacity to monitor fishing. Other operational challenges were insufficient funding to undertake data collection and participate in peer review processes. *Kinisku'nej* recounts,

Well, funding-wise like we could use more funding and more people but we're just stuck to the same funding last 25 years. So, it's very limited and we have limited staff...there's areas... the where the community members fish, like in Margaree and ... they fish for lobster up in St. Peter's and we can't be there every day. There's a limited budget, so that's one.

Furthermore, the intent of funds provided through the Aboriginal Fisheries Strategy (AFS) program limits what can be accomplished by the community as it is currently funded and may be better directed to other activities such as broadening community

outreach and protecting fish habitat. Hubert Nicholas, Director of fisheries for Membertou First Nation shares an example of how the funds are used in the community; The budget that's allocated from DFO that tells us, basically, here's the amount of money set aside for you to do, programming that's beneficial to your community's needs and wants to research fisheries or environmental or community concerns that were related to fisheries. So, at the beginning of the year, we develop a plan, lay out projects that we're going to be involved in and the Government gives us a set amount of money that's been there for, the same amount, for twenty years, so,... almost 2/3 of it goes to salaries, so we're left with 1/3 to do projects and to pay for assets such as vehicles and boats and stuff, but for whatever's left out of the 1/3, let's say 75% of that 1/3 we do projects that we've always done. There's nothing new. There's nothing spectacular. There's nothing that ...allows the imagination to go, this is actually what we really need because you're limited on the amount of funds that we have that you pretty much end up doing the same projects every year, which is good, not great. I think if we were left to do things with the amount of money, rather than fisheries focus, I think we could accomplish a lot more within our communities because we would start doing environmental aspects of it, community outreach that's more needed for, I don't know about fishing related, but protecting species, protecting habitat, and the amount of money we're given is not enough to do that. An inadequate way, a haphazard way, we're given enough to ...make it look good, or at least allow DFO to say, 'You know what, they did

enough, check the box, give them their money and move on, let's do it again next

year'. I think to adequately do what we want to do, we probably need about three times as much money.

Former chief and respected knowledge keeper and traditional harvester Kerry Prosper, also shares that the fund as it is set up, creates internal challenges for addressing community priorities;

Well, hopefully, I could see it developing more and more and people and organizations finding their place and we're just set up to fail with the way we're being funded and limited funding and people are fighting over what's there. It's hard to keep creative you know, yes, it's a shame but hopefully we can get through that.

While attempts have been made to legalize access to First Nations, inconsistencies evident in agreements creates inconsistent access and different rules for many Mi'kmaw communities. In other words, not all communities share the same access to the same species at the same time or location, or in the same quantities. The sheer number of communities negotiated AFS agreements creates additional challenges for federal authorities responsible for enforcing specified measures. Within agreements, unrealistic reporting required from the communities were also identified. From the Federal/Provincial Government perspective, there is similar experience that the current processes are ineffective. *Pollock* comments,

...we often get assigned, essentially, to enforcing those measures. A lot of times when we look -at the management measure between AFS agreements we do not see consistency. We also don't always see that many of these measures are

achievable. For example, when I look at many AFS agreements with some of the reporting requirements, I often wonder how we would be able to enforce them, or how anybody, would be able to reasonably achieve certain reporting requirements.

In general, Mi'kmaq are not part of recreational angling associations and thus are not involved in annual meetings held by DFO and the industry. Similar processes for Mi'kmaq fisher's participation and to receive status updates are not regularly held by Mi'kmaw organizations. Many Mi'kmaq communities are supported by commercial fishing liaisons who attend advisory processes for commercial fisheries and update community commercial fishery managers but not fishers.

With regards to livelihood fishing, operational challenges are related to how slowly progress moves in government, leading to frustrations on the wharf. Despite having a treaty right to fish, there is no process to implement the *Marshall* decision beyond the Marshall Response Initiative (MRI) through communal commercial access and operation and administration at the community level. Mixed and Federal/Provincial Government participants noted that they are reacting to a changing natural and legal landscape; to wait for the problem to arise and then address it.

There are capacities issues for Mi'kmaq as livelihood fishers. In communities, only a subset of Mi'kmaq is employed through communal commercial fisheries leaving many others unemployed and untrained, or unemployed but trained. Mi'kmaq individuals lack

access to secure capital while others lack fishing experience and/or training. Storing fish in community was identified as problematic.

Elder Albert Marshall summarizes the root of capacity issues in communities as a lack of funding to build the capacity, administer, and govern fisheries effectively.

Those kinds of things, I think, has to be, but we have to take that initiative and under the Charter, or whatever you want to call it, the United Nations Declaration of the Rights of Indigenous Peoples, those are all spelled out. All we have to do is just build on it, build on them, but we have to get the cooperation from the Government because the tools we don't have. That tool is money.

5.2.7 Considerations for the Development of an Alternative Governance Model

Based on the analysis of the challenges identified by the participants, there were commonalities among the groups regarding the theoretical categories while having different emphasis in relation to the components of the categories. The following section summarizes the challenges from each of the participant groupings. For reference, a bar graph to illustrate the theoretical categories identified relevant to each participant grouping perspective is provided in Figure 6.

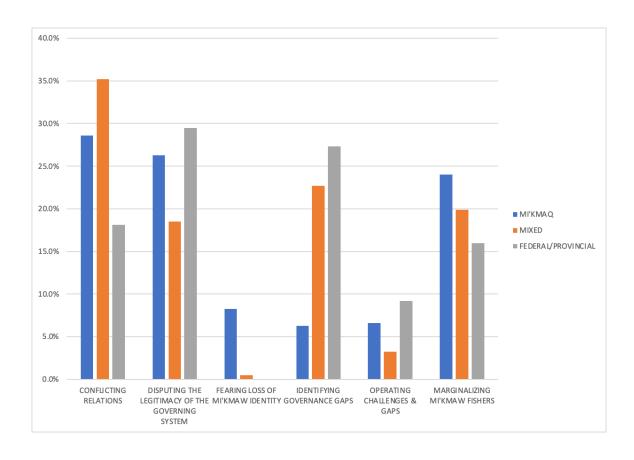


Figure 6 Summary of participants' perceptions of challenges as theoretical codes. Values are expressed as percent.

5.2.7.1 Mi'kmaq Perspective

Within the six theoretical categories of identified challenges, two groupings emerged for the Mi'kmaq perspective. The first grouping is composed of challenges that were identified as having more emphasis, while the second grouping is having the identified challenges but with lesser emphasis. For the group with more emphasis, thus the greater quantity of related codes that emerged from the interviews, the categories of conflicting relations, disputing the legitimacy of the governing system and marginalizing Mi'kmaw fishers comprised most of the initial codes. The second grouping of the categories, fearing loss of Mi'kmaw identity and operating challenges, comprised a smaller proportion of the coded data. This first grouping suggests that the challenges to be

overcome must consider how conflicting relations are addressed, internally and externally. Furthermore, any proposed model must be legitimate for Mi'kmaw fishers and more broadly to the Mi'kmaq themselves. Related to legitimacy is the lack of participation of Mi'kmaw fishers in governance of their own fishery, thus the proposed model must create space for Mi'kmaw fishers. The challenge of fearing loss of Mi'kmaq identity suggests that the proposed governance model must be developed for the context of the Mi'kmaq in Nova Scotia.

5.2.7.2 Federal/Provincial Governing System Perspective

Within the five theoretical categories of identified challenges, two groups of categories emerged. The first group of categories is composed of challenges that were identified as having more emphasis, and the second grouping of categories as being identified to be of lesser emphasis. For the group with more emphasis, thus the more related codes that emerged from the interviews, are conflicting relations, disputing the legitimacy of the governing system, marginalizing Mi'kmaw fishers, and identifying governance gaps. The second grouping of categories of challenges, consisted only of operating challenges.

These findings suggest from the Federal/Provincial perspective, that the governance model developed must also be legitimate to the federal/provincial governing systems, include ways to address conflicting relations, and address governance gaps. The authority of DFO and the provincial governing systems enables the state to restrict access and create boundaries around the exercise of rights. Thus, a model must address ways in which the federal and provincial governing systems share authority and decision-making with the Mi'kmaq.

5.2.7.3 Mixed Perspective

Two grouping of categories emerged as challenges. The first grouping of categories with more emphasis, thus the more related codes that emerged from the interviews were the categories of conflicting relations, disputing the legitimacy of the governing system and marginalizing Mi'kmaw fishers. These findings suggest that the challenges to be overcome must consider how conflicting relations are addressed, internally and externally. Furthermore, the model must be legitimate for Mi'kmaw fishers and more broadly to the Mi'kmaq themselves, and the federal and provincial governments. Related to legitimacy and marginalizing Mi'kmaw fishers is the lack of participation of Mi'kmaw fishers in governance of their own fishery, and the authority of DFO and the provincial governing system to create challenges around the exercise of Aboriginal and treaty rights. Thus, the model must have appropriate space for Mi'kmaw fishers and the ability to address challenges to power imbalances regarding the exercise of Mi'kmaw rights to fish between the federal and provincial government and the Mi'kmaw fishers. The second grouping, fearing loss of Mi'kmaq identity and operating challenges, comprised a smaller proportion of the coded data but suggest the proposed governance model must also address the context of the Mi'kmag in Nova Scotia.

5.3 Participants' Perceptions of Opportunities

From the case study interviews and subsequent analysis, five theoretical categories explaining opportunities were constructed: i) addressing governance gaps, ii) forging a [treaty] relationship, iii) founding governance on Mi'kmaw knowledge system, iv) using current governance processes, and v) enhancing operations. Perspectives obtained from three categories of interview respondents (Federal/Provincial, Mixed, and Mi'kmaq) are

discussed within each of the categories derived from the data analysis. Table 5 contains the theoretical categories with each of the sub-categories contained within the theoretical code. The sub-categories are displayed as percent to demonstrate the emphasis in relation to the theoretical code.

Table 5 Participants' perceptions of challenges showing frequency of focus codes. Values are expressed as percent. GS refers to 'governing system'; N=number of initial codes.

THEORETCAL CODES AND SUBCATEGORIES	MI'KMAQ (N=1337)	MIXED (N=321)	FEDERAL/ PROVINCIAL GS (N=730)
ADDRESSING GOVERNANCE GAPS	12%	12%	9%
Creating Structure Where Necessary	7%	5%	14%
Improving Governing Capacity in DFO	0%	16%	40%
Incorporating Governing Principles	0%	11%	0%
Making Room for Mi'kmaw Fishers	17%	0%	0%
Incorporating Practicality in Governance	0%	0%	9%
Incorporating Decision Making Criteria at DFO	35%	8%	0%
Creating Community-Based Processes	10%	0%	0%
Improving Current Governance	9%	30%	14%
Building Governing Capacity in First Nations	23%	30%	23%
FORGING A [TREATY] RELATIONSHIP	31%	48%	41%
Applying Rights to Modern Context	2%	1%	1%
Being Open to Working Together	0%	1%	3%
Benefitting Economically Beyond Fishing	3%	4%	2%
Collaborating for Mutual Benefit	8%	9%	14%
Educating Non-Mi'kmaq on Mi'kmaq Context	0%	15%	10%
Interacting to Build Relations	11%	10%	27%
Maintaining Fisheries Shared Goal	0%	0%	8%
Making Room for Mi'kmaq	0%	7%	0%
Protecting Rights Requires Caution	1%	0%	0%
Recognizing Treaty Foundation	10%	14%	8%
Righting The Wrong	1%	2%	1%
Sharing as a Principle	10%	6%	6%

THEORETCAL CODES AND SUBCATEGORIES	MI'KMAQ (N=1337)	MIXED (N=321)	FEDERAL/ PROVINCIAL GS
Striving for Solidarity	25%	6%	(N=730) 1%
Trusting Each Other	3%	3%	0%
Understanding Significance of Fisheries to the Mi'kmaq	26%	22%	17%
FOUNDING GOVERNANCE ON MI'KMAW KNOWLEDGE SYSTEM	39%	23%	9%
Addressing Deviations Differently	14%	1%	28%
Empowering Inherent Rights in Treaty	6%	17%	4%
Incorporating Governing Principles	7%	0%	0%
Incorporating Mi'kmaq Traditional Governance Approaches	10%	20%	15%
Incorporating Mi'kmaw Values	13%	11%	0%
Incorporating Mi'kmaw Ways of Knowing	18%	7%	15%
Incorporating Netukulimk	12%	8%	0%
Re-Inventing Governance Where Necessary	5%	5%	19%
Self-Governing as a Governing Approach	8%	19%	19%
Incorporating Many Ways of Knowing	0%	8%	0%
Incorporating Mi'kmaw Traditional Practices	6%	4%	0%
Incorporating Practicality in Fishing	3%	0%	0%
USING CURRENT GOVERNANCE PROCESSES	11%	16%	41%
Adapting Current Governance	0%	0%	4%
Integrating Western Law to Support Fisheries and Governance	31%	22%	11%
Making Room for Mi'kmaq	0%	0%	7%
Regulating Fisheries Experience a Strength	0%	16%	9%
Using Aggregates Efficient	8%	20%	3%
Using Agreements as a Tool	17%	10%	28%
Governing Fisheries at Community Level	21%	0%	1%
Regulating of Fisheries Needed	7%	0%	0%
Having Established Processes for Fisheries Governance	16%	32%	37%
ENHANCING OPERATIONS	7%	1%	0%
Expanding Spatial Scale of Fishing	5%	0%	0%
Incorporating Practicality	0%	25%	0%
Succeeding as Commercial Fishers	0%	0%	50%
Succeeding as Communal Commercial Fishers	3%	0%	0%
Supporting Fishers with Services	81%	75%	50%
Supporting Governance Operations	11%	0%	0%

MI'KMAQ (N=1337)	MIXED (N=321)	FEDERAL/ PROVINCIAL
		GS
		(N=730)
100%	100%	100%
	(N=1337)	(N=1337) (N=321)

5.3.1 Addressing Governing Gaps

It is noted that addressing governance gaps is similarly important among the perspectives (Table 5), although the different perspectives offer different emphasis within the subcategories. Shared perspectives among all participant groups reveal the need to create governance structures where necessary, improve current governance, and build governing capacity in First Nations.

Governing capacity that supports the development of technical skills and research, enforcement, and other capacities are needed in Mi'kmaq governing systems. These can be achieved through governing incrementally and using external expertise to build capacity to match federal institutions. From the Federal/Provincial Government perspective, building capacity on rights understanding and education are needed throughout the organization. Morely Knight, former senior DFO executive, shares,

The department provides training and makes efforts to ensure cultural sensitivity among and by its employees, but not necessarily enough. For example, they provide direct training to fishery officers when they're going through their basic training on things like cross-cultural awareness and have Indigenous people from across Canada come and speak to the new recruits. There's training provided to other people in the Department as well, in cross-cultural awareness and Indigenous

awareness, in Aboriginal rights and treaty rights. There's lots of discussions and information sessions that are carried out by the Department internally to ensure that those areas are being covered in discussions in how people go about their work in administering their duties are, whether it's the development of an integrated fisheries management plan or the conducting of science,...

Opportunities for creating structure where necessary was identified. Ways to integrate traditional and elected leadership, authority, and approaches specific for livelihood are potential opportunities relayed from the Mi'kmaq perspective. Co-management and evolving governance processes and models are opportunities noted from the Federal/Provincial Government perspective.

From the Mixed perspective, educating DFO and incorporating transparency in programs are needed, while building governance capacity is needed in the Mi'kmaw context that includes building governance capacities in communities, policy development, technical skills, leadership, and enhancing credibility as governors. Opportunities to improve current processes from the Mi'kmaq perspective include incorporating flexibility, developing procedures and refining processes and incorporating conflict resolution processes. From the Mixed perspective, opportunities to include other sources of knowledge, expanding participation, and aligning processes are welcomed.

Federal/Provincial Government participants noted opportunities to improve current processes are the inclusion of decision-makers in discussions, reviewing programs and processes, and including more sectors and participants in current governance (Table 5).

Related to improvements in governance is the opportunity to create structure where necessary as autonomous fisheries institutions to address rights-based fisheries that cannot be filled by other organizations or processes. Specific to the Mi'kmaq perspective is the opportunity to address governance gaps at the community level. Fisher inclusion and participation is needed on multiple levels but more so at the community and aggregate levels where there is a lack of participation and consultation due to a lack of opportunities for their inclusion and others in the community. Curtis Falls, Director of Operations for Kespuwick Resources Inc. comments,

...we have people on the ground actually doing it and as long as we listen to them and we give them what they need to do it and we help them regulate themselves more or less, I think we'll be alright.

Specific to the Mixed perspective was the need for incorporating governing principles. From the Federal/Provincial perspective, there is desire to incorporate practicality in governance. Unique to the Federal/Provincial Government perspective, practicality in governance is desired. Agreements made with communities in some instances are not practical as limiting access to species under the Aboriginal Fisheries Strategy is unnecessary for many species in the licence conditions.

5.3.2 Forging a [Treaty] Relationship

Identified as the most frequently coded category for Mixed and Federal/Provincial Government participant groups and the second highest for the Mi'kmaq group was the opportunity to forge relationships (Table 5). The prominence of this particular

opportunity among all perspectives indicates a willingness or at the very least, an understanding, that relationships could and should be improved. Shared perspectives among those participants groups include enhancing understanding of the significance of fisheries to Mi'kmaq people, interacting to build relations, recognizing treaty as the foundation for relationships, collaborating for mutual benefit, benefitting economically, sharing as a principle, and applying rights to a modern context (Table 5).

It is understood by Mi'kmaq participants that fisheries are more than food or means to support oneself. Tied to Mi'kmaq identity, fishing is more than a right. Fishing is an expression of the Mi'kmaq culture to support communities and sustaining a way of life. Michael Stephens, treaty fisher and harvester shares, "I was always taught as a kid you are Mi'kmaq. You are L'nu. If you want food, go get it from the land, from the rivers, wherever." Similarly, Tom Johnson explains,

I think like the Mi'kmaq fisheries, if we really look at the core history behind it and if we go back, way back prior to colonization, then we're looking at like, an inherent type of fishery. I don't even know if, I think the Mi'kmaq word is "kwitamen", "you're going fishing", but it was just more of a way of life for survival.

From the Mi'kmaq perspective and although to a lesser emphasis the Mixed and Federal/Provincial perspective, striving for solidarity as Mi'kmaq is an opportunity to collaborate and act collectively despite jurisdictional issues such as reserve boundaries.

Once united, this provides opportunities to develop an image of the fishery, livelihood

concepts, shared rules, and to implement and advocate for governance of rights-based fisheries. Understanding that agreeing on a large scale may be difficult, there are other opportunities to collaborate on a smaller scale. From the Mixed perspective, uniting for solidarity also provides opportunities for co-developing solutions for Mi'kmaq identified species of priority, as well as other species. Additionally, agreeing on shared rules is a potential opportunity noted by the Federal/Provincial Government participants.

Interacting to build relations to improve governance and foster cross-cultural learning on Mi'kmaq rights and the Mi'kmaw context need opportunities for such interaction.

Collaborating is seen as an opportunity to derive mutual benefit, such as collaborating for common purpose and partnering with those who share the same goals and is viewed as a willingness to collaborate with governments, with the understanding that collaborating and co-existence underpin a treaty relationship.

A treaty relationship is the recognition of Mi'kmaq treaties and understanding of their role to the foundation of governance. Access to resources were protected in the treaties, and the rights derived from the legal recognition reinforce treaty existence and validity. Underlying treaty recognition is Mi'kmaq laws, jurisdiction, exclusive ownership as Aboriginal title, and traditional governance, and an opportunity to make amends for Canada's past wrong doings such as compensating for loss of use. Applying rights in the modern context is the opportunity in today's political climate for rights implementation. *Squid* shares,

I think I'm more optimistic now about the potential of addressing fisheries rights, and fisheries management in a much more comprehensive way than I have been for the last 13 years in the public service but I really think, I really hope that the changes that we're making now are going to be sustainable.

Similarly, *Cod* ponders,

I just think that, I guess my concluding remark is that I think we are at a very interesting point in history. What happens in the next 10 years between the federal government and First Nations and Indigenous peoples here and across the country is going to be setting up the situation for the next number of decades. So, I really think we are in a juncture in time and there is an opportunity to bring things together if you will and have co-management situation and things like this. So, I guess I just want to share, I think we are at tremendous opportunity and let's hope that something positive in the next few years comes out of what we are currently experiencing.

Sharing, as a principle and opportunity, is more than sharing the same resource, although as a finite resource, sharing is necessary. *Squid* comments,

...fisheries are a finite resource and we all have a responsibility to manage them, protect them and use them in a way that's sustainable for everybody and if there's not enough fish for everybody, then how do we share the fish? And what does that mean in terms of management regimes.

Sharing space for fishing and other equitable opportunities are important pieces for reconciliation, as are sharing responsibility, authority, and jurisdictions. Devin Ward reflects on his hope for a shared future,

And hopefully we can develop something that sees a true shared stewardship approach to fisheries management where we have some meaningful say in the various management measures that are put out...

Benefits to having a treaty relationship are not only about deriving economic benefits but are also about benefiting as treaty people in sales and services and other economic opportunities derived from fishing. Unique to the Federal/Provincial Government perspective were the openness to work together and recognition that maintaining fisheries is a shared goal. *Pollock* explains,

For me, conservation is the wise use of the resource. It's not preservation, it's long term sustainability. It's the wise use of the resource, ensuring its well-managed, it thinks about not only the one species that you're harvesting but you're looking at the fishery resource as a whole. So, it's long-term sustainability for everybody's benefit, present and future generations...

Sharing tools, resources, and information to aid in decision-making are opportunities for communities, organizations, and governments to learn from each other and build governance capacity.

Trust and sharing are necessary for any relationship. Trust can be achieved by building credibility, but it can also be given with the understanding that there is shared concern for sustainability. *Mussel* also furthers the role of the Mi'kmaq in maintaining fisheries and the need to work together,

So, that we have fish today and also fish down the road meaning maybe 10, 20, 25 years, 50 years from now. So, generations down, that were able to say we still have

those fish around AND to be even more specific to the Mi'kmaq fisheries. The important piece here is there are certainly species that are more important and working to..., to me, it's working together to try to figure out how we are going to get 50 years down the road and still have those fisheries exist, that they are, you know, looking at the bigger scale of fisheries management or if you are looking at Mi'kmaq fisheries themselves, they still need to existing in 50 years for, you know, based on the culture, I know it's hugely important and it's big piece of, I'm going to say, cultural but also life for Mi'kmaq. So, I think as we're moving forward looking at fisheries management and the bigger picture, they're definitely a big part and an important part as we move forward and we need to figure that one out.

From the Mixed and Federal/Provincial Government participant group perspectives was the need to educate non-Mi'kmaw on the Mi'kmaw context and facilitating interaction and creating space to build relations. *Lobster* reflects,

A lot of what I say is a lot of our work is just supporting, enabling and getting out of the way. Mi'kmaq know better than anybody else what the Mi'kmaq need to do. We just need to create that space for that to happen...but I think there's opportunity to do things a little differently.

And lastly, unique to the Mi'kmaq perspective is an element of caution needed when forging a treaty relationship. Protecting Mi'kmaq rights requires caution as agreements can be interpreted as modern treaties which means that historical treaties could be replaced with modern agreements.

5.3.3 Founding Governance on Mi'kmaw Knowledge System

Having the Mi'kmaw knowledge system underpinning governance initiatives was identified as the theme emphasized by the Mi'kmaq (Table 5). This indicated the importance of the Mi'kmaw knowledge system including the values, beliefs, practices, including laws, as an opportunity to enhance governance that is currently only based on Western approaches and values. Shared among the perspectives was the importance of incorporating traditional governance approaches, Mi'kmaw ways of knowing, *Netukulimk*, the need to address deviations differently, self-governance as a governance approach and re-inventing governance where necessary.

Incorporation of traditional governance approaches, especially the integration of Mi'kmaw concepts of conservation and resource management approaches, is tied to their historical ways of life. Other opportunities, from both Mi'kmaq and Mixed perspectives are governing on a smaller scale, decentralizing responsibilities through traditional Mi'kmaq districts, and the use of Mi'kmaw protocols such as asking for permission and addressing responsibilities through protocols. Re-instilling of cultural roles was an opportunity identified by all participants. Clarifying the role and responsibilities of the Mi'kmaq Grand Council was also identified as an opportunity from the Mi'kmaq perspective. Elder Albert Marshall shares a historical perspective that contradicts current organization of Mi'kmaq under the *Indian Act*,

Just like the time when these ecological forms were in existence. We had district Chiefs. Now the Grand Councils within that ecological zones, they are intimately, should be intimately knowledgeable and connected to the environment. So, they will be the ones to determine on the ground level of what needs to be done and what

resources they will need. The Grand Council is the overseer of the territory by and large.

The importance of incorporating Mi'kmaw values to guide governance initiatives was raised repeatedly. Values identified included ethics to guide behaviour, valuing relationships, balancing sustainability with current and future needs, spirituality, belief in cultural practices, and integrity. Special consideration was given to the incorporation of *Netukulimk* as a Mi'kmaw value to guide fishing practices. Prioritizing ecosystem needs is fundamental to *Netukulimk*. This can be achieved through many ways but self-limitation, preventing and minimizing waste, taking what is offered, and leaving areas to replenish describes how *Netukulimk* can be achieved when fishing. It is understood that conservation practices vary among fishers, such as the use of selective fishing strategies of keeping males and releasing female salmon, but self-limitation is non-negotiable when practicing *Netukulimk*.

Opportunities exist to incorporate Mi'kmaw ways of knowing. Mi'kmaw ways of knowing are valued, including learning from family, experience, elders, and the land as ways to conserve fish. Kerry Prosper explains that fishing is one way to learn Mi'kmaw values,

...and you learn about conservation from your parents or uncles or other brothers or sisters, saying you got to throw the little ones back and keep the good size ones to eat so you learn little by little and how to try to respect them. And the old people would tell you don't take too many; what are you going to do with all those things,

all that fish. You better eat them or give them away because they are going to spoil. So, you learn all those little things and you develop a consciousness of what you're doing because they are always telling you when you are doing good things, when you do wrong things. So, you develop that consciousness...

Of particular concern to the Mi'kmaw and Federal/Provincial perspective were ways to address deviations from Mi'kmaw values, ethics, laws, and federal law. Providing options for penalties, taking responsibility for actions, penalizing inappropriate behavior, and creating processes to prevent abuse of rights were identified as some opportunities to address such deviations. However, addressing deviations must be based on equitable processes that include interfering when necessary, educating on the impacts of actions, and using tribunal concept to address deviations from Mi'kmaw values and to evaluate accountability of fishers' actions. Devin Ward shares,

So, that could be something that's decided by a panel of say community members or respected individuals from a community and those that are involved in the management of that fishery from our own community.

Similarly, from the Mi'kmaq and Federal/Provincial Government perspective, there is a need to address deviations, or when rights are wronged. Currently, there are evolving processes for dealing with infractions through restorative justice that focus on compliance as the goal rather than the penalty and the need for resolving legal violations peacefully.

Related to the above notion of adherence to values is the incorporation of governing principles, such as accountability and transparency. The Mi'kmaq hold that they have responsibilities that come with rights but sometimes fail to act responsibly. Holding each

other accountable as Mi'kmaq for their actions, reporting catches, and having open and transparent communication with each other are opportunities for incorporating governing principle within and between the Mi'kmaq and greater society. Also, as knowledge is viewed as being place-based, there is an understanding that Mi'kmaw knowledge, while valued, may not be widely applicable throughout the province. Mentoring as a part of learning and handing down of traditions are opportunities to share fishing practices with other Mi'kmaq who may reside outside Mi'kmaw communities. Furthermore, Mi'kmaw governance initiatives must support traditional practices. Bartering and having the ability to recover expenses when sharing fish, which are currently not supported in current FSC agreements with DFO, are valued by Mi'kmaw fishers. Other traditional fishing practices are freedom to fish when fish is needed, engage in a diversity of fisheries, use traditional means, have their family involve in fishing, and the ability to sell fish on a small scale.

Self-governing as a governing approach, as a right and as implied in the treaties, relies on the inclusivity of the people for self-policing and government "getting out of the way" to decentralize decision-making. A desired alternative to hierarchical arrangements, organizing for self-governance to determine fishing needs, area of interest, and how to harvest, are related to Mi'kmaq fishers' desire to organize for representation. Also noted by the Mi'kmaq perspective is that self-governing can have many forms and requires an opportunity for self-governance to happen.

Empowering and protecting inherent rights and Mi'kmaq way of life in treaties are fundamental to an alternative governance approach. Aboriginal rights, as inherent rights, are captured in the treaties as the treaty protects the Mi'kmaw way of life. Cheryl Maloney, treaty beneficiary, tells us, "So to me, our treaties just affirm protection of inherent rights to do what we always do." Similarly, Butchie MacDonald explains, "Inherent ...to me it's all one because without the inherent right you wouldn't have the treaty." All participants noted similar connections between inherent and treaty rights and fisheries.

From the Mixed participant group perspective, there is an understanding that Mi'kmaq see and act in the world differently, individually and collectively, and protocols based in ethics are important instruments to guide behaviour. Learning from others and having processes to integrate Mi'kmaw knowledge, values, and the importance of *Netukulimk* to Mi'kmaq fishing practices are also deemed important. Ken Paul, Neqotkuk³², Wolastoqey Nation shares the value of the First Nations approach to fisheries,

I think that what DFO now calls their precautionary approach is something that has been inherent in a First Nations value-based approach to any kind of natural resource extraction and if that was really honored, I think that we would not have as many problems with the shortages of the fish stocks.

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³² Neqotkuk is the traditional name of Tobique First Nation. It refers to currents flowing under the river which is reference to the Tobique River flowing into the Wolastoq (St. John) River.

5.3.4 Using Current Governance Processes

Shared perspectives exist among participant groups for the theoretical category of using current governance processes. The four sub-categories identified from the analysis of participants' data were: having established processes for fisheries governance; using agreements as tools; integrating western law to support fisheries and governance; and the efficient use of aggregate organizations.

All participants agreed that there are current processes that can be utilized to further fisheries governance. However, this was a more prominent opportunity identified by the Federal/Provincial Government perspective, likely due to their understanding of the current legal framework (Table 5). As such, there was indication from the Federal/Provincial perspective that current governance could be adapted to fit current challenges.

The use of agreements are tools for administering fisheries differently than commercial and recreational fishers, and the primary tool utilized control and legalize access by DFO. Agreements can incorporate flexibility and adapt to community needs, outline roles and responsibilities, and provide an opportunity to co-develop the contents from multiple parties. Brandon Maloney, current councillor and former Director of Fisheries for the Sipekne'katik Band shares an example of access based on a community developed plan,

Our food fishery is our own plan that we developed around Marshall, right after

Marshall ... about 10-15 years ago, DFO started accepting our FSC Management

plan and what they done when they accept it is, they mirrored it with a licence by

the Minister. So, they take our ... food fishery management plan and they take it and

they mirror it and they mirror it so their officers can enforce it. So, our guys are going by our licence, enforced by me and our Guardianship program and stuff now. DFO's going by their licence, that is mirrored to our management plans, so that their officers are enforcing their licence. So, they're enforcing their stuff on their side. We're enforcing ours on this side and it's up to me and DFO, sometimes, where it crosses a little bit and try to work it out.

The integration of Canadian law to support fisheries and governance is well established and provided the foundation for current efforts by federal departments. Access and governance are supported through case law outcomes and modernization of the *Fisheries Act* to support and uphold Indigenous rights in Canada and Indigenous inclusion. Chief Terry Paul comments that it is because of jurisprudence that Indigenous people have access to fish,

Very little, really. I can't even think of examples of before those decisions where we had any substantial access to it. The very little ...there was some movement, very little though, until those cases were won and there was, the access much more then and this doesn't take much to add some to none.

Numerous processes are currently used by federal, provincial government and Mi'kmaw organizations that are effective that could be utilized. From the Mi'kmaq perspective, managing fisheries at the community level is well established with potential opportunities to regulate fisheries. Processes for consultation and negotiation are in place with DFO and the community and more broadly at the aggregate level. Communication takes many

forms and is used to enhance transparency between governments, organizations, and fishers. All participants noted that using aggregate organizations enhances efficiency and creates boundaries for operating.

From the Mixed and Federal/Provincial Government perspectives, regulating fisheries is a strength of DFO with processes for adapting, decision-making, communicating, accountability and collaborating with industry, although challenges remain in changing times. *Clam* shares,

We're regulators. We do a very good job of creating rules. Promulgating them, enforcing them. We're good regulators, but, we're in an era where it takes more than regulation to, you know, run the country and to jointly arrive at a better place. I think we're into, it's not regulation we're into. We're, we're into some form of, of, of shared delivery that we're not, we're not ready for, I think.

Unique to the Mi'kmaq perspective is the recognition that regulating Mi'kmaw fisheries by the Mi'kmaq is needed, especially in light of competing interests, climate change, and ecological uncertainties that present additional challenges to fisheries sustainability.

5.3.5 Enhancing Operations

The Mi'kmaq are aware that enhancing current operations is necessary thus it was identified as a prominent theme when compared to the Mixed and Federal/Provincial Government perspectives (Table 5). One shared perspective emerged as the opportunity to support fishers with services (Table 5). From a Federal/Provincial Government perspective, providing support for fishers may be realized by supporting communities with governance structures while the Mixed participants shared that a communication

role could be fulfilled with fishers communicating the resource status of fishes. The Mi'kmaq perspective is more encompassing, and the support required is to solve some of the operational challenges currently experienced by communities. Support to sell product, secure access, provide an educational role for Mi'kmaw fishers in ecology, supporting fisher safety and training, sustaining capacity and creating stability in organization and staff were noted. Other opportunities identified in supporting fishers with services include building fishing capacity, communication, assistance with navigating the legal system, negotiating conservation measures, operationalizing fishing plans, and supports for resource management by developing management plans.

Beyond the single shared perspective of enhancing operations, other opportunities specific to each perspective also emerged. For example, for the Mi'kmaq, there is opportunity to expand the spatial scale of fishing by exploring fisheries in other areas. Furthermore, Mi'kmaw fishers are successful as commercial fishers and have demonstrated success in the industry. As commercial fishers, they are well trained and experienced in fishing in areas beyond their communities or counties. From the Mixed perspective, incorporating practicality is important. Capital investment in gear ideally should reflect the species harvested and the scale of fishing undertaken. Governance operations should also reflect an aspect of practicality and common sense.

Identified by the Mi'kmaq perspective is the need to support governance operations.

Funding is needed to support sustainable harvesting, governing capacity, research, self-

governance, and enforcement. Currently, insufficient funding exists through government programs and communities.

5.3.6 Considerations for the Development of an Alternative Governance Model

For reference, a bar graph of the theoretical codes for each of the participant groups' perspectives is illustrated in Figure 7. Based on the opportunities identified by the participant groups' perspectives, the mixed perspective emphasized the opportunity of forging a [treaty] relationship. The Federal/Provincial perspective emphasized collaborating, educating, and interacting to build relations and understanding the significance of the fisheries to the Mi'kmaq. The Mi'kmaw perspective, however, emphasized striving for solidarity, sharing as a principle, recognizing the treaty as a foundation to relationships, interacting to build relations, and understanding the significance of the fisheries to the Mi'kmaq. The Mixed perspective was similar to the Federal/Provincial perspective, especially in regard to educating the non-Mi'kmaq, but even more so than the Mi'kmaq perspective in recognizing the treaty foundation to forging relationships.

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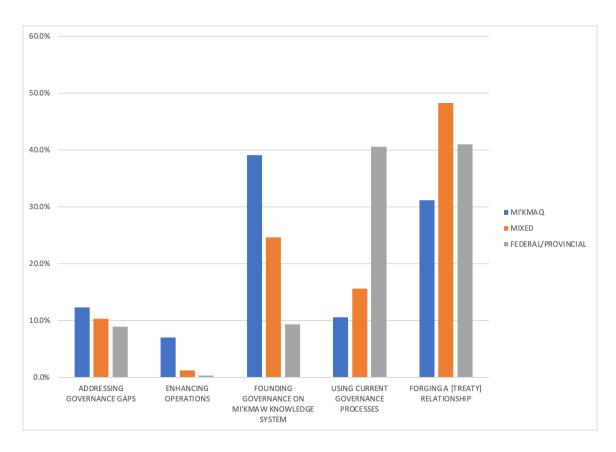


Figure 7. Summary of participants' perceptions of opportunities as theoretical codes. Values are expressed as percent.

The Mi'kmaq perspective emphasized the opportunity to found governance on their Mi'kmaw knowledge system, as did the Mixed perspective to a lesser degree. Less emphasis was placed on the category of founding governance on the Mi'kmaw knowledge system by the Federal/Provincial governing system. However, the Federal/Provincial governing system emphasized the opportunity to use current governance processes.

Similar to both the Mi'kmaq and Mixed perspectives was the opportunity to address governance gaps. From a Two-Eyed Seeing perspective, and with these four of five categories of governance opportunities identified by the participants, the governance

model could be built on a shared value of a [treaty] relationship. While differences exist as to how to forge a [treaty] relationship between participant groups, such as the desire for solidarity for the Mi'kmaw in addition to building better relations with the non-Mi'kmaw governing system and society. From the Federal/Provincial perspective, the treaty as the foundation for forging relations are prominent opportunities to build a relationship and a promising start as a key consideration for the governance model.

Differences also emerged among the theoretical categories. For example, the prominence of the Mi'kmaw knowledge system underpinning Mi'kmaw governance for the Mi'kmaw participant group perspective and the use of current governing processes for the Federal/Provincial participant group perspective. With this in mind, the nuances within the divergent opportunities must also be taken into consideration and addressed when creating the governance model.

5.4 CONCEPTUALIZING MI'KMAQ ABORIGINAL AND TREATY-BASED FISHERIES IN NOVA SCOTIA

Since the *Sparrow* and *Marshall* decisions, there has been extensive literature dedicated to Aboriginal rights and the treaty right to fish for a moderate livelihood in Canada. A plethora of literature exists on the Aboriginal and Treaty rights from historical to legal perspectives, treaty relations, fisher relations, and political considerations (Asch, 2014; Barsh, 2002; Davis & Jentoft, 2001; Henderson, 1997; King, 2011, 2014; Pictou, 2015, 2017; Prosper et al., 2011; Steigman & Pictou, 2016; Wiber & Milley, 2007; Wicken, 2018; Wildsmith, 1995). However, no studies have described what a Mi'kmaq Aboriginal and treaty-based fishery, or fisheries are. I attempt to articulate an image of Mi'kmaw

fisheries, as I understand it to be, from the Mi'kmaw participants using both interview data and desktop research.

Enhancing our understanding regarding the Mi'kmaq image of their fisheries is fundamental to a Two-Eyed Seeing approach and relevant to Interactive Governance Theory as the legitimacy of the governing system "rests in the eye of the beholder" (Kooiman, Jentoft, Bavinck, Chuenpagdee, & Sumaila, 2005, p.280). Furthermore, the articulation of the image of the fishery can be used to develop or criticize governing instruments (e.g. policy) and actions (e.g. enabling actions such as organizing to influence government or implementing actions such as management practices), thereby contributing to the development and implementation of more appropriate instruments. Images such as the 'tragedy of the commons' that portrays humans as profit-maximizing and greedy have influenced present fisheries management theory and practice; while images of sustainability are difficult to translate into instruments and actions (Kooiman et al., 2005).

Like sustainability, *Netukulimk* is a concept used to portray Mi'kmaw fisheries and is difficult to translate into instruments and action. In addition, images contain assumptions on "the role of government in modern society" (Kooiman, et al., 2005, p. 330). With this in mind, articulating an image of the Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia requires exploring the historical and current perspective. In particular, the interdependency of the Mi'kmaw way of life, as Aboriginal rights, to the Peace and Friendship treaties (1725, 1752, 1760-61) must be explored (Battiste, 2010).

Ankukamkewe'l³³ and Mi'kmaw Traditional Governance 5.4.1

Aboriginal and treaty rights have distinct, legal meanings. However, to the Mi'kmaq, they are interconnected, and as treaty rights, they are dependent on Aboriginal rights. Aboriginal rights can exist on their own, as they are exclusively held by Aboriginal people's pre-European contact (Wicken, 2018), but treaty rights do not exist independently in this context. The foundations of the treaties are based on the Mi'kmaq knowledge system and language and the "... real treaty' is the understanding of the parties" rather than solely the written text (Henderson, 2016, p.110). The treaties did more than maintain the economies of the Mi'kmaq (Wicken, 2018). Historian William Wicken (2018) explains that Mi'kmaw law was integrated into the 1726 treaty by recognizing the Mi'kmaq as an independent political entity from the British and that the Mi'kmaq "held proprietary rights over their fishing, hunting, planting and over other activities associated with their migratory economy" (p. 219).

Treaty making and treaty ratification, ankukamewe'l, through traditional districts accomplished several things that are relevant to the Mi'kmaw knowledge system and the creation of an alternative governance model for Mi'kmaw fisheries. William Wicken (2018) provided three important connections between treaties and governance. First, the treaty intended to create norms of behaviour to enable co-existence between the Mi'kmaq in Nova Scotia and the British. Second, the treaties created a new political order for coexistence in a rapidly changing landscape. To do this, the British recognized Mi'kmaq sovereignty. In other words, the British recognized the Mi'kmaq to be a political and

³³ Ankukamkewe'l means adding or making relations (Pictou, 2017).

legal entity who were governed by their own customs, independent from the authority of the British colony. Third, the treaties recognized the Mi'kmaw way of life by securing access to resources the Mi'kmaq needed to live as Mi'kmaq (Wicken 2018). In sharing knowledge for this research, *KjiKeptin* Andrew Denny of the Mi'kmaq Grand Council explains the Mi'kmaw way of life is "a gift from the Creator for us and we have to look at it that way. Take what we need...". Mi'kmaq treaty rights are about survival. *KjiKeptin* Denny shares,

So, it's very important that way we'll look at inherent rights. This is the practices that every family went through. It wasn't about... I keep mentioning the money because non-Mi'kmaw just look at commercial, about them making money. For the Mi'kmaq, when you look at inherent rights, it's about them living and surviving and just living in accordance with how they were brought up when you went out [fishing].

As such, adherence to locally developed rules were the norm. The need for guidelines were not necessary as the rules in place were there for protection and reflected their sense of place. *KjiKeptin* Denny explains,

They didn't need anybody to tell or have guidelines, you know, that's how we were brought up. That's inherent rights. How you're brought up. We come into this world and this is where we belong. When you belong in an area, you protect it. You just don't use it, use it. You learn to live with the ecosystem. Learn to help out.

KjiKeptin Denny explains that Mi'kmaq people were unhindered "unless you were doing something wrong". As such, the Mi'kmaq policed themselves as part of taking care of the

ecosystem. Interferences were made if people didn't respect Mi'kmaw teachings and values of cooperation. *KjiKeptin* Denny shares their experience,

And that's the best thing. It's not the fact that nobody overfished, if they did, there's always your neighbor or your parents that would say, take what you need. Always. That cooperation. It's for all of us, it's not just for one individual.

Cooperation as a value was reinforced in the Creation Story and as the role of the mother.

One of the values treasured by the Mi'kmaq Grand Council is the family and role of family in governance as unlike that of western government. *KjiKeptin* Denny explains,

And the Mi'kmaw worldview, the Grand Council, the Grand Chief didn't go dictate stuff like the King or the Queen would. They respected the family. The families knew what was needed for the nation. And he kept them in line. He asked for advice. He asked for strength, he asked for wisdom from all families. In the non-Mi'kmaw world, if you look at history, look at history of the kings, look at the president, 'Oh, I'm the boss', that's not the Mi'kmaw world. They have a different viewpoint of what a government is than what the Mi'kmaq is. They can't respect it because they don't see it as powerful. But Grand Council government is more powerful because it believes in its people.

Lifelong treaty harvester Butchie McDonald shares the relevance of Mi'kmaw way of life in the treaty,

So, to me the inherent right is, you know, it's part of your life and that's why it's in the treaty because it's your way of life and for my grandfather to sign a treaty, he had that knowledge, the survival skill, because it's not left out. It's there today. It's not left out.

And lastly, the treaties secured mutual benefits via a trade network for barter and sale of any goods brought to established locations (Wicken, 2018). These points are captured by Pictou (2017, p. 127) as the treaty concept being "...a livelihood that seeks to strike a balance between being able to harvest food with revenue potential but with responsibility to the community and natural resources as a whole." As Pictou (2017) and others allude, rights do not exist on their own but are embodied in the practice of living the Mi'kmaw way. As "members of a hunting and fishing society" (Wicken, 2018, p. 138), fisheries were their way of life and their right to live as Mi'kmaq. Like Aboriginal rights,

Aboriginal fisheries can exist on their own, but the Mi'kmaq understand, and assert, that they cannot have a treaty fishery without their Aboriginal fishery, as the treaty fishery was an extension of the Aboriginal fishery derived from the practice of living the Mi'kmaq way.

Mi'kmaq treaties and sovereignty, however, are independent of current elected leadership in First Nations. Imposed through the *Indian Act*, the Mi'kmaq Grand Council did not provide consent or delegate responsibility to elected Mi'kmaq First Nations leadership. Rather their power of a governing authority was also not surrendered but a new authority was created and recognized in the *Indian Act*. This dispute regarding authority and jurisdiction remains at the core of Mi'kmaq governments, despite attempts to include the Mi'kmaq Grand Council in modern forums for decision making (Denny & Fanning,

2016b). As the traditional governing body of the Mi'kmaq, the Mi'kmaq Grand Council is not recognized as a governing authority in federal law and consequently feels powerless. Despite the lack of authorization of the Mi'kmaq Grand Council, interviewed participants desire a greater connection to traditional governance approaches. The following outlines suggested ways Mi'kmaq can incorporate traditional governance approaches into an alternative governance model (Table 6).

Table 6 Participants' suggestions for incorporating Mi'kmaq traditional governance approaches. Percent of the sub-category is based on its composition within the category of Incorporating Mi'kmaq Traditional Governance Approaches.

INCORPORATING MI'KMAQ TRADITIONAL GOVERNANCE APPROACHES	10%	
Re-Instilling Cultural Roles	39%	
Incorporating Mi'kmaq Protocols	16%	
Clarifying Roles and Responsibilities of Grand Council	14%	
Preserving Ecosystem at District Level	8%	
Decentralizing Responsibilities Through District Governance	4%	
Having Governing Experience	4%	
Resolving Violations Peacefully	4%	
Including the People in Decision Making	4%	
Following Protocols	2%	
Guiding by Community	2%	
Incorporating Traditional Governance Approaches	2%	
Relating to Territory	2%	

While much of the responses focused on descriptions of re-instilling cultural roles of the Mi'kmaq such as the inclusion of elders, the role as representatives of the Mi'kmaq by the Grand Council in matters of Mi'kmaq rights, role of women as law makers and ethical teachings in the family, incorporating protocols and clarification of the roles and responsibilities of the Mi'kmaq Grand Council were also emphasized as opportunities.

Other opportunities related specifically to the spatial scale of governance and who is included in decision-making. For example, decentralizing responsibilities through district-based governance, governing at a smaller scale, relating to territory, and preserving ecosystem at the district scale were also identified as related opportunities, as was involving the community and people in decision making as part of incorporating traditional governance approaches.

5.4.2 Understanding the Significance of Fisheries to the Mi'kmaq Mi'kmaq participants articulated significance of the fisheries as a way of life, where fishing is more than the act or art of catching fish. Fishing is the means for sustaining a Mi'kmaw way of life. Butchie McDonald explains their relationship with fishing;

Harvesting, fishery, fishing means many things. It means making a living. It means feeding yourself, feeding your family, feeding your community. It means moving ahead in life. It means a way of life. Harvesting stuff [from] the waters for food or to sell.

Moreover, fishing is also identity. *Ta'pitji'j* asserts,

...inherent is different for me because it's not something that's never been written.

It's something that is a part of who I am. It's a part of the culture that I've been born into.

Fishing can provide for one's community but is also a source of identity of Mi'kmaq people as a whole. Understandably, fishing is viewed as a way to improve one's quality of life where people earn a living to support themselves and their families. Beyond the economic gain and social understanding of fishing to Mi'kmaw identity, fishing as an activity, connects people to nature, is enjoyed, and is viewed as a way to heal.

5.4.3 *Netukulimk*: The Mi'kmaw Way of Life

Central to survival and living in accordance with Mi'kmaq *putuswaqn*, or teachings, is *Netukulimk*. Many words and phrases are used to describe the concept; take what you need (Barsh, 2002), restoring respect for responsibility, spiritual connectedness, and accountability (Prosper et al., 2011), and the connection of fish stock to the economic, political, and spiritual wellbeing (King, 2011). Given the significance of *Netukulimk* to the Mi'kmaq way of life, it is not surprising that participants centered their discussion around *Netukulimk* when explaining the significance of their fisheries. The following (Table 7) outlines the components of *Netukulimk* taken from the theoretical category of Founding Governance on Mi'kmaw Knowledge System.

Table 7 Breakdown of sub-category into focus codes. Percent of the sub-category is based on its composition within the category of Incorporating *Netululimk*.

INCORPORATING NETUKULIMK	12%
Considering Ecosystems Needs	40%
Abiding by Concept of Netukulimk	11%
Limiting Self	8%
Minimizing Impact to Ecosystem	6%
Taking Less Fish Than Other Fisheries	6%
Leaving Area to Replenish	5%
Minimizing Waste	5%
Selecting Which Fish to Keep	5%
Having Own Conservation Rules	3%
Preserving Females in Population	3%
Preventing Waste	3%
Harvesting Available Species	2%
Taking Male Salmon	2%
Taking What is Offered	2%

Respecting the guiding principle of *Netukulimk*, experienced livelihood fishers fish and sell at a small scale. Interviewed Mi'kmaw fishers shared that they were using smaller boats ladened with 30 to 40 traps and oftentimes less. Fishers keep some lobster and sold some while respecting the reproductive cycle of the species harvested and including many of the conservation measures in the commercial lobster fishery. Butchie McDonald shares,

You want to be conservative. Don't bring in the smaller lobsters. Don't bring in the lobsters that have eggs, or any species that are spawning, right.

While *Marshall* (1999) specifies that the right to fish for a moderate livelihood does not mean the accumulation of wealth, Mi'kmaq concept of wealth is based on their ability to support themselves and their families. Michael Stephens shares his perspective,

Wealth, to L'nu people, is, you know what I mean, is the ability to take care of your network, your circle, and it says we can't accumulate wealth with...

In addition to the treaty concept and beliefs and values supporting co-existence with the settler society, other components to *Netukulimk* were identified by participants when fishing. Highly emphasized was considering ecosystem needs prior to and when fishing. Furthermore, fishers identified having their own conservation rules. This results in a spectrum of conservation measures that may be at times contradictory. For example, leaving an area to replenish and preserving females in fish populations by taking male salmon, yet taking what is offered when fish is needed or based on availability of fish, or selecting which fish to keep may contradict current federal conservation measures. This may be perceived as a lack of consistency among fishing practices that may be viewed as

questionable by other perspectives and society at large who normally follow prescribed rules for conservation. Furthermore, *Netukulimk* is conservative in its approaches to fishing and involves taking less fish than commercial fisheries, prevents waste, and minimizes impact to the ecosystem.

In addition to being guided by *Netukulimk*, fishers incorporate other traditional practices. Mi'kmaw traditional fishing practices and the purpose of fishing varies. Table 8 outlines examples of fishing practices.

Table 8 Examples of Mi'kmaw traditional practices when fishing. Percent of the subcategory is based on its composition within the category of Incorporating Mi'kmaw Traditional Practices.

INCORPORATING MI'KMAW TRADITIONAL PRACTICES	6%
Bartering Fish	10%
Fishing is Place Based	10%
Recovering Expenses When Sharing Fish	10%
Fishing Freely	7%
Fishing When Needing Fish	7%
Involving Families in Fishing	7%
Recognizing Individuality in Fishing	7%
Combining Aboriginal and Livelihood	3%
Controlling Effort by Mother Nature	3%
Eating Fish	3%
Fishing At Night	3%
Fishing Beyond District Boundaries	3%
Fishing Done by The Skilled	3%
Fishing Locally	3%
Fishing Moderately	3%
Fishing Using Traditional Methods	3%
Recognizing People Have Different Needs	3%
Selling Fish Small Scale	3%
Using Traditional Fishing Methods	3%

Among the examples underpinning fishing practices are fishing for food when one needs fish, fishing at night, fishing moderately, or the ability to fish freely, and the ability for economic gain. Bartering or recovering expenses when sharing fish and selling at a small scale are current ways Mi'kmaw fishers benefit. Fishing is described as place-based, locally, or beyond district boundaries, thus there is the recognition that fishes are shared between and among the Mi'kmaq. Fishing is done by the skilled but involves families as a way to share revenue and pass along practices. There is an understanding that people have different needs and individuality in fishing, including the use of traditional methods. Furthermore, fishing effort is viewed as controlled by Mother Earth. Fishing is weather dependent as well as seasonal, thus fishing the same species throughout the year may not be possible.

5.4.4 Mi'kmaw Values

Specific to fishing and traditional governance, several other Mi'kmaw values were identified in addition to those discussed in Chapter Two. Several of the identified focus codes are related, such as valuing relationship, negotiating survival, and incorporating spirituality where the relationship to people, Mother Earth, and the Creator are recognized (Table 9).

Table 9 Mi'kmaw values identified by participants. Percent of the sub-category is based on its composition within the category of Incorporating Mi'kmaw Values.

INCORPORATING MI'KMAW VALUES	13%
Leading by Integrity	22%
Valuing Relationships	22%
Negotiating Survival with Mother Earth	13%

INCORPORATING MI'KMAW VALUES	13%
Abiding by Mi'kmaw Ethics	12%
Incorporating Mi'kmaw Spirituality	12%
Balancing Sustainability with Needs	4%
Instilling Collective Consciousness	4%
Being Responsible	3%
Aligning Values within Aquaculture	1%
Guided By Trust	1%
Instilling Mi'kmaq Values When Fishing	1%
Using Mi'kmaw Language	1%

The sub-category of leading by integrity signifies the desire for leaders to adhere to moral principles or for leaders themselves to already identified moral principles. Equally emphasized was the valuing of relationships, inclusive of humans and the natural and spiritual worlds. Participants reflect that survival is about negotiating one's needs in relation to what is available without compromising survival of others. Similarly, abiding by Mi'kmaw ethics and incorporating Mi'kmaw spirituality were emphasized. Using the relationship of fishing and the values associated with the Mi'kmaw fishing and traditional governing practices, I can begin to articulate an image of the Mi'kmaw fisheries.

5.4.5 Image of the Mi'kmaw Fisheries

The understanding described in the previous section imparts an image of the Mi'kmaq fisheries one that supports the individual's and collective's physical, spiritual, cultural, and economic needs yet is self-governed, ethical, shared, responsible, conservative, respectful, and intermittent. This image of Mi'kmaw fisheries is one that is reflective of a needs-based fishery with the ability to move among Mi'kmaq districts.

Contributing to food, income, and sustainability through stewardship practices, small scale fisheries are different from the industrial fisheries model characterized by a vertical integration of pre- and post-harvest activities and environmental impacts such as bycatch, discards and use of technology in fishing (Chuenpagdee & Jentoft, 2015). Furthermore, the use of traditional teachings and spirituality to guide fishing is vastly different from the 'tragedy of the commons' image influencing present day fisheries management where exclusion, command and control dominates (Kooiman et al.,, 2005).

5.5 Understanding the Challenges as Directives for Governability Assessments

While there are specific challenges based on the context, such as fearing loss of Mi'kmaq identity and governance gaps unique to the Mi'kmaq, three of the five governance challenges identified in section 4.3 are identical to governability challenges arising from small scale fisheries where social justice is predominately a key concern (Jentoft, 2013). Tensions and conflicts between user groups, marginalization, and legitimacy issues, in which all are assumed to contribute, reduce governability in small scale fisheries (Jentoft, 2013). Norms and principles, also at odds between privileged majority and rights-based fishers, are indicative of divergence in the norms and principles as meta-governance. The lack of interactions is an expression of issues or deficits in which the opportunities for problem solving are non-existent or ill-aligned to function within the institutions of fisheries governance.

In such cases, Jentoft (2013) provides guidance on assessing governability. Close attention must be given to the operationalizing of governance. For example, the

performance of the orders is required as an analysis of the governing modes and interactions (Jentoft & Chuenpagdee, 2015). Thus, the analysis requires an examination of "the effectiveness and legitimacy of the governing system as it executes and implements its principles and functions" (Jentoft & Chuenpadgee, 2015, p. 28). The next two chapters provides the governability assessment of the Mi'kmaq Aboriginal right to fish for Atlantic salmon, *plamu*, in Chapter Six and followed by the governability assessment of the Mi'kmaq treaty right to fish for American lobster, *jakej*.

CHAPTER 6 RE-AWAKENING THE MI'KMAQ SPIRIT OF RESPONSIBILTIY: A CASE STUDY ASSESSING THE GOVERNABILITY OF MI'KMAQ ATLANTIC SALMON, *PLAMU*, FISHERY

So, that kind of, not just a philosophy, but that kind of a tool in which I believe we can employ of helping our youths in which they will be able to re-awaken the spirit that's been dormant and that spirit, of course, is responsibility.

-Elder Albert Marshall, Eskasoni First Nation

6.1 CASE STUDY OVERVIEW

In the Mi'kmaw Creation Story, salmon was central to Mi'kmaq society. The role of salmon was to provide nourishment and in doing so, enabled the Mi'kmaq to maintain the balance of terrestrial life for food, and was thus recognized and celebrated for its contribution to the survival of the Mi'kmaq.

Kluskap was so glad for his nephew's arrival to the Mi'kmaq world, he called upon the salmon of the rivers and seas to come to shore and give up their lives. The reason for this is that Kluskap, Netawansum and Nukumi did not want to kill all the animals for their survival, so in celebration of his nephew's arrival, they all had a feast of fish. They all gave thanks for their existence. They continued to rely on their brothers and sisters of the woods and waters, and on each other, for their survival³⁴.

209

³⁴ Mi'kmaw Spirit. (2016). Mi'kmaw Creation Story. Retrieved from http://www.muiniskw.org/pgCulture3a.htm

Salmon, *plamu* in the Mi'kmaw language, is one of the many culturally significant species currently providing nourishment for individuals and communities and is central to Mi'kmaq spirituality and identity. With the arrival of the Europeans in the early 1600's and subsequent settlement that affected the natural landscape of eastern Canada, colonization resulted in many changes. These included changes to the legal and political structure of the Mi'kmaq and their territory that continue to impact Mi'kmaq governance today, including changes to the rules governing salmon.

Until the recognition of Aboriginal rights in 1990 (*R. v. Sparrow*, 1990) and despite the recognition and validity of Mi'kmaq treaties with the Crown in 1985 (*R. v. Simon*, 1985), the Mi'kmaq were excluded from legally participating in the salmon fisheries unless they were provincial licence holders. Today, the Mi'kmaq continue to struggle to find the appropriate space as governors of their Aboriginal right to fish for species needed, such as salmon. While the *Sparrow* decision (1990) recognized the right of the Musqueam to fish for food, social and ceremonial purposes, governments implemented the *Sparrow* decision by broadly applying the rights to fish for food, social, and ceremonial needs without a space, or spaces, for exclusive governance of Atlantic salmon by the Mi'kmaq. As a result, there were no opportunities to voice concerns regarding how the recreational salmon fishery impacted the availability of Atlantic salmon for Mi'kmaw FSC fisheries.

While Canada recognizes Aboriginal rights, as indicated by the Constitutional protection of Aboriginal and Treaty rights (*Constitution Act*, 1982, s. 35), impacts of colonization create challenges for the Mi'kmaq regarding legitimacy and perceptions of authority to

govern their own fisheries. Confounding the issue is the continued declining populations of Atlantic salmon through overharvest, climate change, and habitat alterations (NASCO, 2019a). Mi'kmaq and federal and provincial governing authorities share concern for conservation for Atlantic salmon, however, different perspectives on how to achieve conservation stemming from different values and beliefs are evident (Denny & Fanning, 2016a). In contrast to Denny and Fanning (2016a) who focused on the different perspectives underpinning salmon management and potential paths forward for governance, this case study explores the current governability of Atlantic salmon in Nova Scotia.

As discussed in Chapter Five, the image of the Mi'kmaq fishery was found to conflict with current fisheries management suggesting a poor institutional fit between the systems-to-be-governed and the governing system. Furthermore, the majority of the challenges experienced in the salmon fishery are indicative of social justice challenges (Chapter Five), indicating low governability. As noted by Jentoft & Chuenpagdee (2015), the intent of a governability assessment is to "understand how the various structural features and processes of the governing system, the system-to-be-governed and their interactions affect governability" (p. 26). This case study assesses the governability of Atlantic salmon fisheries in Nova Scotia in an effort to understand how the current governing system works and provide insight into why it does not.

Using the governability assessment framework to examine the Atlantic salmon fishery in Nova Scotia, I will accomplish four tasks:

- (1) explore the features of the systems-to-be-governed for the Atlantic salmon (natural) and Atlantic salmon fisheries (social);
- (2) recommend appropriate mode(s) of governance using the findings from the features of the system-to-be-governed, based on Interactive Governance Theory;
- (3) assess the performance of the existing governing modes in response to the demands of the system-to-be-governed in the context of the *Sparrow* decision and implementation of the FSC fishery to identify limits of each governing mode; and lastly,
- (4) assess the current level and quality of first order governing interactions for Atlantic salmon fisheries.

Where applicable, challenges related to the themes discussed in Chapter Five - disputing legitimacy of the governing system, marginalizing Mi'kmaw fishers, conflicting relations, losing Mi'kmaq identity, identifying governance gaps, and operation of the governing system - will be highlighted. The following sections explores the system-to-begoverned of Atlantic salmon based on desktop literature review and the key themes identified in the analysis of the interviews (Chapter 5).

6.2 EXPLORING THE FEATURES OF THE SYSTEMS-TO-GOVERNED

Understanding the Atlantic salmon fisheries as the systems-to-be governed requires familiarity of its two subsystems (natural and socio-economic) separately, as well as the relationships and interactions between them. The natural system refers to the marine physical environment, ecosystems, and other external influences such as climate change that may alter the natural system. In contrast, the social system-to-be-governed is comprised of direct and indirect resource users, the social relations between and within

them, and the interactions that occur among them (Jentoft & Chuenpagdee, 2013). The following sections examine the features of diversity, complexity, dynamics and vulnerability of the natural and social systems-to-be-governed as recommended by Chuenpadgee and Jentoft (2013). An examination of these characteristics is then used to determine the most appropriate mode of governance for the Atlantic salmon fishery in section 6.2.3.

6.2.1 The Natural System-to-be-Governed

Atlantic salmon, *plamu*, *Salmo salar*, is known for its large body size, taste, and predictable returns to their natal streams each fall to spawn. Among the Atlantic Canadian fish species, Atlantic salmon has one of the most complex life histories, migration patterns, and associated terminology. Within Nova Scotia, there are few remaining salmon populations available to support recreational and Indigenous food fisheries (NASCO, 2019b).

6.2.1.1 Diversity

Atlantic salmon are cold water diadromous species that exhibit high genetic diversity.

Five large groups of Atlantic Salmon in Atlantic Canada, referred to as Designatable

Units (DUs), are identified by the Committee on the Status of Endangered Wildlife in

Canada (COSEWIC) (Figure 8). Designable units recognize discreteness based on

genetic evidence, natural disjunction, and/or occupying differing eco-geographic regions

(COSEWIC, 2017). In Nova Scotia, the four relevant DUs and their corresponding

management areas are: Eastern Cape Breton (ECB), Nova Scotia Southern Upland (SU),

Inner Bay of Fundy (IBoF) (DFO, 2018b) and Gaspé-Southern Gulf of St. Lawrence (the

entire southern Gulf of St. Lawrence (and PEI) (COSEWIC, 2010) (Figure 8). Current evidence suggests a high degree of genetic diversity among regions but genetic diversity can also be found within DUs such as DU13 (Eastern Cape Breton) (COSEWIC, 2010).

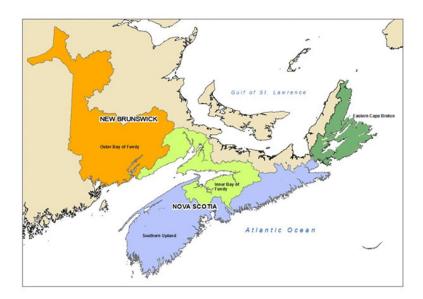


Figure 8 Atlantic Salmon populations in the Maritimes Region based on designatable units (DU): Outer Bay of Fundy DU 16 (orange); Inner Bay of Fundy DU 15 (light green); Southern Upland DU 14 (blue), Eastern Cape Breton DU 13 (dark green). The Gaspé- Southern Gulf of St. Lawrence DU 12 encompasses the entire southern Gulf of St. Lawrence and PEI, and parts of Quebec (COSEWIC, 2010). Map Source: http://www.dfo-mpo.gc.ca/species-especes/profiles-profiles/salmon-atl-saumon-eng.html

Atlantic salmon also exhibit high diversity in distribution. Both freshwater and marine phases are critical to Atlantic salmon reproduction and growth. As such, juvenile salmon are present in many of the rivers and streams in northeastern North America and northeastern Europe. As maturing adults and post-spawning stages, Atlantic salmon are oceanic and feed in areas off Canada, Europe and Greenland (Figure 9). Consequently,

Atlantic salmon are part of mixed stocked fisheries in the Labrador Sea between Canada and Greenland where they aggregate for feeding.

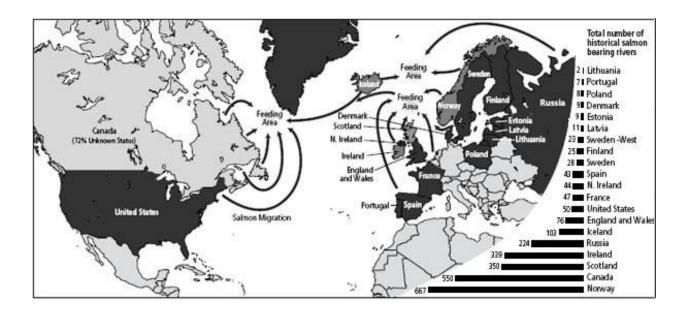


Figure 9 Range and distribution of Atlantic salmon in the North Atlantic Ocean (Source: COSEWIC, 2010)

6.2.1.2 Complexity

Atlantic salmon are diadromous species with a complex life history (Figure 10). Life history is divided into freshwater and marine phases. Spawning is localized in river systems with juveniles remaining for several years before transitions to the marine phase of their life history.

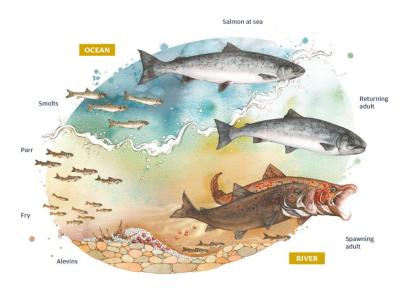


Figure 10 Salmon life cycle (NASCO, 2019a).

Water temperature and photoperiod are identified as key drivers for successful rearing, spawning, and reproduction (Scott & Scott, 1988). Salmon begin their life as alevins that emerge from gravel spawning beds known as redds. Juvenile salmon spend their first year as fry (young of the year) and then as parr for the next 1 to 2 years. Both the fry and parr actively feed on aquatic insects. In addition to the availability of food, specific freshwater habitats are critical to this component of the freshwater phase. Temperature and rearing habitats influence survival of salmon eggs and juveniles. Overall, optimal salmon rivers are cool (lethal at temperatures of 27.8 and higher) and are characterized by habitats comprised of resting areas (pools), fast flowing shallow areas (riffles) and other substrates such as boulders, rubble, cobble, and gravel that provide food and shelter (Gibson, 2017; Scott & Scott, 1988).

In spring (May and June), juvenile salmon leave the rivers as smolt (2 to 4 years old). At the final stage of their freshwater rearing phase, they are between 12 to 15 cm in length and become physiologically ready for their life in the marine environment (McCormick, Hansen, Quinn, & Saunders, 1998; Scott & Scott, 1988). However, Atlantic salmon populations do not share identical migratory patterns. It is noted that not all salmon populations in Nova Scotia endure long, oceanic migrations. Some salmon and salmon populations stay more locally within Canadian waters during their at-sea migration and return as grilse, as is the case of Inner Bay of Fundy salmon (Lacroix, 2013) and the Atlantic coast of Cape Breton (COSEWIC, 2010). At sea, they grow rapidly, feeding on large crustaceans, pelagic fish and squid and can remain in the marine environment for one (as grilse) to two years (as multi-sea winter salmon) before returning to the rivers to spawn (Hansen & Quinn, 1998; Scott & Scott, 1988).

Unlike many Pacific salmon species, Atlantic salmon may spawn more than once in their lifetime and demonstrate different spawning patterns and post-spawning behavior that add to the complexity of their life history. Spawning may be alternate (every other year) or consecutive (every year), or a combination of both. Post-spawning adults (kelts) leave the river immediately after spawning while other salmon individuals overwinter and leave the river the following spring (Scott & Scott, 1988).

6.2.1.3 Dynamics

Atlantic salmon exhibit a high degree of homing to natal rivers. Undoubtedly, river habitats are dynamic; climate change adds to already dynamic hydrology with direct impact to freshwater fishes (Poesch, Chavarie, Chu, Pandit, & Tonn, 2016). Predicted

increases in air (2 to 11 °C by 2070) and thus water temperatures along with changes in patterns of precipitation will potentially have consequences to freshwater habitats. For example, increased evaporation of freshwater due to higher summer temperatures can lead to higher water temperatures and low river flow and volume (Poesch et al., 2016). In such instances, salmon would seek out suitable habitat that can result in intraspecific and interspecific competition for space and food. Aggregations of salmon in pools can also increase the probability of predation. Changes in river flow are noted due to increased winter discharges, earlier spring melts, and increased or decreased precipitation events impacting groundwater availability (Poesch et al., 2016). Anticipated impacts are changes to the timing of spawning runs and out migrations of Atlantic salmon smolt and shifts from cold water fish assemblages to cooler and warmer water fish assemblages (Poesch et al., 2016).

Provincial stocking of several rivers occurs (Baddeck River, Middle River and Margaree River as examples) to enhance the recreational salmon fishery and compensate for impacts from catch and release fisheries (morbidity and mortality) using progeny from river specific broodstock. However, introductions of aquaculture reared juveniles results in a loss of genetic diversity among populations (Ayllon, Martinez, & Garcia-Vazquez, 2006; Perrier, Guyomard, Bagliniere, Nikolic, & Evanno, 2013) and reduced fitness, leading to compromised reproductive success (Milot, Perrier, Papillon, Dodson, & Bernatchez, 2013).

6.2.1.4 Vulnerability

Despite closures of Canadian ocean-based commercial fishing for Atlantic salmon in 1984 and a moratorium on all commercial salmon fisheries in eastern Canada by 2000 (DFO, 2019a), it remains highly vulnerable as a species and as distinct genetic populations. Current sources of vulnerability are due to natural predation, interspecific competition for space and food, and anthropogenic impacts. Predators are numerous in both the freshwater and marine phases. As juvenile fish during the freshwater phase, salmon are available as prey for birds (mergansers and kingfishers), eels (Scott & Scott, 1988) and other salmonids (Henderson & Letcher, 2003). More recently, striped bass (Morone saxatilis) is identified as a potential predator to smolts transitioning to the marine environment due to spatial and temporal overlap and recent population increase (Daniels, Chaput, & Carr, 2018; Grout, 2006). Common natural predators identified during the marine stage are seals, larger fish such as sharks, pollock and tuna, and sea birds. Predators identified just prior to spawning in freshwater habitat include bald eagles and osprey. Other factors may contribute to the survival of Atlantic salmon. Competition between other salmonids such as introduced species like Brown trout (Salmo trutta) and Rainbow trout (Salmo gairdneri) for space and food, may potentially alter the behaviour of salmon in river habitats (Armstrong, Kemp, Kennedy, Ladle, & Milner, 2003; Scott & Scott, 1988; Van Zwol, Neff, & Wilson, 2012). Both trout species are more tolerant to warmer water temperatures than Atlantic salmon (Poesch et al., 2016; Scott & Scott, 1988). Tolerance to variations in temperature vary among the freshwater stages. For example, salmon eggs exhibit lower tolerance for increasing water temperatures than fry and parr phases and are more vulnerable to increases in temperature (Elliott & Elliott, 2010)

Anthropogenic influences that delay or interfere with successful spawning thus impacting reproductive success include Indigenous harvests, catch and release fisheries, and stream obstructions, or those which directly impact migration behaviour such as pollution, fish farming, sea lice, and hydropower developments that prevent freshwater migration (Ford & Myers, 2008; Gibson, 2017; Thorstad, Økland, Aarestrup, & Heggberget, 2008). Continued ocean-based fishing of aggregations of different genetic populations of salmon, i.e. mixed stocks, also reduce the number of salmon available to spawn in North America. For example, salmon fisheries taking place off West Greenland are of mixed origin with a high percentage of salmon originating from Canada (Bradbury et al., 2016). Other considerations that can impact food availability and thus vulnerability include declining water quality from anthropogenic sources such as land development, forestry and pollution (Gibson, 2017). Additionally, the proximity of salmon aquaculture was found to reduce survival of wild Atlantic salmon (Ford & Myers, 2008). Competition and interbreeding with wild salmon, increases in disease transmission and parasites and predation to the area were noted (Gibson, 2017).

Because of the observed vulnerability of Atlantic salmon populations, they are considered a 'species at risk'. Two of the four DUs in Nova Scotia were assessed by COSEWIC as endangered. The IBoF DU is currently protected under the *Species at Risk Act* (DFO, 2018b, 2019a). Inner Bay of Fundy rivers are part of a live gene bank program to maintain the genetic composition of IBoF salmon and assist in their recovery (DFO, 2010).

The Gaspé- Southern Gulf of St. Lawrence DU is assessed as 'special concern'.

Vulnerability of salmon populations is high as there is no likelihood of rescue from vagrant individuals as neighbouring regions are genetically dissimilar (COSEWIC, 2010). Salmon population in the southern portions of Nova Scotia are severely depleted with little evidence of improvements in salmon abundance despite fishery closures (COSEWIC, 2010). In the State of the North Atlantic Salmon Report by the North Atlantic Salmon Conservation Organization (NASCO) (Dec 2019), less than five rivers in Nova Scotia are identified as 'currently sustainable'; the majority of rivers in Nova Scotia no longer have salmon, are currently at risk, or do not have data.

6.2.1.5 Summary of the Features of the Natural System-to-be-Governed Based on the above review of the features of the natural system-to-be-governed, Atlantic salmon exhibit high diversity, complexity, dynamics, and, importantly, vulnerability as a species at risk. With the large range of Atlantic salmon, multiple life history phases and specific local freshwater habitat requirements needed for salmon to complete its lifecycle, coupled with only five rivers identified as currently sustainable, it is evident that the natural system-to-be-governed presents extraordinary challenges to the governing system. The following section will examine the features of the social systems-to-be governed.

6.2.2 The Social Systems-to-be Governed

It is evident from the previous section that viewing salmon exclusively as the natural system is challenging without mentioning impacts to humans and vice versa. Atlantic salmon, or lack thereof, have consequences for the social system-to-be-governed and vice

versa. Presently, Mi'kmaq individuals are the only ones who can legally retain Atlantic salmon in Nova Scotia (Denny & Fanning, 2016a; DFO, 2019b).

In the following section, I will focus on the features of the social systems-to-be-governed using Two-Eyed Seeing to discern Western and Mi'kmaq contexts. In particular, I explored the features of diversity, complexity, dynamics and vulnerability of the non-Mi'kmaw recreational fishery and the Mi'kmaw retention fishery.

6.2.2.1 Diversity

Like the high diversity evident in the natural system-to-be-governed, high diversity exists in the social systems-to-be governed. Diversity is evident as the number of fisher organizations and their ability to organize in the Mi'kmaw and non-Mi'kmaw salmon fisheries and expansion and competition among stakeholders. In 2018, 2,012 salmon licences were sold in Nova Scotia to individuals within and outside the province, including international recreational fishers (DFO, 2019b).

6.2.2.1.1 Number and Fisher Organizational Ability

The salmon sportfishing industry is well organized in Nova Scotia and Atlantic Canada. The organization of the industry into associations facilitates interactions with governments provincially, nationally, and internationally. For example, the Nova Scotia Salmon Association (NSSA) is comprised of 25 Nova Scotia angling associations and is a member of the Atlantic Salmon Federation as one of their regional councils (Nova Scotia Salmon Association, 2019). Mi'kmaq membership in sportfishing associations is absent although there are Mi'kmaq participation at the board of director level. Recreational

fishing organizations are often organized geographically based on municipalities or interest.

In contrast to the salmon sportfishing industry, Mi'kmaq salmon fishers are not organized as salmon fishers or as fishers within their communities. Canada's amalgamation of numerous policies into the *Indian Act* (1876) and subsequent division of the Mi'kmaq nation into 29 communities in Atlantic Canada, Quebec, and northern Maine (Paul, n.d.) created pockets of autonomous Mi'kmaq communities each with a governing body of elected chief and councils. As a result, thirteen autonomous Mi'kmaq communities and one off-reserve organization (Native Council of Nova Scotia) are situated within Nova Scotia. While all Mi'kmaq have the right to fish salmon for FSC needs, Mi'kmaq salmon fishers estimate that only a small proportion of the Mi'kmaq population are actively harvesting Atlantic salmon though the actual amount or estimate is unknown.

In Nova Scotia, one community continually rejects AFS agreements, licences, and associated funding. Federal (DFO) funding is not provided to communities who do not accept AFS agreements for 'managing' FSC fisheries. For salmon governance, Mi'kmaw salmon fishers are represented through their communities at the level of the Assembly of Nova Scotia Mi'kmaw Chiefs (ANSMC). Here, and supported through AAROM organizations, allocations, season, fishing methods, and justification are discussed annually through formal consultation. This process, which began in 2012, currently replaces DFO negotiation with individual communities on the topic of salmon for nine of

thirteen Mi'kmaq communities who agree to have the ANSMC & KMKNO consult on their behalf with DFO regarding salmon allocations in Cape Breton.

6.2.2.1.2 Expanding and Competing Stakeholders

As with non-Mi'kmaw interests in aquaculture, First Nations are among current finfish and shellfish aquaculture lease holders, especially in the Bras d'Or Lakes, Cape Breton Island. Aquaculture activities are found throughout Nova Scotia waters. Based on Nova Scotia Fisheries and Aquaculture Site Mapping Tool³⁵, 23 marine finfish licences are issued throughout the majority of Nova Scotia, with the exception of northeastern Cape Breton to the Gulf of St. Lawrence. Land-based licences are issued throughout Nova Scotia (Figure 11). Atlantic salmon and rainbow trout are currently the dominant commercial species in Nova Scotia with biophysical conditions suitable for the expansion particularly in the Fundy-Yarmouth and South Shore regions (Stantec, 2009). One land-based recirculation fish farming facility is in operation (Sustainable Blue, 2019). Other companies are currently exploring opportunities to tap into pristine Nova Scotia waters (CBC News, 2019). The aquaculture industry is also well represented through the Aquaculture Association of Nova Scotia (AANS) and include First Nation participation.

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³⁵ Nova Scotia Fisheries and Aquaculture. Aquaculture Site Mapping Tool. See https://novascotia.ca/fish/aquaculture/site-mapping-tool/.

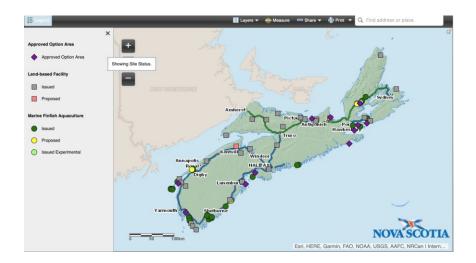


Figure 11 Location of marine aquaculture as in green. Land-based facilities (grey squares) are for salmonids and non-salmonids, such as Arctic char, American lobster, striped bass, American eel, Atlantic cod, halibut, and shellfish. Source: Nova Scotia Fisheries and Aquaculture. Aquaculture Site Mapping Tool (https://novascotia.ca/fish/aquaculture/site-mapping-tool/).

Other stakeholders include fishing guides. The guiding association also relies on the recreational fishery. However, licenced guides are not required for non-residents or residents to fish in Nova Scotia (Nova Scotia Fisheries & Aquaculture, 2019b). Licensed guides are organized through the Nova Scotia Guides Association (Nova Scotia Guides Association, 2018). Presently, and as of late 2020, content on Mi'kmaq history and Aboriginal and treaty rights is provided to guides in their annual training program.

6.2.2.2 Complexity

Legal pluralism is driving complexity within the social system-to-be-governed.

Following the *Sparrow* (1990) decision, Musqueam have the affirmed legal right to fish for FSC needs with priority of access over other fisheries, in this case, the recreational fishery in their territory. As a matter of policy, DFO applies the findings of this case to others like the Mi'kmaq. Contributing to the feature of complexity within the social-

systems-to-be-governed are differences in values underpinning each type of salmon fishery and the rules that apply to these fisheries.

To the recreational fishers, salmon is highly valued for several reasons. Salmon fishing unites people and also creates a sense of identity derived from shared practice in shared places (Booth, 2019). Fisher motivations for recreational fishery ranges from opportunities to catch the prized fish to the enjoyment of nature (Nguyen, Rudd, Hinch, & Cooke, 2013). It is also likely that salmon for food was also another motivation as the sale of salmon licences decreased in Nova Scotia following the implementation of a catch and release fishery in 2015 (Denny & Fanning, 2016a). Interestingly, the Nova Scotia Salmon Association, an organization supporting fisher responsibility to conserve and preserve salmon and promote habitat restoration, comments on the value of salmon to First Nations and "...rally the actions of passionate anglers and conservationists to maximize the likelihood of survival and sustainability of our fish, rivers and recreation" (Nova Scotia Salmon Association, 2019). While the value of Atlantic salmon to the recreational fishery was not explicitly stated by recreational fishers, it is evident that recreational fisher connection to salmon is ruled by strong emotions linked to conservation and perseverance of local salmon populations.

For the Mi'kmaq, connecting the past with present and maintaining traditional practices are values attributed to salmon fishing. For the Mi'kmaq, *plamue'kemkewey*, salmon fishing, is part of Mi'kmaq identity. With identity and ability to fish come the responsibility to provide for others and to adhere to Mi'kmaq values that are expressed

through *Netukulimk* (Denny & Fanning, 2016a; Giles et al., 2016). Fishing is also one way of demonstrating how the Mi'kmaq culture is practiced, transmitted, adapted, and sustained (Giles et al., 2016). Dan Paul explains,

If I can afford to hit the river, to bring home 3 or 4 salmon, they'll get cut up, chunked up and given away. I'm the last one who eats cos there's too many elders here, asking for it, and too few fishers going out there... So, this is the reason why I'm out there doing what I do so that if people, if one person sees what I'm doing, and wants to learn, well, I'll teach what I know because somebody took the time to do this with me. My grandfather taught me about fishing and hunting. And there were others came around later in life that I have to look up and say, thank you very much. By the same token, it's our responsibility as L'nu to look after each other.

Based on the quote above, as an opportunity to maintain traditions and practices, it is also linked to social obligations of communal provisions. Having the ability to provide for others is a respected Mi'kmaq value that drives Mi'kmaq to fish. Anoogwa Pictou, a traditional harvester explains,

What drives me to fish for salmon? In all honesty, it's my grandmother. She like is so in love with the taste of salmon that she won't eat any other fish, so if you could provide for my own grandmother and other people who...just like elders in general...people who can't get out and do their own fishing or whatever, you can provide for your own community. That would be the greatest push. You can actually provide for people who can't provide for themselves.

Rules are not identical between non-Mi'kmaw and Mi'kmaw salmon fishers. While there are river specific management for salmon fishing, fishing methods and retention rules permitted for the non-Mi'kmaw recreational fishery do not vary. In contrast, practices for Mi'kmaw fishers vary among communities and differs from current recreational fisheries management and practices. Misunderstanding between Mi'kmaq and the recreational industry on how Mi'kmaq can fish, what salmon they can keep, and ultimately what rules they follow are evident. Often, fishing authorities themselves lack understanding of Mi'kmaq rights and fishing practices that are guided by Mi'kmaq concept of *Netukulimk*, and even more broadly through agreements between communities and the federal government.

Complexity increases when each community who chooses to enter into federal agreements results in a community-specific agreement stipulating access, location, seasons and methods in the licence conditions. In other words, negotiated communal licences agreements result in different rules within the Mi'kmaw salmon fishery. For example, members from one First Nation community may have different stipulations for salmon fishing such as fishing locations, timing, allocation, and fishing methods than other communities. Furthermore, collaborative efforts between DFO and nine of the thirteen Mi'kmaq First Nations to address this issue, such as the development of a conservation harvest plan (CHP), are not inclusive of all Mi'kmaq First Nations, resulting in different rules for communities indicated in the CHP. Additional challenges include a lack of transparency of licence conditions due to confidentiality of the agreements and lack of sharing of information among Mi'kmaq First Nations.

The dichotomy in the salmon fishery is portrayed as an 'us' and 'them' situation. While Mi'kmaq have been active participants in the salmon fishing under the affirmed rights to access for FSC needs, there is still a lack of understanding of Aboriginal rights and Mi'kmaw context in general. Mi'kmaq membership in sportfishing association is notably absent but relations are said to improving slowly since Mi'kmaq re-entry into salmon fishing following the *Sparrow* decision (1990). Streamside relations are said to be improving, however, many non-Mi'kmaw anglers lack understanding of Mi'kmaq fishing practices and the law that protects the Mi'kmaq, as do enforcement authorities. Anoogwa Pictou, a traditional harvester, recounts,

...some DFO and DNR won't know the treaty rights. The example would be coming to snaring salmon. Some DFO and DNR don't know. They're like, people actually snare salmon? They believe it's poaching during the fall time for salmon in Barney's River. One time I went there with the older fellas from here, DNR showed up and they just didn't know. Then they're like ready to charge us. 'Where's all the salmon at? We know you got salmon' and all that. They make up this big stink. And we're like, no, this is our treaty right and we've been doing this a very long time. If you don't believe us, call up DFO. Then they called up DFO. DFO came down and told them, 'No, give them back their salmon and apologize to them. That's their right.' So, the other law enforcement agencies just don't know, I guess, or [are] uneducated about the treaty rights and certain types and ways of fishing and how we go about it.

Poor relations may also be attributed to the majority of anglers participating in the recreational fishery identified as being international (Gardner Pinfold, 2011), thus likely lacking understanding of Mi'kmaq inherent rights in the context of current Canadian law.

Even within Mi'kmaq governance, there are 'yours' and 'mine' considerations for salmon harvesting. Mi'kmaq have been coerced to fish in rivers closest to their residence even though there are no limits to the geographic limitation to the exercise of Aboriginal rights within the Indigenous nation's specified territory (*R. v. Sparrow*, 1990). Over the decades, this has led to an understanding to fish locally. Sharing a limited resource is challenging among the Mi'kmaq First Nations. Conflicting positions ensued as Mi'kmaq voice is divided on who fishes which area, and how it relates to traditional Mi'kmaq governance and current organization of the Mi'kmaq nation. Furthermore, poor relations are evident between First Nations and with off-reserve representation through the Native Council of Nova Scotia (NCNS)³⁶. However, sharing a limited resource applies to those First Nations who agree to fish under limited harvests agreements in certain rivers, such as First Nations fishing under the Conservation Harvest Plan. For those First Nations who

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³⁶ Relations between the NCNS and the Mi'kmaq communities are poor, most recently over the creation of harvester identification cards and lack of consultation with NCNS. See https://www.cbc.ca/news/canada/nova-scotia/native-council-members-sue-nova-scotia-government-

^{1.5299838?}__vfz=medium%3Dsharebar&fbclid=IwAR1tuyG9kGvV0s0SSl0R8mJqV2O F4-7IW5epi0HJ_C_U2mAQ9p9mHstpGe0

are not involved in the CHP or those that do not negotiate with DFO, the ability to limit harvests in rivers with conservation concerns is not achieved.

6.2.2.3 Dynamics

Stakeholder composition is changing and presents new opportunities for competition and conflict. New ecotourism opportunities, such as Tube the Margaree River³⁷, is a recent outfit offering two to three-hour scenic experiences using inflatable tubes during the summer months but has the potential to interact and conflict with salmon fishers. Guiding services for fisheries is not legally required though guides are hired for some fishing excursions in Nova Scotia and have, until recently, limited knowledge on Mi'kmaq history and Mi'kmaq Aboriginal and treaty rights. Largely opportunities seized by the non-Mi'kmaw population, however, potential opportunities for ecotourism and cultural excursions exist for the Mi'kmaq.

As another economic driver, aquaculture has a long history in Nova Scotia (Aquaculture Association of Nova Scotia, 2019; Kraly, 2019). In a 2007 report prepared by Stantec for the Nova Scotia Department of Fisheries and Aquaculture, aquaculture was identified as having the potential to become a much larger industry in the province with direct and indirect benefits for rural areas. While there may be increasing opportunity and interest in aquaculture in Nova Scotia, aquaculture, especially open pen salmon fish farming, is not always supported. Public controversy regarding finfish farming also exists in local, settler

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³⁷ Tube the Margaree River. See http://livelifeintents.com/river-tubing

communities. Moratoria have been put in place in 2013 on new finfish farms that were lifted in 2016-2017, and requested again by the municipality of Queen's County, Nova Scotia in April 2019 (Kraly, 2019). Possible impacts to wild salmon populations from open-pen salmon farming and the marine environment have been documented (Ford & Myers, 2008; Liu, Chuenpagdee, & Sumaila, 2013; McGinnity et al., 2003; Naylor et al., 2005; Whitmarsh & Palmieri, 2009) and underpin current perceptions as being sources of contamination for the marine environment and harmful to natural salmon populations.

6.2.2.4 Vulnerability

Despite the low abundance of Atlantic salmon in many rivers, Atlantic salmon continues to be symbols of heritage and health to Canadians. Importantly, cultural connections to salmon are evident for both the non-Mi'kmaw and Mi'kmaw fisheries. For the non-Mi'kmaw recreational fishery, cultural connections and the contribution to the local economy from sport fishing are threatened. As a highly prized game fish (Scott & Scott, 1988), recreational salmon fisheries have high economic impact especially to the rural economy. Despite the prohibition to retain salmon in the recreational fishery, the recreational catch and release salmon fishery was valued at \$128,283,000 in Atlantic Canada and created 3,316 full time equivalent jobs in 2010 (Gardner Pinfold, 2011). Nova Scotia Fisheries and Aquaculture estimated the economic value of the sport fishery (all species) at over \$58,000,000 in 2019 (Nova Scotia Fisheries & Aquaculture, 2019b). Clearly, to the non-Mi'kmaw recreational industry, there is vulnerability at the level of the fisher and fisher associations, and also more broadly to the local economy such as hotels, restaurants, outfitters, and professional guides that rely on the fishery to support their services should the stocks continue to decline.

Vulnerability of the Mi'kmaq system-to-be-governed from a decline in salmon is more complex and without the means to associate monetary value to its significance. Fishing for salmon or other culturally important species has long been understood and undertaken by the Mi'kmaq. Fishing is intricately linked to both the animals and territory in Mi'kmaw concepts of identity, beliefs and values (Denny & Fanning, 2016a) and sovereignty (Wicken, 2018), independent of Canadian case law. Mi'kmaw connections to salmon are based in culture and tradition, and an expression of sovereignty. In the Mi'kmaw Creation Story, salmon are used to teach the value of animals and reciprocating responsibilities the Mi'kmaq have to the natural world, as illustrated in section 6.1.

It is evident that both the Mi'kmaw salmon fishery and non-Mi'kmaw recreational salmon fishery are vulnerable, albeit for different reasons. The Mi'kmaw culture and knowledge system are vulnerable as salmon populations continue to decline. Cultural transmission thus continuity is dependent on the ability to harvest and share salmon according to traditional teachings. While fewer incidents are being reported when fishing for salmon, Mi'kmaw fishers are still physically vulnerable. Threats and physical violence continue to be shown toward Mi'kmaw fishers by federal authorities, local community, and non-Mi'kmaw recreationally fishers as described in Chapter Five (sections 5.3.1.1 and 5.3.1.2). For the non-Mi'kmaw recreational interests, there is vulnerability from the loss of salmon to rural economies supported by recreational salmon fisheries and to the emotional relationship of recreational fishers with salmon.

6.2.2.5 Summary of the Features of the Social System-to-be-Governed It is evident that because of legal pluralism and the number of First Nations in Nova Scotia that negotiate (or not) with DFO, the social systems-to-be-governed is highly diverse, complex, dynamic, and vulnerable. Many salmon fishers, both Mi'kmaq and non-Mi'kmaq, share similar space as fishing is restricted to only two salmon fishing management areas and specific rivers within those SFAs. Different rules for governing salmon for each type of fishery and many First Nations add to the complexity of the existing social systems-to-be-governed. Conflicting values underlying fishing, and lack of understanding of Aboriginal rights and how Mi'kmaw fishers are governed also contribute to its complexity. Increased competition for access to the same rivers by the fishing and tourism sectors, influx of international non-Mi'kmaw fishers who are unaware of Mi'kmaq Aboriginal rights and local history contribute to poor streamside relations and adds to the dynamics of the social system-to-be-governed. While natural populations are declining, the interest in salmon aquaculture increases, as do opportunities for conflict between salmon preservationists, Mi'kmaq rights holders and economic opportunists.

Vulnerability of the social-systems-to be governed share similarities in that the connection to salmon and salmon fishing is both personally and culturally significant, yet the values underpinning both fisheries conflicts. In this case, recreational fishers preserve salmon to retain their fishery; Mi'kmaw fishers take salmon to preserve their culture. Other differences in vulnerability are the economic reliance of the local economy to the sport fishing industry in contrast to the personal vulnerability of Mi'kmaw fishers to other fishers, enforcement authorities, and non-Mi'kmaw fishing communities. As such,

the social system-to-be-governed poses extraordinary challenges to the governing system.

The following section examines the recommended mode of governance based on described features of the system-to-be-governed.

6.3 RECOMMENDED MODE OF GOVERNANCE BASED ON THE SYSTEM-TO-BE-GOVERNED PROPERTIES

As stated in Chapter three, and according to Interactive Governance Theory, appropriate modes of governance are recommended that best match the properties of the system-to-be governed (Jentoft, 2007). Here, the properties assessed as the features of the system-to-be-governed necessitate a response from the governing system. Thus, the governability of the system-to-be-governed is "dependent on the extent to which the governing system can deliver (or transcend) the four essentials of the system-to-be-governed" (Jentoft, 2007, p.5). Appropriate modes of governing are hypothesized to be self-governing, co-governing, or hierarchical based on the assessment of the system-to-be governed properties.

Based on the features of the natural system-to-be-governed identified for Atlantic salmon, plamu, in Nova Scotia, it has high diversity, complexity, dynamics, and vulnerability. Similarly, the social system-to-be-governed is also highly diverse, complex, dynamic, and vulnerable. According to IGT, the recommended mode of governance is a hybrid where all three forms of governance are needed. Despite the salmon fishery being supported by a species assessed to be at risk and is thus vulnerable and importantly, provides justification to infringe on the Aboriginal right, some First Nations have not responded to or recognized DFO's authority. The authority to infringe on Mi'kmaw

rights is not considered legitimate as many fishers insist that it is both their Aboriginal and treaty right to harvest Atlantic salmon. As a result, Aboriginal and treaty rights may be perceived as overshadowing legal federal infringement and further contribute to the vulnerability of Atlantic salmon.

The following section explores the extent to which the governing systems respond to the extraordinary demands of the system-to-be-governed. Knowing that governability is already low (Chapter Five), this assessment explores the extent to which the current governance modes perform its functions and to identify currents limits to the governability of Mi'kmaw salmon fisheries.

6.4 Assessing the Performance of the Governing Modes

For each of the governing modes, assessing the performance of the orders is a nuanced examination of "the effectiveness and legitimacy of the governing system as it executes and implements its principles and functions" in relation to the governing demands (Jentoft & Chuenpadgee, 2015, p. 28). Focusing on the governance institutions, each of the current governing systems is examined in relation to how it can deliver on the needs of the system-to-be-governed. Specifically, I examined how each of the current governing modes contextualize, coordinate, learn, and safeguard Mi'kmaq salmon fishing in Nova Scotia. While the focus of this chapter is the Mi'kmaw FSC salmon fishery, it is also important to discuss the recreational fishery in the context of current governing system and perspectives as a Two-Eyed Seeing approach.

As discussed in Chapter Three, a hierarchical mode of governance is recommended as best able to respond to the system-to-be-governed need for safeguarding vulnerable natural and social subsystems (Kooiman et al., 2005). Hierarchical governing arrangements are characterized largely as top down driven with superordinate and subordinate structures with laws, policies, and sanctions as the primary safeguarding provisions (Kooiman et al., 2005). The following sub-sections explores the legitimacy and effectiveness of current laws, policies, and sanctions of the hierarchical governing system as it responds to the demands of the Mi'kmaw FSC salmon fishery. The primary hierarchical fisheries governance institutions are Fisheries and Oceans Canada (DFO), Parks Canada, and the Nova Scotia Department of Fisheries & Aquaculture (NSFA).

6.4.1.1 Laws, Regulations, & Case Law Governing Atlantic Salmon Fisheries Laws, regulations, and applicable case law governing Atlantic salmon fisheries are discussed in relations to the recreational salmon fisheries and Mi'kmaw salmon fisheries.

Mi'kmaq salmon fisheries are those that support the FSC needs of Mi'kmaq in Nova Scotia.

6.4.1.1.1 Recreational Salmon Fishery

Well-structured and hierarchical, command and control measures applying to the recreational salmon fishery are provided through legislation, regulations, and licence conditions that restrict the retention of Atlantic salmon. Both federal and provincial law govern the recreational salmon fishery. Atlantic salmon, as a diadromous species, is under the authority of two federal governments. Under the *Canada National Parks Act*

(2000), Parks Canada regulates fishing through the National Parks of Canada Fishing Regulations (2000) for all parks in Canada. Within the Cape Breton Highlands National Park, the purchase of a salmon licence is required (s.3(1)(e)) with mandatory reporting through registration (s.7.1(1)). Retention is prohibited (s.23) and daily catch limits are established for Atlantic salmon greater than 30 cm (s.12.3). Other restrictions limit gear type (s.15-18), seasons (s.9), daily fishing times (s.22(2)) and bait restrictions (s.24). The remaining rivers, falling outside of Parks Canada's authority, are under the jurisdiction of the Department of Fisheries and Oceans.

The *Fisheries Act* provides a framework for management and control of fisheries, conservation and protection of fish habitat (s.2.1). Regulations made under the act that pertain to the salmon fishery are the *Maritime Provinces Fishery Regulations* (1993, Part IX) for fishing in the Provinces of Nova Scotia, New Brunswick and Prince Edward Island and in Adjacent Tidal Waters. In addition to the *Fisheries Act* (1985), the *Species at Risk Act* (SARA; 2002) also applies to one population of Atlantic salmon.

The *Species at Risk Act* (SARA; 2002) is legislation that aims to protect wildlife in Canada. Legislation is applicable to Environment and Climate Change Canada, Fisheries and Oceans, and Parks Canada as departments whose authority and jurisdiction includes species management. Currently, the only legislatively protected population of Atlantic salmon is the Inner Bay of Fundy (IBoF). The IBoF population was listed as endangered under the *Species at Risk Act* (2002) in 2003 (Government of Canada, 2020c). The purpose of the *Species at Risk Act* is to prevent the extirpation of wildlife species in

Canada from anthropogenic activities and to prevent species that are listed as special concern from becoming endangered or threatened (s.6). However, the remaining Atlantic salmon spawning populations in many Nova Scotia rivers have been assessed as endangered by COSEWIC since 2010 and have not been listed despite evidence of declining abundance. Other legislation that applies include the *Coastal Fisheries*Protection Act (1985) and the Department of Fisheries and Oceans Act (1985). The minister is authorized to issue leases and licences for fisheries or fishing under the Fisheries Act (s.7(1)). However, as a recreational fishery occurring in provincial inland waters, licences are issued provincially.

Freshwater species are managed by Nova Scotia's Department of Fisheries and Aquaculture using a memorandum of understanding with DFO. Provincial legislation regulates access through the issuing of licences for freshwater and Atlantic salmon but has additional purposes such as expanding recreational and sport-fishing opportunities and ecotourism (s.2(e)) and supporting the sustainable growth of the aquaculture industry (s.2(d)). Regulations made through the *Fisheries and Coastal Resources Act* (1996) are the Recreational Fishing Regulations (2001), Aquaculture Licence and Lease Regulations (2019), and Aquaculture Management Regulations (2019). Fishing regulations regarding licences are made under s.53(2) and s.113 of the *Wildlife Act* (1989). Valid licences are required to fish in provincial waters (*Wildlife Act*, s.53(3)). Salmon licences are required to fish for salmon under the Recreational Fishing Fishery Regulations (2001, s.5(2)) with exemptions to those under 16 years of age (s. 6). Landlock salmon fishing is open to provincial licence-holders in 11 identified lakes in Nova Scotia and are subjected to effort

controls such as bag limits, minimum and maximum sizes limits, and seasons (Nova Scotia Fisheries & Aquaculture, 2019b). As these salmon remain in the lake throughout their life history, they are managed entirely by the Nova Scotia Fisheries and Aquaculture and are not considered to be at risk as diadromous Atlantic salmon.

Salmon fishing for catch and release occurs in seven counties spread over two Management regions of DFO, restricted to Salmon Fishing Areas (SFA) 18 and 19, and in most cases, are managed by river. For example, in Eastern Cape Breton (Salmon Fishing Area (SFA) 19, Figure 12), the recreational catch and release salmon fisheries is permitted in three rivers (Middle, Baddeck, and North Rivers) each with their own management plans and seasons.

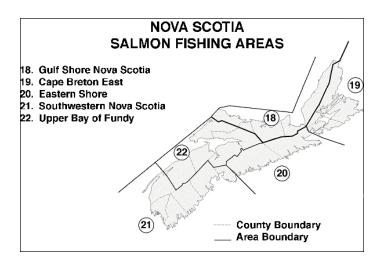


Figure 12 Nova Scotia salmon fishing areas. Source:
http://www.inter.dfo-mpo.gc.ca/Gulf/FAM/Recreational-Fisheries/2012-Salmon-Angling-Seasons

Salmon populations occurring in the Southern Gulf of St. Lawrence (SFA 18) also continue to support recreational catch and release fisheries in Nova Scotia (COSEWIC, 2010) albeit with increasingly conservative management measures. The retention of small salmon (<63 cm) in the recreational fishery in SFA 18 was prohibited in 2015 (DFO, 2016b). Methods of fishing are restricted in the non-Mi'kmaw salmon fishery. Angling with barbless or pinched barbed hooks is the only method used to catch (and release) salmon (Nova Scotia Fisheries & Aquaculture, 2019b). Though not under protection of the *Species at Risk Act*, recreational salmon fisheries continue to be prohibited in SFAs 20-22 due to their endangered status (COSEWIC, 2010). Overall, this analysis suggests that Canadian law, in particular federal law, and its application to non-Mi'kmaw Canadians, is effective to safeguard the natural system-to-be-governed from the recreational salmon fishery. The following section will examine current Canadian law in its application to Mi'kmaw salmon fisheries and its ability to safeguard Atlantic salmon.

6.4.1.1.2 Mi'kmag Salmon Fisheries

Current legislation included limited protection to Aboriginal and Treaty rights. The *Species at Risk Act* (2002; s.3) and the recently amended *Fisheries Act* (s.2.3; 1985), upholding existing Aboriginal and Treaty rights recognized and affirmed in section 35 of the *Constitution Act*, 1982. Nonetheless, the *Sparrow* decision is considered the landmark court cases that tested the entrenchment of Aboriginal rights in s.35(1) of the *Constitution Act* (1982) (Elliott, 1991). Several cases followed that delineated Aboriginal and treaty rights, as discussed in Chapter Two.

Instead of embarking on an opportunity that *Sparrow* created for the enhanced role of Indigenous peoples in fisheries, the federal response to "restraint on the exercise of sovereign power" (*R. v. Sparrow*, 1990, para 8) was the creation of the Aboriginal Communal Fishing Licences Regulations (1993) and community negotiations to develop licence conditions. These regulations are the primary legal instrument to fit Indigenous fisheries into the current legal framework.

The Aboriginal Communal Fishing Licences Regulations (1993) allow for a limited and government controlled communal licence to be issued to an Aboriginal organization (i.e. Indian band, an Indian band council, a tribal council or an organization that represents a territorially based aboriginal community), to carry on fishing and related activities with associated conditions and responsibilities to the community or organization. Rather than licences issued to an individual such as the provincial issuances of licences to recreational fishers, licences and associated conditions are negotiated with First Nations elected leadership (McGaw, 2003). While many of the agreements and licence conditions for FSC species are open ended, i.e. no size, geographic or season restrictions for many species, there are restrictions and limits to several species, including Atlantic salmon.

Licences and subsequent fishing conditions are associated with agreements, referred to as the Aboriginal Fisheries Strategy (AFS) agreement. Agreements are time limited, comprehensive agreements negotiated annually between DFO and the Mi'kmaq bands or organizations to harvest identified fish species using specified harvest methods, seasons, and conservation measures. Co-operative management responsibilities and funding are

also included (Denny & Fanning, 2016a; Harris & Millerd, 2010; King, 2011; McGaw, 2003) to establish and support community fishing departments with resources to hire fisheries-related staff, undertake scientific projects, gather catch reports, and act as community educators and resource monitors during fishing, as examples. The point of contact for these negotiations are with community leadership and community fishery managers who are considered as representatives for community fishers by DFO, or with organizations representing a subset of Mi'kmaq people, such as the Native Council of Nova Scotia. Communication of the licence contents and conditions are the responsibility of the First Nations though this research has found many fishers are unaware of the licence conditions and restrictions to their fishing areas. Similarly, knowledge shared during this study suggest funding to support community responsibilities is insufficient and have not increased in the past thirty years.

While access to salmon, methods and fishing seasons are provided in the licence, conditions regarding fishing locations, communities, methods and seasons vary by community. In contrast to restrictions in the recreational fishery, Mi'kmaw salmon fishers can employ a variety of methods, fishing seasons, and retain salmon. Traditional methods of spearing and snaring are practiced and angling with barbed hooks as the intent, for the most part, is to retain salmon for the purpose of consumption. Salmon in Middle, Baddeck and North Rivers (SFA 19) are provided for Cape Breton Mi'kmaq First Nations and selected rivers in SFA 18 are available for Aboriginal FSC requirements through the Aboriginal Fisheries Strategy (AFS) agreements with five Cape Breton based First Nations.

In contrast to the provisions provided under the *Fisheries Act*, the *National Park Act* and subsequent regulations fail to provide for the Aboriginal harvest of salmon. Within Park boundaries, there is a recreational catch and release salmon fishery. Under the *National Parks Act*, the Governor in Council can make regulations pertaining to activities "...where aboriginal people have existing aboriginal or treaty rights to traditional renewable resource harvesting activities within any area of a park," (s.17(2)). Currently, there are no Aboriginal fishing regulations for Cape Breton National Park. Allocations for Cheticamp, Clyburn and North Aspy Rivers in the Cape Breton National Park (considered to be in SFA 19) are not provided to the Mi'kmaq despite the existence of a recreational fishery in those rivers (National Parks of Canada Fishing Regulations; s.31-33). Provincial regulations, in particular, fishing regulations created under the provincial *Wildlife Act*, do not exempt individuals fishing under federal Aboriginal Communal Fishing Licences Regulations which may underpin confusion for provincial enforcement officers when enforcing fishing regulations.

In contrast to the laws governing the non-Mi'kmaw recreational fishery, the primary regulations safeguarding Atlantic salmon, the Maritime Provinces Fishery Regulations, for the most part, do not apply to the Mi'kmaw fishers licenced under the Aboriginal Communal Fishing Licences. Such regulations thus are not effective in its application to safeguard the resource. Of the 121 sections contained in the Maritime Provinces Fishery Regulations, only 17 are applicable to the Aboriginal Communal Fishing Licence Regulations. For salmon, payments for licences or registration cards are not required (s.

3), nor do any of the restrictions to fishing methods and gear (s.51,60), fishing times (s. 51,61), limits to salmon quotas and lengths (s.62-65), as well as other general prohibitions on methods (s.7-16) and gear (s. 20-23). As such, current federal regulations safeguarding Atlantic salmon do not apply to the Mi'kmaq salmon fishery. This, however, is contingent on whether the species is federally listed under SARA. General prohibitions protect listed species from mortality, harm, harassing, or capture (s. 32(1)). However, only the Inner Bay of Fundy population of Atlantic salmon is protected under SARA.

The legitimacy of agreements is contested by many Mi'kmaq fishers. The *Sparrow* decision affirmed Aboriginal rights but also created boundaries around the exercise of the right. As such, Aboriginal rights are not absolute and may be limited. Limits to the Aboriginal right for fish for FSC needs are best described as coming second to conservation and resource management. Conservation is viewed as uncontroversial justifications of a limitation on constitutional rights. While there was no species-specific definition provided for conservation, it is broadly described as ensuring the needs of species are met, though disagreement on how to conserve and manage Atlantic salmon is evident (Denny & Fanning, 2016a). Furthermore, and despite law currently supporting the Aboriginal right to fish for FSC needs, the use of federal regulations and agreements with DFO do not address Mi'kmaq sovereignty and as a result, legitimacy of the licence conditions by Mi'kmaw fishers is not achieved. Given the declining status of Atlantic salmon, justification for infringement may be viewed valid, however, the use of

restrictive agreements is not widely accepted by Mi'kmaw salmon fishers. Ta'pitji'j explains,

It's not a contract. I don't need no acknowledgement. I don't need no recognition.

It's just who I am and where I come from and inherent is something that, for me,

runs through my veins.

Similarly, Dan Paul reflects, "But our inherent right as L'nu allows us to provide for our families because this is L'nu'ekatik. All of this. Atlantic Canada. It's not just the reserve."

It is evident that there is limited application and thus effectiveness of the current regulations intended to safeguard the Mi'kmaq salmon fishery. Key legal mechanisms are case law that provides the federal government with powers to infringe on constitutionally protected rights and the use of agreements and licence conditions to restrict harvest quantitatively and geographically. For First Nations who refuse to accept the licence and associated conditions, legitimacy of the regulations and limits to their Aboriginal right is not achieved. For fishers for which their First Nations are under agreements signed with DFO, or under the conservation harvest plan that includes Parks Canada, legitimacy is also not achieved at the fisher level. However, there is some acceptance of refraining from harvesting from the Cape Breton Highland National Park as the intent of national parks are to preserve wildlife despite the occurrence of a recreational fishery. Gaps in provincial fishing regulations are noted and may contribute to a lack of understanding among provincial enforcement officers regarding the Aboriginal right to fish and how it is addressed in provincial regulations.

6.4.1.2 Policies

Numerous federal and provincial polices were found to be applicable to the system-to-be governed. Key DFO salmon and recreational fishing policies include:

- Sustainable Fisheries Framework (2009)
- Recreational Fisheries in Canada: An Operational Policy Framework (2001)
- Wild Atlantic Salmon Conservation Policy (2018) and Implementation Plan (2019-2021)
- Aboriginal Fisheries Strategy (1992)
- Integrated Aboriginal Policy Framework (2005).

The Sustainable Fisheries Framework promotes the precautionary approach and use of harvest rates and decision rules to guide an ecosystem-based approach to managing fish populations (DFO, 2009). After a decade, the DFO is only just embarking on the use of critical, cautious and healthy criteria for decision making for Atlantic salmon (DFO, 2018c). As such, there are no policies or guidelines regarding harvest rules for critical, cautious or healthy assessments or securing of basic harvest levels for salmon for FSC needs.

The Recreational Fisheries in Canada: An Operational Policy Framework is outdated but reference the importance of conservation, the social and economic value and connection, and legitimate use of fisheries resources as a means of protecting the natural and social systems-to-be-governed (DFO, 2001). Also stated is the priority of access for Indigenous peoples for FSC needs over other users while recognizing fisheries management is consistent with conservation and the protection and recognition of Aboriginal and treaty

rights. However, there are indications that the ability to be sensitive to the rights of
Indigenous peoples is hampered by DFO due to multiple and often competing demands
from other resource groups. To illustrate, the updated Wild Atlantic Salmon Conservation
Policy is one such example. The goal of the Wild Atlantic Salmon Conservation Policy is
...to restore and maintain healthy wild Atlantic salmon populations... by rebuilding
and protecting the biological foundations of wild Atlantic salmon while taking into
consideration the social, cultural, ecological and economic benefits of wild salmon
for now and for the future generations of Canadians (DFO, 2019a, para 2).
Within the policy are four guiding principles to govern decision-making and facilitate

within the policy are four guiding principles to govern decision-making and facilitate adaptative management approaches:

- 1) conservation, with the emphasis on protecting genetic diversity and habitats as the highest priority in decision-making;
 - 2) sustainable use and benefits, that reflect the rights of Indigenous peoples and others deriving benefits;
 - 3) precautionary approach and transparent decision making, via the use of consistent rules and procedures; and
 - 4) shared stewardship to encourage compliance to sustain and rebuild salmon populations by including relevant parties in decision-making.

While conservation is the first guiding principle and identifies its moral responsibility to protecting salmon and in principle 2, reflect the rights of Indigenous peoples, it is presented as equal to 'others deriving benefits' rather than priority of access as affirmed in the *Sparrow* decision (1990). Furthermore, the use of consistent rules and procedures

contradicts the interpretation of s.35(1) of the *Constitution Act* in the *Sparrow* decision (1990).

Integrated Fisheries Management Plans (IFMP) are required for sharing stewardship and inclusive decision-making but do not "fetter the Minister's discretionary powers set out in the *Fisheries Act*" (DFO, 2013). Currently IFMPs do not exist for Atlantic salmon in Nova Scotia but do in Newfoundland, which further demonstrates the inconsistency in management approaches in DFO. However, how Aboriginal rights are integrated within fisheries management for Indigenous peoples is guided by policies specific to Aboriginal fisheries.

In 1992, the Aboriginal Fisheries Strategy (AFS) was implemented which outlined the community negotiated terms for fishing and other fisheries related activities (King, 2011; McGaw, 2003; Wiber & Milley, 2007). The Aboriginal Fisheries Strategy policy is to issue FSC licences to First Nations whether or not they reach an agreement with DFO with provisions determined at the discretion of the Minister;

The AFS is of assistance to DFO in managing the fishery in a manner consistent with the Sparrow decision and subsequent Supreme Court of Canada decisions. The AFS seeks to provide for the effective management and regulation of fishing by Aboriginal groups through the negotiation of mutually acceptable and time-limited fisheries agreements between DFO and Aboriginal groups. Where agreement cannot be reached with an Aboriginal group, DFO will review the consultations with the group and the Minister of Fisheries and Oceans will issue a communal fishing

licence to the group, containing provisions that the Minister believes are consistent with the Sparrow decision and subsequent Supreme Court of Canada decisions. The licence allows the group to fish for food, social and ceremonial purposes. Where DFO reaches agreement with an Aboriginal group, the Minister of Fisheries and Oceans will issue a licence to the group that reflects the agreement reached (DFO, 2012, para 5 to 6). [Emphasis added by author].

The imposition of licences as a federal policy contrast with DFO's Integrated Aboriginal Policy Framework. Although also outdated, and developed 15 years post-AFS, the Integrated Aboriginal Policy Framework is a policy for DFO employees to build and support relations, working in a way that upholds the honor of the Crown, and facilitates Aboriginal participation in fisheries and management of aquatic resources. Guiding principles to achieve their vision include respect for Aboriginal peoples' values and rights, proactive and innovative approaches to address emerging issues, use of participatory and collaborative decision-making processes, and accommodate Aboriginal interests while balancing resource management and interests of other Canadians (DFO, 2007). While the above description resembles principles for consultation as *Sparrow* clearly insists, there are no DFO policies on how the federal government consults with Indigenous peoples.

In addition to DFO policies, there are two other policies influencing how the Mi'kmaq are impacted by salmon management and decision-making in Nova Scotia. Within Parks Canada and under the Parks Canada Guiding Principles and Operational Policies (Parks

Canada, 2017), "Special opportunities for public participation are provided to individuals and groups at the local and regional levels, including Aboriginal peoples, who may be more directly affected by Parks Canada initiatives and operations." However, there is a lack of fisheries-related policies beyond recognition of the relationship between humans and their environment and "protection and presentation of natural areas recognize the ways in which people have lived within particular environments" (principle 5).

Another relevant policy is the consultation policy developed by the Province of Nova Scotia -The Government of Nova Scotia Policy and Guidelines: Consultation with the Mi'kmaq of Nova Scotia, and the Canada – Nova Scotia Memorandum of Understanding on Cooperation Regarding Duty to Consult. Aligning their operations to be consistent with the recognition and affirmation of existing protected Aboriginal and Treaty rights and Supreme Court of Canada decisions concerning the duty to consult, the policy provides direction and consistent guidance to ministers of the Crown and to provincial government staff when considering decisions or actions that may have adverse impacts to established and/or asserted Mi'kmaq rights. The policy further clarifies the roles and responsibilities of participants and the procedures for consultation, referred to as the Terms of Reference (Government of Nova Scotia, 2015). Presently, the province has limited responsibilities to manage anadromous, catadromous and other marine species such as Atlantic salmon (DFO, 2001). As such, this policy is only applicable to consultations involving aquaculture development in Nova Scotia, as aquaculture, through an MOU with the federal government, is the responsibility of the government of Nova Scotia and would be coordinated through the Office of Aboriginal Affairs. Participation

in the development of the policy and procedures by the Mi'kmaq of Nova Scotia, as well as provincial governments and industry, to provide clarification on consultation as it relates to Mi'kmaq Aboriginal and treaty rights and title, and how it should be approached may be viewed as both legitimate and effective. Even so, consultation is often contested by Mi'kmaw fishers due to lack of inclusion thus may not be viewed as legitimate by rights holders.

To summarize, based on the review of existing federal and provincial policies applicable to the salmon fisheries, policies to safeguard the systems-to-be-governed exist though there are inconsistencies in DFO policies. The two federal policies reiterate the Constitutional recognition of Aboriginal rights and reflect the priority of access. However, the Wild Atlantic Salmon Conservation Policy was found to contradict the Constitutional protection of Aboriginal rights while the AFS's ability to impose licences at the discretion of the Minister was found to contradict the principles outlined in the Integrated Aboriginal Policy Framework. The Provincial policy for consultation addresses the need for a clearly defined policy and process for consultation and is better suited to address the context of Mi'kmaq in Nova Scotia and may be assessed as effective and legitimate. However, the province has a very limited role in salmon governance beyond issuing licences and leases for salmon aquaculture.

6.4.1.3 Sanctions

Sanctions are clearly defined for licence holders falling under Parks Canada, Nova Scotia Fisheries and Aquaculture and DFO authority. Under the National Parks of Canada Fishing Regulations (C.R.C., c. 1120) fishing permits or salmon licences may be

cancelled (s.8(3)) and suspended for a year if fishers are found in violation of the regulations (s.8(5)). The *Species at Risk Act*, *Fisheries Act* and the *Fisheries and Coastal Resources* Act outline penalties for offences.

New amendments to the *Species at Risk Act* and *Fisheries Act* in 2019 include provisions for alternative measures. Alternative measures are defined as "...measures in respect of the protection of fisheries, fish or fish habitat or the prevention of pollution, other than judicial proceedings, that are used to deal with a person who is alleged to have committed an offence under this Act" (*Fisheries Act*, 1985, s.86). Extensive criteria must be met to proceed with alternative measures including "the alleged offender accepts responsibility for the act or omission that forms the basis of the offence;" (s.86.2(1)(e)). However, the application of sanctions to Aboriginal fisheries is complicated by the constitutional protection of Aboriginal and Treaty rights in s.35(1) of the *Constitution Act* (1982) and the Aboriginal Fisheries Strategy policy.

The acceptance of licences by First Nations and the imposition of licences through the AFS despite agreement, implies that licence conditions are an agreed set of rules for which violations are offences thus punishable with penalties. Section 43.4 (1) of the *Fisheries Act* states,

Every person acting under the authority of a permission referred to in section 4 or a lease or licence, whether issued under this Act or provincial legislation, shall comply with any terms and conditions of the permission, lease or licence that are imposed under the authority of this Act.

Individuals found guilty of an offence punishable on summary conviction or as an indictable offence are subject to fines (s.43(3)). However, DFO in both the Maritimes and Gulf regions implemented special protocols for minor fisheries infractions for Indigenous peoples in an effort to build relationships. For example, effort is being made by federal enforcement officers to work with offenders to find solutions through dialogue with community and fishery managers before going to court. Both DFO and First Nations feel that this is useful and meaningful, especially for those who do not fully understand the limits around Mi'kmaq rights, licence conditions, how fisheries are conducted, or restrictions arising from fishing species that are endangered such as Atlantic salmon. The use of alternative measures is promising. However, the legitimacy supporting whether the violations are indeed violations may be contested, given the Constitutional protection of Aboriginal and Treaty rights, supporting case law, and the imposition of licences. For these reasons, the use of sanctions is not effective or seen as legitimate for violations of licence conditions in Mi'kmaw FSC salmon fisheries.

6.4.2 Contextualizing Provisions of Self-Governance Modes

As discussed in the Chapter Three, a self-governing mode is recommended when there is considerable diversity among the actors in the social subsystem being governed, resulting in the need for sensitivity to the differing context on the part of the governing system (Kooiman, Bavinck, Jentoft, & Pullin, 2005). Self-governing arrangements are characterized as having the ability to govern themselves with little intervention or support from the government. Using interferences, self-governing institutions have the ability to govern themselves (Jentoft & Chuenpagdee, 2015). The use of Ostrom's design principle for self-governing of common pool resources was recommended by Jentoft &

Chuenpagdee (2015). However, its application to customary management systems undertaken by individuals is problematic due to a lack of self-organization. Ostrom's design principles assume self-organization as a prerequisite to collective action where appropriators, those who withdraw resource units from a resource area, develop their own system of governance (Ostrom, 1990). As such, the lack of self-organization of Mi'kmaw fishers does not fit the criterial for self-governing regardless of whether imposed communal licences are rejected by community leadership and assertion of the Mi'kmaq Aboriginal rights as individual appropriators does not fit the criteria for self-governing.

Challenges identified in Chapter Five identified specific governance gaps such as the lack of organization of Mi'kmaw fishers. Based on the identified challenge for salmon, independent of the federal government, it is apparent that a self-governing mode is absent for Mi'kmaw salmon fisheries. Consequently, the lack of self-governing mode limits current efforts to enhance governability.

6.4.3 Learning and Coordinating Provisions of Co-Governing Modes
As discussed in the Chapter Three, co-governing arrangements are gaining popularity
using organized forms of interactions for governance. Co-governing modes are
recommended for complex and dynamic natural and social sub-systems within the
system-to-be-governed and the need for inclusiveness and flexibility on the part of the
governing system (Kooiman et al., 2005). As such, co-governing arrangements are
characterized by horizontal cooperation, co-ordination, and communication, without a
central or dominating actor, using mutually negotiated agreements, common rights, and
duties (Kooiman et al., 2005). Here, stakeholders working in cooperation with society

and government characterize co-governance (Chuenpagdee & Jentoft, 2013). In Interactive Governance Theory, government is viewed as a constructive partner to enhance the governability pertaining to issues of complexity, thus serving a coordinating function that enhances participation, power-sharing, and democracy. However, there are challenges associated with co-governance such as increasing participation, interactions and thus costs, without the guaranteed success of enhancing governability (Jentoft & Chuenpagdee, 2015).

In assessing whether the governing interaction facilitated co-governance, four criteria were used based on Gash (2016): (1) network of partners with diverse interests; (2) the collaborative unit must have the authority to govern; (3) use of innovative ways of perceiving and addressing societal problems; and (4) importance of learning integrated into the process for the purpose of promoting mutual understanding and consensus. Using these criteria, there were no examples of co-governing mode for salmon fisheries found in Nova Scotia.

One scenario, the tri-partite process established through the formal consultation process for Atlantic salmon does contain elements of shared cooperation, coordination, and communication and innovative ways of perceiving and addressing societal problems.

However, it is clearly stated that the use of the consultation TOR³⁸ "does not constitute by any Party to reach agreement or to undertake consultation in respect of any particular decision, activity or subject matter" (article 3), and is optional (article 13a). As such, the lack of formalized agreement to resolve complex issues between the Mi'kmaq and the DFO does not meet the identified criteria and is thus a limit to the current governance of Mi'kmaq Aboriginal fishery for Atlantic salmon.

6.5 Assessing Governing Interactions

Governing interactions occur between the systems-to-be-governed and the governing system and are the focus of the last stage of the governability assessment. The following section assesses the nature, type and quality of the governing interactions. Additionally, and as recommended by Jentoft & Chuenpagdee (2015), the role of power relations as inclusiveness, representation, and participation currently in place for the salmon fisheries are explored. Three types of interactions were identified: negotiation, consultation, and advisory.

6.5.1 Negotiation

Recalling that Mi'kmaq did not have legal access to Atlantic salmon and many species until the *Sparrow* decision in 1990, the Aboriginal Fisheries Strategy provided access to

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³⁸ Consultation Terms of Reference were developed with the Mi'kmaq of Nova Scotia as represented by the Thirteen Mi'kmaw Saqmaq (the "Mi'kmaq of Nova Scotia"), Her Majesty The Queen In Right of Nova Scotia as represented by the Minister of Aboriginal Affairs ("Nova Scotia"), and Her Majesty The Queen In Right of Canada as represented by the Minister of Indian Affairs and Northern Development ("Canada") (MacMillan & LeBlanc, 2002).

fish resources using time limited, comprehensive agreements based on negotiations with communities. Negotiations take place annually between DFO and community fishery managers and elected leadership to develop plans for access to fish species, conservation measures, management responsibilities and associated funding (Denny & Fanning, 2016a; Harris & Millerd, 2010; King, 2011). Depending on the community, perspectives vary with the quality of those negotiations and the instruments, i.e. the licence conditions and agreement, for the community.

From the regulatory perspective, access to fish resources is a federal obligation in response to the *Sparrow* decision, although there were examples of access provided to First Nations for salmon pre-*Sparrow*. Licences are perceived as necessary as without a licence, First Nations are considered by DFO to be operating without rules for harvesting and are in violation of the *Fisheries Act*. The use of licence conditions and agreements facilitates access and allows DFO to enforce licence conditions under the judicial system. It also provides a supporting mechanism to demonstrate Mi'kmaq fishing activities that would be considered illegal under regulations or recreational licence conditions, are indeed following the agreed to rules. However, negotiation begins with the licence conditions then the associated responsibilities and data collection. While agreements do not have specific wording to indicate it is rights limiting, any consensual restrictions to access, methods or seasons means that the community is in agreement with federal restrictions and subsequent infringement. Thus, the annual negotiation begins with the negotiations of infringement and protection of the natural system-to-be-governed rather

than preservation of Mi'kmaq knowledge system, including the transmission and practice of Mi'kmaw harvesting techniques.

Licences are issued in advance of negotiations regardless of whether First Nations recognize the legitimacy of the licence. Two very different DFO perceptions regarding the agreements are evident. First, the AFS agreements and licence conditions are viewed as negotiated based on community needs, or second, the agreements and licence conditions are templates and rolled over annually with little negotiation. In some cases, agreements have not changed since they were originally negotiated. As a result, access may be too high or too low for some communities. Furthermore, as licence conditions vary between communities, there is a lack of guidance in national policy to assist federal employees in negotiating licence conditions for FSC fishers. As a result, questions arise whether measures are indeed realistic for enforcement by DFO and reporting requirements for communities.

From the Mi'kmaw perspective, numerous restrictions regarding salmon access and allocation ensued since community agreements and licence conditions were first implemented in 1992. This presumably was due to the declining abundance and increased concern for the sustainability of salmon populations. However, the continuity of the power of DFO to impose licences to community negotiations as a result of the AFS policy resound, as is the lack of justification for proposed conservation measures that often mirror the recreational measures. As such, licence conditions are perceived as not reflecting Mi'kmaw needs or permit the use of cultural practices.

Licence conditions and AFS agreements are related and perceived as a 'package deal.'

Funding is not provided unless proposed licence conditions are accepted. However, many

First Nations claim agreements and licence conditions are accepted 'under duress'

(National Indigenous Fisheries Institute, 2019). Funding provided for management

responsibilities and research and hiring of personnel varies among communities.

Regardless of this variation, funding is limited, thereby impeding the ability to effectively

carry out negotiated responsibilities that are perceived to have little benefit to the

community. Lastly, as the format was established long ago, First Nations are 'stuck with

it' and it 'checks the box', questioning whether the annual DFO and community

negotiations are meaningful, mutually beneficial and the use of licence conditions are

indeed effective. Perspectives from Mi'kmaw fishers reveal similar concerns regarding

the quality of community negotiations and the impact of the licence conditions on

Mi'kmaq rights.

Three such concerns from Mi'kmaw fishers emerged regarding the quality, nature, and power of federal licences. First, agreement to DFO licences and subsequent conditions limit Mi'kmaq Aboriginal rights. Second, this agreement gives authority to DFO to regulate and enforce licence conditions. Third, as fishers with rights, they are not consulted or involved in negotiations to enter into agreements that impact their rights. The low numbers of Mi'kmaw fishers in each community and subsequent lack of fisher organization within each community contribute to a lack of representation and thus marginalization of fishers by the Mi'kmaq First Nation leadership involved in

negotiations. The lack of fisher engagement in the negotiations and lack of organization are gaps in current Mi'kmaw fisheries governance. For this reason, whether intentional or unintentional, current DFO and Mi'kmaq governments play a role in marginalizing Mi'kmaw fishers.

To conclude, community negotiations suffer from poor quality, and beyond legalizing access to species, fail to consider the Mi'kmaw values in fisheries. The lack of inclusion and organization contribute to marginalizing Mi'kmaw fishers in the process on negotiations impacting their Aboriginal right to fish for Atlantic salmon. Since 2012, there have been some improvements to DFO-community negotiations. A formalized consultation process replaced nine of thirteen individual Mi'kmaq First Nation negotiations with DFO. However, fisher participation is lacking.

6.5.2 Consultation

Since 2012, the primary governing interactions between nine of the thirteen Mi'kmaq First Nations and the federal and provincial governments for Atlantic salmon is the consultation process. Consultation, as a formalized process, is driven by the Terms of Reference (TOR). While the consultation limits the opportunity to reach agreement, as the TOR does not imply the parties come to an agreement, and its use is discretionary by DFO, it does provide space for discussion that is on record (article 1) or not (article 17), thereby allowing for learning opportunities to proceed without concern for the legal implications arising from those discussions. The Mi'kmaq of Nova Scotia, represented through appointed consultation committees, have the authority to enter into consultations and legally binding commitments (articles 4 and 5). The TOR itself is transparent and

publicly available, however, records or information provided or received are held in confidence unless "disclosure is required by law" (article 15). In the TOR, processes for opting out or to engage in consultation independently undermine the principle of solidarity where the expectation is to unite for common interest and purpose. The first application of the TOR by DFO for species specific consultation potentially impacting Mi'kmaq rights was related to discussions over Atlantic salmon. Despite the limitations present in the TOR, tangible improvements were made to the governance of Atlantic salmon from both the community leadership and regulatory perspectives.

The consultation forum for salmon was established in 2012 to discuss potential impacts of the recreational fishery to Mi'kmaq Aboriginal rights. The process required the involvement of the federal fisheries and parks agencies, provincial fisheries, and Mi'kmaw organizations representing the technical capacity, resource management, jurisdictional overlap, cultural awareness, and understanding of Mi'kmaq fishing practices and values required to govern salmon. Notably absent was off-reserve representation from the *Netukulimkewe'l* Commission as they are not members of the ANSMC. To resolve salmon conservation issues, working groups were established in 2014 for open discussions that were not 'on-record' or 'with prejudice'. It became the opportunity to learn about Mi'kmaq culture and worldview that provided necessary insights into Mi'kmaq fishing practices, values, and belief system, a deeper appreciation of underlying issues facing federal, provincial, and Mi'kmaq governance, and developing trust. Opportunities for shared interest in capacity development and sharing of resources, and data for inclusion in the scientific assessments were realized, and Mi'kmaw concerns

with the recreational salmon fishery that were raised were addressed³⁹. While not immediately evident, the process resulted in evolving and tangible improvements to the governance of salmon fisheries in Nova Scotia based on a shared appreciation of salmon, concern for its sustainability, and appreciation of Mi'kmaw and Western perspectives. Initially, consultation meetings occurred twice a year; working groups interactions were frequent to resolve issues that were not on record, allowing opportunities for in depth discussions. Since 2012, meetings are held one to two times per year. Mi'kmaq-led advisory processes were developed to coincide with consultation and its timelines and addressed the lack of Mi'kmaw salmon fisher input. Mi'kmaq First Nations (four of thirteen) who are not involved in the Conservation Harvest Plan negotiate independently or are supported in those negotiations by the AAROM organization, the Mi'kmaw Conservation Group.

Based on this research, it is evident that there are mixed perceptions regarding the quality of the consultation processes. Given its new application to fisheries and activating it for one of many culturally significant species, obstacles were to be expected. Despite the encountered obstacles, significant accomplishments were achieved for all parties in terms of building relations, reporting, learning, and incorporating a cultural, conservative, and providing a legal basis to support the Mi'kmaw salmon fishery. Morely Knight, former senior DFO executive reflects on the consultation process in Nova Scotia for salmon,

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³⁹ This is a personal reflection held by the author based on being present at the consultations.

... I know that was a long and drawn out process and I know it's something that there's still lots of improvements needed but I did personally push really hard ... to get that in place and point out that this is not the end of the world. This is no different than what we would do in many other circumstances and I think, at the end of the day, it was an example of a really positive relationship where all the Federal Government had to do was let go a little bit of a paternalistic attitude and the sky didn't fall... So, I think it's an example of a really positive relationship. Something really positive was done and the resource is better off because of it and Mi'kmaq people are allowed to make decisions that make sense for them but they are also protecting the resource while they're doing that.

Furthermore, the benefits of the consultation process are opportunities for co-learning, building relationships and respect, and importantly, trust. However, like the community negotiations, it perpetuates fisher exclusion. As a result, fishers do not share the same perspective regarding consultation. As noted in Chapter Five and in section 5.3.3.4, as minorities in communities, consultation affects fishers who lack opportunities to be included in order to influence consultation outcomes. Within the Mi'kmaq nation, data analyzed for this research suggests the authority to consult with elected leadership is creating animosity between elected and traditional leadership. As a result, the notion of who should consult on impacts to Mi'kmaq rights prevails.

Given the confidentiality surrounding consultation, transparency is an issue as it excludes the ability of First Nations or KMKNO to provide updates and general information on consultation outcomes. Furthermore, the exclusion of rights holders from such processes

also undermines its legitimacy and contributes to marginalizing Mi'kmaw fishers and the effectiveness of the conservation harvest plan developed at the consultation table.

6.5.3 Advisory

Three different streams of advisory processes exist for three different fishing groups and processes: the non-Mi'kmaw recreational fishery; off-reserve Mi'kmaq through the self-governing organization *Netukulimkewe'l* Commission; and those situated within Mi'kmaq governing arrangements to support consultation processes. DFO hosts annual Zonal Management Advisory Committee (ZMAC) meetings with recreational associations and interested stakeholders to discuss stock status, management measures, and to offer feedback on the recreational Atlantic salmon fishery. Referred to as consultation with the industry by federal and provincial authorities, the meetings are well advertised, open to the public and are held in the evenings. Invitations are extended to others to participate, such as First Nations, who rarely attend. In part, this can be attributed to poor relations, capacity, and the current consultation framework which cautions against First Nations participation. A similar process is held by the provincial fisheries but for salmon, DFO takes the lead and are supported by Nova Scotia Fisheries & Aquaculture.

For the Native Council of Nova Scotia, the Regional *Netukulimkewe'l* Advisory Councils (RNAC's), provide input in the implementation of the community's regional harvesting plans. Through the RNAC representative, individuals can advise the *Netukulimkewe'l* Commission on any changes or revisions that may be needed to the guidelines. Individuals are encouraged to attend these meetings and members are provided with

information pertaining to the meetings. The Commission produces an annual fisheries management plan and distributes it to their membership, but it is not available on-line.

Nonetheless, this research provides evidence that Mi'kmaw fishers' perceptions of not having a voice are changing, albeit slowly. The establishment of Mi'kmaq-led advisory processes to address the gap of fisher knowledge and participation and to better inform supporting technical bodies for formal consultation are giving fishers an opportunity for input into harvesting activities. The roles of the Aboriginal Aquatic Resources and Oceans Management (AAROM) bodies are expanding to accommodate this need. For example, as an AAROM organization, the *Unama'ki* Institute of Natural Resources (UINR), initiated the *Unama'ki* Salmon Fisheries Advisory Committee⁴⁰ in 2016 in response to a governance gap around fisher participation and input into the Conservation Harvest Plan (CHP) for Atlantic salmon and to improve communication between communities. As such, UINR assumes the responsibility for coordination and other responsibilities identified by the committee. The committee gathers at a minimum four times per year to:

- Provide transparency in the Mi'kmaq salmon fisheries in *Unama'ki* by sharing the numbers of tags distributed and salmon harvested by each community;
- Advise Mi'kmaw decision-makers regarding the abundance and distribution of
 Atlantic salmon, based on the best available knowledge (Mi'kmaq ecological
 and/or scientific) and the guiding principle of *Netukulimk*;

⁴⁰ Unama'ki Salmon Fisheries Advisory Committee terms of reference are on file with the author.

266

- Provide harvest data in a timely manner for scientific assessments;
- Encourage communication between community fishery departments and harvesters;
- Seek recommendations from respective fishers and First Nations regarding CHP implementation; and
- Provide an opportunity for Mi'kmaw fishers to bring their concerns regarding
 other species of cultural and ecological significance or activities impacting those
 species to the attention of UINR.

Membership includes fishery managers from each of the five communities, salmon harvesters, UINR, KMKNO, Native Women's Association and the Mi'kmag Grand Council. Recommendations to the ANSMC are made following a discussion of DFO stock status updates. Here, new knowledge from DFO science, NSFA, and/or Parks Canada is added as evidence to support decisions as well as Mi'kmaq knowledge. Salmon harvesters represent themselves and provide a harvester perspective for the CHP and other issues. To date, the ANSMC has not rejected advice provided by the Advisory Committee. While the community could benefit from the participation of more salmon harvesters, they are currently assumed to be represented through community fishery managers. However, it is noted that relations between community fishery managers and fishers vary among First Nations and most communication with fishers are described as 'top down' through social media postings rather than interactive in nature. Few Mi'kmaw fishers attend despite assistance for travel and time to participate. The responsibility is delegated to Mi'kmaq First Nations' fishery managers to invite fishers, however it is unknown why fishers do not attend.

As part of the Terms of Reference, other sessions are coordinated as needed, such as workshops with salmon fishers to improve communication or other items of interest. Codevelopment of conservation messages, status updates, and collaborative messages for the Nova Scotia Anglers Handbook are other activities organized through this process.

Information regarding salmon status is available at the *Unama'ki* Salmon Advisory Committee and is used to justify fishing activities. Stock status is shared via social media and community news postings. The First Nations who participant in the CHP is responsible for providing fishers with the CHP, and each household is provided with a summary of fishing areas available for harvest without compromising the state of the salmon populations. Catch reports from participating CHP First Nations are shared among Unama'ki Salmon Advisory participants, DFO science, and the consultation process, and externally through relation building processes such as the Collaborative Salmon Initiative. Though fisher participation is poor despite incentives to compensate for lost time or travel, the advisory process is gaining legitimacy. Fishers observe tangible outcomes that support and incorporate cultural practices into the CHP due to their participation, such as the opening up of the Margaree known as the Sanctuary to Mi'kmaw fishers and the removal of closed seasons. Improved coordination between parties is noted, especially with timing of reporting salmon harvests to DFO for incorporation into their assessments.

As noted, there are significant gaps in representation. The other AAROM body in Nova Scotia, the Mi'kmaw Conservation Group (MCG), operates as an advisory committee for their representative communities' First Nations fishery managers. Fishers are not part of their advisory process. These four remaining Mi'kmaq First Nations have allocations to the one river in Cape Breton Island but are not part of the CHP, or in some cases, not part of ANSMC consultation process but are members to the MCG. There is no interaction or communication between those First Nations and the *Unama'ki* Salmon Advisory Committee and limited sharing of information during consultation. While specific reasons were not provided, this is speculated to be attributed to the legal recognition of community autonomy, community-specific agreements with DFO, competition between communities, and trust issues between Mi'kmaw organizations.

6.5.4 Summary of First Order Governing Interactions

The commonality among the identified governing interactions is the marginalized role of Mi'kmaw fishers. Of the three interactions, individual community negotiations are poor, while consultation is viewed as a hopeful alternative with integrated processes for learning and sharing, though time consuming. For both negotiations and consultation, where activities and agreements directly impact Mi'kmaq Aboriginal rights, there is limited opportunity for Mi'kmaw fisher inclusion, resulting in negative perceptions of legitimacy. A somewhat more positive interaction is the advisory process where Mi'kmaw fishers, albeit a select few, participate and have opportunities to share information, be informed on salmon status, and contribute knowledge. Coordinated externally, the advisory process contributes to the enhanced legitimacy of the

consultation process. An illustration of various components within the current governance structure for Atlantic salmon is illustrated in Figure 13.

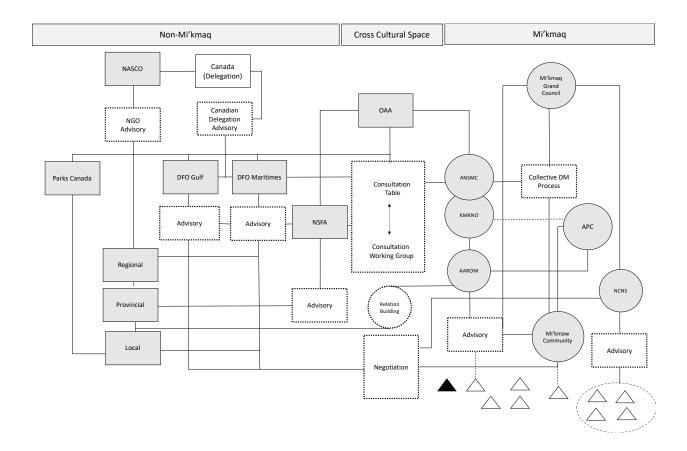


Figure 13 Illustration of current governance of Atlantic Salmon in Nova Scotia. Interactions are indicated as dotted lines; Mi'kmaw organizations and governing systems are circles; Non-Mi'kmaw fisher organizations and governing systems are rectangles. Triangles indicate Mi'kmaw salmon fishers; color triangle indicates fishers who are part of First Nations who are not in agreements with DFO. The cross-cultural space for governing interactions exists between the Federal/Provincial Government and Mi'kmaw governance institutions.

6.6 CONCLUSION

Based on the governability assessment, despite over 30 years of the recognition of Aboriginal rights, governing of Mi'kmaq Aboriginal rights for Atlantic salmon continues to face many obstacles. Within the system-to-be-governed, both the natural and social

systems display high diversity, complexity, dynamics, and vulnerability. As recommended by Jentoft and Chuenpadgee (2015), all modes of governance are required for effective governance. However, only the hierarchical mode of governance was found within the case study. While the *Sparrow* decision reinforces federal infringement on Aboriginals where conservation is in question, the use of laws and sanctions are ineffective and not afforded legitimacy by the Mi'kmaw salmon fishers. Laws from other governing authorities such as Parks Canada do not have regulations for Aboriginal peoples. Provincial regulations for salmon fishing are not aligned with federal regulations and the Constitutional protection of Aboriginal rights to exempt Mi'kmaq are absent in provincial regulations. While some federal policies clearly state the order of priority of access for Aboriginal fisheries, others fail to be consistent. In particular, the Wild Atlantic Salmon Conservation Policy was found to contradict the Constitutional protection of Aboriginal rights and the imposition of licences at the discretion of the Minister was found to contradict the principles outlined in the Integrated Aboriginal Policy Framework. Other gaps in federal policies identified through this research include guidance on policies to assist with FSC negotiations to determine the contents for licence conditions.

Governance research and practice have shown that self- and co-governing modes require contextualizing and learning and coordinating respectively for effective governance (Kooiman et al., 2005). Based on the analysis of this case study, the absence of self- and co-governing modes likely contribute to many of the identified challenges faced in the salmon fishery today. Governing interactions were found to be improving with better

quality and more effective interactions occurring between fishers and organizations. However, higher level negotiations and consultation lack fishers' representation and contributes to challenges of marginalization of Mi'kmaw fishers.

The *Sparrow* decision (1990) called for a new way of governing fisheries with Aboriginal people. After three decades, this has not been fully realized. While the recognition and affirmation of Aboriginal rights, thus the Mi'kmaq Aboriginal right to fish for salmon is found throughout Canadian legislation, policy, and programs as the federal response to *Sparrow* decision, the Mi'kmaq themselves have not seized all available opportunities. In this case, the lack of self-organization of Mi'kmaw fishers hinders the governability of Aboriginal right to fish for salmon. Without self-organization, co-governance is not possible as there is no reciprocal body to which the hierarchical mode can co-govern with. It is only through self-organization of Mi'kmaw fishers and thus embarking on a journey of responsibility to self-organize that the governability of Mi'kmaq Aboriginal rights to fish for salmon and fisher representation may improve.

CHAPTER 7 "THE RIGHT TO BE IN THE LIGHT": A CASE STUDY ASSESSING THE GOVERNABILITY OF MI'KMAQ LIVELIHOOD FISHERY FOR AMERICAN LOBSTER, JAKEJ

There's lots of objects being burned and protests and threats and racial threats to a whole nation. We've been, it pretty much is, it seems like a technical war that's been going on for a very long time, but I find the new generation, the young guys, they don't want to hide. They don't want to go in the dark no more and that's good because, I'm here, I've been in the dark and I find I have a clearer understanding now that we have the right to be in the light, so let's go. Let's stop hiding...

-Brandon Maloney, current Band Councillor and former

Director of Fisheries for the Sipekne'katik First Nation

7.1 CASE STUDY OVERVIEW

Like many Mi'kmaq, Brandon Maloney is tired of hiding and fishing out of sight and under the cloak of darkness when Mi'kmaq treaties rights are recognized by the Supreme Court of Canada. The validity of the treaties is undeniable but despite Constitutional protection and affirmation in the Supreme Court of Canada, governing a treaty right to fish in Nova Scotia is proving to be more problematic than just. On September 17, 2019, the twentieth anniversary of the Marshall decision was honored in various ways across *Mi'kma'ki*. From feasts to symposia, the Mi'kmaq celebrated the landmark victory in the recognition of their treaty right to commercial harvesting. Overshadowing the celebration, however, was the reflection that there is no movement in the recognition, legitimacy, and governance of a livelihood fishery in Eastern Canada. Chief Paul,

fisheries portfolio lead for the Assembly of Nova Scotia Mi'kmaw Chiefs reflects in an interview with CTV news,

"It hasn't happened yet," Chief Paul said. "That's what the issue is. We need to get going. We need the government to start taking action in implementing the Supreme Court decision where we have a right to a livelihood."⁴¹

Since the Marshall decisions, scholars suggested a variety of paths for "finding workable resolutions" (Coates, 2000, p. 197). Such examples included the need for improved relations as the basis for cooperation to be the core of advancing solutions (Coates, 2000, 2003; Pictou, 2015) to resolving jurisdictional responsibilities and sovereignty (King, 2011; Ladner, 2005). Other scholars noted the need for Mi'kmaq inclusion in multi-levels and co-produced resource management plans (Fox, 2006) and inclusion of main party stakeholder agreement negotiations (McGaw, 2003). Other scholars such as Harris & Millerd suggest an operational path may be through the amalgamation of all Mi'kmaq fishing interests as fishing without qualification as food, livelihood, or commercial and improved understanding of justifications limiting Aboriginal and treaty rights (Harris & Millerd, 2010). Lastly, Russel Barsh, suggested enhanced Mi'kmaq responsibility coupled with a coordinated management regime (Barsh, 2002). Arguably, many of the suggested paths are needed in combination to advance a treaty-based fishery as a

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⁴¹ CTV News. (2019). Twenty years after landmark win for fishing rights, First Nations say there's still work to be done. September 18, 2019. https://atlantic.ctvnews.ca/twenty-years-after-landmark-win-for-fishing-rights-first-nations-say-there-s-still-work-to-bedone-1.4599963

workable solution, but to date, and as Chief Paul alludes, the Department of Fisheries & Oceans fails to legally implement the treaty right to fish for a moderate livelihood. As such, the framework for how to lawfully exercise the treaty right without prosecution by law enforcement does not exist (ANSMC, 2020).

After two decades of the affirmed, constitutionally protected right and guidance provided by the *Marshall* decisions (1999) on the nature and scope of the treaty right to fish for a moderate livelihood, DFO, at least from the perspective of the Mi'kmaq, has not achieved a meta-governance justice principle of moral responsibility. In contrast to the expectations of the Mi'kmaq perspective analyzed for this research, DFO has provided access to commercial fisheries to Mi'kmaq First Nations largely through to the Marshall Response Initiative (MRI) and other commercial fishery access programs such as the Allocation Transfer Program (ATP) that were in place prior to the Marshall decisions. Thus, it would appear that from DFO's perspective, providing commercial access addresses its responsibility to meeting its Constitutional commitments. Evidently, conflicting perspectives between the Mi'kmaq and DFO of what is a treaty right and how to govern the treaty right to fish for commercial access are the core of the problem. While a legal framework is needed as the foundation for a treaty right to fish for a livelihood, it does not necessarily transfer to successful implementation of the treaty right to fish for small scale commercial needs given the challenges identified in Chapter Five.

As explored in Chapter Five, the challenges identified are indicative of social justice issues, thus governability is assumed to be low. Such issues require the governability

assessment to focus on the performance of the orders (Jentoft, 2013). Furthermore, the image of the Mi'kmaq fishery was found to conflict with current fisheries management suggesting there is a poor fit between the systems-to-be-governed and the governing system (Chuenpagdee & Jentoft, 2013). The intent of a governability assessment is also, as discussed in the previous chapter, to "understand how the various structural features and processes of the governing system, the system-to-be-governed and their interactions affect governability" (Jentoft & Chuenpagdee, 2015, p. 26). Using the governability assessment framework of the American lobster fishery in Nova Scotia, I will accomplish four tasks:

- (1) explore the features of the of the systems-to-be-governed for the lobster and lobster fisheries;
- (2) recommend an appropriate mode(s) of governance using the findings from the features of the system-to-be-governed, based on Interactive Governance Theory;
- (3) examine the performance of the existing governing modes in response to the demands of the system-to-be-governed in the context of the *Marshall* decision and implementation of the Mi'kmaw livelihood fishery to identify limits of each governing mode; and lastly,
- (4) assess the current level and quality of interactions governing the fisheries and the exercise of power within such interactions.

Where applicable, challenges related to the themes discussed in Chapter Five - disputing legitimacy of the governing system, marginalizing Mi'kmaw fishers, conflicting relations, losing Mi'kmaq identity, identifying governance gaps, and operation of the

governing system - will be highlighted. The following sections explores the system-to-begoverned of American lobster based on desktop literature review and the key themes identified in the analysis of the interviews (Chapter 5).

7.2 EXPLORING THE FEATURES OF THE SYSTEMS-TO-GOVERNED

The lobster fishery is Canada's most valuable seafood export and an iconic Canadian fishery species (DFO, 2015) with landings more than doubling over the past two decades in Nova Scotia (Nova Scotia Fisheries & Aquaculture, n.d.-a). The lobster fishery was valued at \$771,107,000 in 2018 in Atlantic Canada with the majority (91.8%) of the value originating in the Maritimes Region of DFO (DFO, 2020a). Understanding the lobster fisheries as the systems-to-be governed requires familiarity of its two subsystems (natural and socio-economic) separately, as well as the relationships and interactions between them. The natural system refers to the marine physical environment, ecosystems, and other external influences such as climate change that may alter the natural system. In contrast, the social system-to-be-governed is comprised of direct and indirect resource users, the social relations between and within them, and the interactions that occur among them (Jentoft & Chuenpagdee, 2013). The following sections examine the features of diversity, complexity, dynamics, and vulnerability of the natural and social systems-tobe-governed as recommended by Chuenpadgee and Jentoft (2013) that will be used to determine the most appropriate mode of governance for the American lobster fishery in section 7.2.3.

7.2.1 The Natural System-to-be-governed

American lobster, *Homarus americanus*, is a temperate marine crustacean occurring between Labrador to North Carolina (Cobb & Castro, 2006). Widely known as a delicacy, it has significant commercial value as one of Nova Scotia's longest managed fishery (DFO, 2011). The American lobster has a relatively simple life cycle in comparison to Atlantic salmon. Lobsters exist as planktonic and benthic phases with limited spatial variability.

7.2.1.1 Diversity

American lobsters, as a species, are not diverse. American lobster occurs only in marine and estuarine waters of North Atlantic Ocean between Labrador to North Carolina (Figure 14) and occur in shallow waters up to 50 m and greater (up to 700 m) and along the continental shelf (Cobb & Castro, 2006). Lobsters are genetically distinct populations between its northern and southern part of their range but display weak genetic evidence for fine scale population structuring within regions (Benestan et al., 2015). Overall, American lobster is considered to have low genetic diversity and are not likely independent stocks (Quinn, Rochette, & Chassé, 2017).

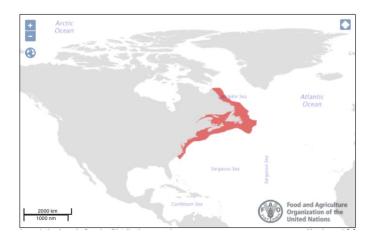


Figure 14 Distribution of American lobster in North America. Source: FAO, 2021.

7.2.1.2 Complexity

American lobsters have a simple life cycle and are not a complex species. Lobster eggs hatch in the summer, beginning their first three to ten weeks of life as plankton before transiting into their benthic stage where they remain for the duration of their life. The larval stages are sensitive and less tolerant than its benthic stage and require temperatures between 10 to 12°C and salinities above 20 ppt (Cobb & Castro, 2006). As larval lobsters seek out habitats to settle, substrate such as softer surfaces or crevices in rocky bottoms are needed as shelter to avoid predators during this vulnerable stage of its life. At this stage, they are referred to as juveniles and remain there until maturity is reached between three to five years (Cobb & Castro, 2006).

As juvenile and adult lobsters, they inhabit a wide range of water temperatures ranging between 0 and 25°C, are tolerant to a wide range of salinities (15 to 32 ppt) and inhabit a wide range of habitats. Typical lobster habitat is thought of as rocky, boulder areas rich in macrophytic algae but they also inhabit mud and sand bottoms and eel grass where burrows can be created for shelter. Most lobsters are found at shallow depths of less than

30 m but can be found at depths of 750 m (DFO, 2011). Kelp bed habitats in particular are credited as providing shelter for lobster and their prey (Bologna & Steneck, 1993).

Lobsters, like other crustaceans, periodically shed their external shell and replace it with a new, larger shell in a process referred to as moulting. Moulting typically occurs during the late summer months and it is during the post-moult that mature lobsters mate. Different sizes moult at different frequencies that is inversely related to size. For example, smaller lobsters moult more frequently while larger lobsters moult less frequently. Moulting occurs annually for a 454 g (1 pound) lobster but less frequently as the lobster grows (1.4 kg and over) to every two to three years. (DFO, 2011).

Lobsters typically have a two-year reproductive cycle. Following mating (i.e. insertion of the male spermatophore into the female), the ova grow and develop internally for nine to twelve months and are fertilized upon extrusion to the underside of the female's tail. Here the eggs are carried for another nine to twelve months (Cobb & Castro, 2006; DFO, 2011). Hatching occurs in the summer of the year following extrusion. Size at maturity is thought to be temperature dependent. Lobsters from warmer waters mature sooner than those inhabiting cooler waters. In Nova Scotia, the age at which 50% of the lobsters reach maturity is typically between 70 to 100 mm carapace length (CL) (DFO, 2011). Larger lobsters have higher reproductive potential and can spawn consecutively. The size at maturity varies, however, lobsters reach maturity between 95 to 100 mm CL off southwest Nova Scotia (DFO, 2011).

7.2.1.3 Dynamics

Larval dispersion is considered to be dependent on currents thus having potential to repopulate other areas (Cobb & Castro, 2006; Quinn et al., 2017). The offshore area in particular is identified as a source for many lobster populations (Quinn et al., 2017). Migrations are limited and seasonal with lobsters typically move into the shallower waters in spring and summer and move back to deeper waters in the fall and winter. Based on older studies using streamer tagging methods, near shore migrations are common but are not extensive and range from a few kilometers to 20 km (DFO, 2011). Newer technology in tagging studies is being applied in many areas to examine lobster movements in Atlantic Canada⁴².

Primary food sources are other smaller invertebrates, marine plants, and detritus common in the lobster environment. Larval prey includes copepods, predominantly *C. finmarchicus*. Higher rates of predation occurs during the settling stage and include small fish and crabs and larger demersal fish such as groundfish, sculpins, skates, wolffish, other invertebrates, and striped bass (Cobb & Castro, 2006; DFO, 2011). Recent expansions in lobster population growth is attributed to the current low abundance of lobster predators such as Atlantic cod (Steneck & Wahle, 2013). While many of the predators listed above are natural to the lobster environment but low in abundance, lobster larvae may be subjected to periods of predation by pelagic fishes (Hanson, 2009).

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⁴² See https://www.apoqnmatultik.ca/about for information about this new First Nations, government, and academic partnership to tag culturally important species in Nova Scotia.

7.2.1.4 Vulnerability

Lobsters are not a species at risk provincially or federally, nor have the Committee on the Status of Endangered Wildlife (COSEWIC) assessed them. Potential impacts from climate change arising from increasing water temperatures on larval prey availability, disease occurrences, and re-distribution of lobsters seeking cooler temperatures are concerning and pose challenges to future management of lobster fisheries (Greenan et al., 2019; Le Bris et al., 2018). Vulnerability to increasing water temperatures are hypothesized to be mitigated through conservation measures to protect the reproductive potential of lobsters (Le Bris et al., 2018). Disease is known to occur in lobsters but the effects are poorly understood (Cobb & Castro, 2006). Despite threats from disease, the lobster fishery in Atlantic Canada is considered healthy, with record high landings occurring the Maritimes Region (DFO, 2016c, 2016d, 2018b, 2019d).

7.2.1.5 Summary of the Features of the Natural System-to-be-Governed It is evident from above description of the features of the natural system-to-be governed that American lobster exhibit low diversity, complexity, and dynamics. Vulnerability is also considered to be low given the lack of concern for species status by COSEWIC, current record high landings experienced in the lobster fishery, local scale of lobster distribution and the potential for larvae from the offshore to 'seed' the inshore. Therefore, the natural system-to-be-governed does not present extraordinary challenges to the governing system. The following section will explore the social systems-to-be-governed

7.2.2 The Social System-to-be Governed

The lobster fishery has a long history of being regulated, starting in 1873 (DFO, 2011). For the Mi'kmaq, who had been fishing lobsters for food since pre-colonial times, the renewed opportunity to harvest and participate in the lobster fishery was re-established following the *Sparrow* (1990) and *Marshall* (1999) decisions for FSC needs and for a limited commercial fishery respectively. In the following section, I focus on the features of the social systems-to-be-governed using Two-Eyed Seeing to discern western and Mi'kmaw contexts. For the lobster fishery, Mi'kmaw context is further conceptualized as FSC, communal commercial, and livelihood. The following sections will explore the features of diversity, complexity, dynamics, and vulnerability of the social systems-to-begoverned in the context of the non-Mi'kmaw lobster industry and the current Mi'kmaq context.

7.2.2.1 Diversity

In contrast to the low diversity of the natural system-to-be-governed, the lobster industry exhibits high diversity in Atlantic Canada. In the Maritimes and Gulf regions, there are 3,621 licences in the Maritimes and Gulf regions, including communal commercial. The majority (61%) of the licences are held in three lobster fishing areas (LFA) 33, 34 and 27 in the Maritimes region (Figure 15). The diversity of lobster fishing is contained within the inshore (Figure 15). However, an offshore lobster fishery also occurs in the Maritimes region. As such, the lobster industry in Nova Scotia occurs over two DFO management regions as inshore and offshore. However, the offshore occurs in one LFA(41), despite its larger geographic area. Consequently, lobster fishers are organized in associations that are aligned with the management of lobster fishing areas.

The lobster industry is characterized by polycentricity. Polycentricity, as explained by Carlisle and Grubby (2019), refers to a complex form of governance characterized by many, and often overlapping, centres of decision making "nested at multiple jurisdictional levels" (p. 928). For example, lobster fishers are organized in associations and nested within larger organizations with elected or appointed representation for their lobster fishing areas (LFA). At least sixteen associations representing 17 lobster management areas in Nova Scotia (Figure 15) were identified in Nova Scotia.

Associations represent fishers on a broad range of issues of common concern.

Currently there are 12 LFAs in the inshore and one in the offshore in the Maritimes Region with one LFA (35) having an overlapping provincial boundary between Nova Scotia and New Brunswick. In the Gulf Region (Gulf of St. Lawrence), there are three LFAs with one LFA (25) overlapping the provincial boundary between Nova Scotia and New Brunswick. Membership of Mi'kmaq First Nations in lobster fishery associations varies. Where present, the community is represented by its communal commercial fishery manager. For the offshore (LFA 41), the eight offshore lobster and Jonah crab licences was held by one enterprise (Clearwater) who represents the offshore lobster industry (DFO, 2020b). As of November 2020, the Mi'kmaq First Nations of Paqtnkek, Pictou Landing, Potlotek, Sipekne'katik, and We'koqma'q and Miawpukek (Newfoundland)

have participated with Membertou in the Mi'kmaq Coalition to acquire 50% of Clearwater Seafood and expect to hold Clearwater's Canadian fishing licences⁴³.

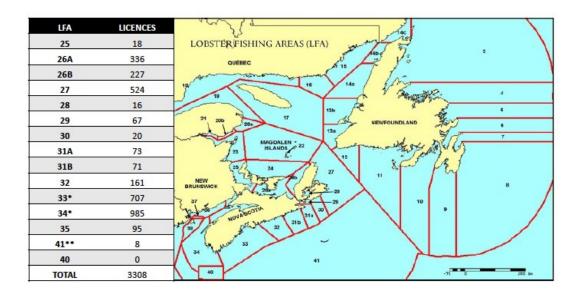


Figure 15 Lobster fishing management areas in Canada (Source: DFO, 2015).

Number of commercial and commercial communal licences in Nova
Scotia (Modified from DFO, 2011, 2014). *Association websites report a
higher number of licences that those found in the IFMP. ** Indicates
offshore LFA where all licences are held by one company.

Mi'kmaq First Nations do not formally organize as Mi'kmaw lobster fishers. For the FSC access, 12 of 13 First Nations hold licences for their food fishery in LFAs closest to their geographic location. Mi'kmaq First Nations provide access to tags to identify traps and community for the LFA identified in the licence conditions. First Nations often limit the number of tags provided to individuals. One First Nation continually rejects licence

⁴³ Al-Hakim Aya. (2020, November 10). Mi'kmaq coalition acquires 50% of Nova Scotia-based seafood giant Clearwater Seafoods. Global News. For full story see https://globalnews.ca/news/7452416/mikmaq-coalition-nova-scotia-clearwater-seafoods/

conditions for their food fishery and does not provide tags to their members. Similarly, livelihood fishers are not organized into management areas, or within their Mi'kmaq community. An estimate of the number of fishers is unknown but is estimated to be small and varies by area. Adjacency of Mi'kmaq lobster livelihood fishing area does not necessarily correspond to their area of residency.

Entirely dependent on the lobster fishery are the post-harvest sector of fish buyers and processors. Currently there over 160 companies that buy lobster (Nova Scotia Fisheries & Aquaculture, n.d.-a). The post-harvest sector in Nova Scotia is represented by the Nova Scotia Seafood Alliance and the Seafood Producers Association of Nova Scotia.

7.2.2.2 Complexity

The lobster fishery is highly complex as a result of legal pluralism resulting from different legal frameworks governing the lobster fisheries. As Kevin Squires, long time lobster fisher from Big Bras d'Or, Nova Scotia, explains, having different sets of rules is challenging to the lobster industry,

'Well, there needs to be one set of rules for everybody. We all got to run by the same rules'. And it's a challenge for us, not being as familiar as we should or might and in the face of just pure resistance to try to explain to people, 'No, there's two rules and that's how it is. We need to a) Understand those rules and come to terms with them and live with them', but that's tough for people. So that's one of the local pieces of tension on the larger scale.

In the above quote, the two sets of rules refer to Indigenous rights and non-Indigenous Canadians' privilege. Furthermore, and as discussed in Chapter Five, non-Mi'kmaw

fishers have come to terms with FSC fisheries, but difficulties accepting the treaty right to fish for a moderate livelihood remain. As such, interactions between the lobster fishing industry and the Mi'kmaw lobster livelihood fishers are contentious. This tension arises due to non-Mi'kmaw perceptions of not only a different set of rules but also the perception that the livelihood lobster operates as a lawless fishery. Michael Stephens, a traditional harvester, shares,

It's even worse. It's a lot worse from an individual because you're not playing by their rules. The rules that they have to follow. You're playing by your own kind of understanding of the rules, your own interpretation of how to assert that treaty right and anything out of the normal to them is problematic and there's jealousy and you know what I mean?

Furthermore, there are specific challenges regarding the rules that arise from the *Marshall* decisions that appear to be lawless, or at least going against the law applicable to the non-Mi'kmaw commercial lobster fishery. Specifically, the challenges are who benefits from the treaty right, the requirement (or not) for licences and regulatory prohibitions, and the differences in conservation and management tools and techniques used to regulate the fishery.

The *Marshall* decisions (1999) clarified that treaty rights are communal and are exercised by authority of their member community. While treaty rights do not belong to the individual, they are asserted by the individual to support themselves and their family (para. 17). Here, the pool of potential fishers is extended, in the eyes of non-Mi'kmaq, to the entire population of Mi'kmaq. This creates fear and uncertainty in an industry that has

been exclusive for decades and considered to be fully subscribed. In order to fish (Maritime Provinces Fisheries Regulations s.4(1)(a)) and sell fish (Fishery General Regulations s.35(2)), the commercial fishery must operate under a licenced regime. This contrasts with the Marshall outcomes. For the livelihood fishery, the use of licences and other regulatory prohibitions "are inoperative... unless justified under the Badger test⁴⁴" (para. 26) and justification for a licensing requirement is dependent on facts (para. 28). Lastly, if justification is provided and the community is consulted to limit such fisheries, Mi'kmaq livelihood fisheries can incorporate conservation and management practices different from the commercial lobster fishery.

From the Mi'kmaq perspective analyzed for this research, the lobster livelihood fishery is not lawless or as widespread as the industry perceives it. Constitutional protection of Aboriginal and treaty rights coupled with the recognition and affirmation of treaty rights is the law that guides their actions. Not all Mi'kmaq desire to become or are livelihood fishers. Mi'kmaw fishers reported that a small proportion of community members are livelihood fishers. Licences may not be necessary under the *Marshall* decision outcomes, and as a livelihood fishery yet to be implemented by DFO, there is no process for which to discuss if or how licences could be acquired. However, the precedent is the authorization to First Nations through licences issued under the Aboriginal Communal Fishing Licence Regulations for Aboriginal and communal commercial. At the time of

⁴⁴ R v Badger, [1996] 1 S.C.R. 771. The Badger test includes the application of the Sparrow test to justify infringements on constitutionally protected treaty rights.

the research, the Mi'kmaq First Nations in Nova Scotia have not pursued that opportunity and individuals are asserting their rights. Regarding conservation measures in use, Mi'kmaq livelihood fishers also value sustainability. Here, cultural teachings of Netukulimk are assumed to take precedence. At the time of the participant interviews, Mi'kmaw livelihood fishers identified their use of commercial and food fishery conservation measures such as minimum legal carapace length and returning ovigerous females. Other Mi'kmaq livelihood fishers were incorporating additional measures to protect ovigerous females such as v-notching. Further, Mi'kmaw livelihood fishers set fewer traps than permitted in the lobster fishing industry. Michael Stephens, a traditional harvester gives an example of the perceived lack of legitimacy of the livelihood fishery among the non-Mi'kmaw lobster fishers that results in vigilantism, despite the small size of the lobster livelihood fishery in comparison to the trap limit in the commercial lobster fishery.

... we started with 12, we got up to 18 [traps]. We're out there fishing them and we got them, we lost every one of them to the non-native harvesters, you know what I mean? They went, they cut them, they stole them, they did whatever they did. We went out there again.

Additional complexities are Mi'kmaq-specific. For example, Mi'kmaw fishers and leadership views of the treaty rights are in conflict with *Marshall* decisions (1999) outcomes. The Mi'kmaq view treaty rights as individual and non-negotiable, whereas the outcomes from the *Marshall* decision (1999) view them as communal and not individually owned, and those negotiations needed to work out the challenges with implementing right-based fishery are negotiations of the right itself. Challenges that are

Mi'kmaq-specific exist with abuse of licence conditions for FSC lobster fishing and Aboriginal rights. Current agreements with DFO that licence the lobster food fishery also create challenges such as selling lobsters acquired using FSC fishery tags. While this fishery is licensed by DFO, the sale of lobster is currently prohibited according to communal licence conditions. Abuse of rights continues to be a challenge and ways to prevent or address abuse of rights are currently unavailable. This includes Mi'kmaw perceptions identified in this study by Mi'kmaw participants of taking too many lobsters despite the lack of an agreed amount of what constitutes a moderate livelihood. Selflimitation and taking what is needed are fundamental to Mi'kmaw concept and practice of *Netukulimk* that many Mi'kmaq fear they are losing. At the time of the research, there were no agreements established between the federal government and Mi'kmaq lobster fishers or Mi'kmaq First Nations in Nova Scotia for livelihood fisheries. Only recently (fall 2020) have management plans developed by First Nations been communicated between fishers and First Nations and DFO. Annapolis Valley and Bear River First Nations have reached agreement with DFO to fish 3,500 traps in LFAs 33, 34 and 35 during the commercial season⁴⁵. Other challenges are a lack of representation of a livelihood fisher voice in Mi'kmaq First Nations and negotiations with DFO.

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⁴⁵ Fisheries & Oceans Canada. (2021, October 13). Interim understanding reached that will see Bear River and Annapolis Valley First Nations members fishing in pursuit of a moderate livelihood. News Release. See https://www.canada.ca/en/fisheries-oceans/news/2021/10/interim-understanding-reached-that-will-see-bear-river-and-annapolis-valley-first-nations-members-fishing-in-pursuit-of-a-moderate-livelihood.html for full release.

7.2.2.3 Dynamics

After decades of a closed entry fishery, new entrants operating under a different set of rules is unsettling to non-Indigenous commercial lobster fishers. As a result, heightened tensions between Mi'kmaq livelihood fishers and non-Mi'kmaw lobster fishers, industry, and non-Mi'kmaw fishing communities are the norm. Non-Mi'kmaw fishers do not accept the treaty right to fish for a moderate livelihood and, as a result, tensions continue to be evident in the lobster fishery in Nova Scotia. Racism, unfair treatments, opposition to fishing using tactics such as lodging complaints, threatening fishers and vandalism are used to prevent Mi'kmaq from fishing. To protect themselves, fishers must hide despite having recognized treaty rights. Lifelong treaty harvester Butchie McDonald explains,

So, everything we do, we camouflage and we fish and hunt that way. We fish in ocean at night only. We don't go out in broad daylight even though we have rights to do this but they'll always complain.

At the time of the research, livelihood fishers were asserting their rights independently though other interviewees reported exploring a community-authorized approach.

Independent fishers lamented on the lack of support from community leadership despite fishing according to *Netukulimk* and the acceptance of the role of communal authority outlined in the Marshall decision. In the fall of 2020, community-authorized approaches were being implemented in Southwest Nova Scotia and Cape Breton Island. Such approaches included the development of policies, harvest plans and community

authorization processes and identification, such as community identified and issued tags.

These actions resulted in a crisis situation in Nova Scotia⁴⁶.

Furthermore, it is noted by the Mi'kmaq that Mi'kmaw livelihood fishers may not follow identical conservation rules. Without similar agreed-to rules for fishing, Mi'kmaw fishers who are livelihood fishing in Nova Scotia and those who are not residents in the fishing area result in animosity between local and non-resident Mi'kmaw livelihood fishers due to differences in fishing practices. Peter Francis explains the challenges of bearing the consequences of non-resident Mi'kmaq fishing as creating a stereotype of Mi'kmaq livelihood fishers in their area;

...a lot of people come from away and I don't know if they realize or maybe they don't care how they leave things here 'cos we have to live here all year long. They get to come here from away and do what they do, and then they get to go back home with no recourse to nothing. But where we live here all year long, and you hear it all the time - ah yeah, the natives blah blah blah oh not you guys though but you're still hearing it all the time...I got no problems with them coming here fishing just

<u>fight/</u>. For Potlotek First Nation challenges with implementing their moderate livelihood during the 2021 commercial season, see <a href="https://www.saltwire.com/atlantic-canada/news/local/traps-seized-by-dfo-in-first-day-of-potloteks-moderate-livelihood-canada/news/local/traps-seized-by-dfo-in-first-day-of-potloteks-moderate-livelihood-

lobster-fishery-100582796/

⁴⁶ For a summary of lobster challenges between industry and Sipekne'katik First Nation see Year in Review: Nova Scotia lobster fishery fight
https://www.660citynews.com/2020/12/26/year-in-review-nova-scotia-lobster-fishery-

like we go to Hunter's Mountain hunting, or Kelly's mountain, you know what I mean but you don't go there to cause trouble.

Introducing a different way of operating and fishing also creates challenges. Fitting Mi'kmaq rights-based fishing into the western model presents challenges to Mi'kmaq livelihood fishers. The current operational model of commercial communal fishing where the community hires members or leases out their licence is in direct contrast to how livelihood fishers envisage their participation. *Ta'pitji'j* explains livelihood as "...the right to build one's livelihood as an entrepreneur...". While lobster fishing grounds for livelihood fishing are easily accessible with smaller vessels and fewer traps require less capital investment, not having a licence limits opportunity to secure capital investment for small scale fisheries. Furthermore, loans are unobtainable if the applicant does not meet the requirements such as having a licence, certification as a Fishing Masters Class certificate or five years of experience as captain of a vessel (Nova Scotia Fisheries & Aquaculture, n.d.-b). Additionally, without a commercial licence, sale of lobsters to registered buyers is prohibited by the Fish Buyers' Licensing and Enforcement Regulations.

7.2.2.4 Vulnerability

The Mi'kmaq livelihood fishers are vulnerable while the commercial and processing industry are potentially vulnerable should stocks collapse, though the nature of the vulnerability itself differs. Lobsters support fisheries. The lobster fishery is estimated to directly employ over 7,200 people in the Maritimes Region alone (DFO, 2011). In the Maritimes Region, there are 3,040 lobster licences (including commercial communal) and an additional 581 licences in the Gulf Region, including overlapping LFA 25 (Fig. 13).

Of these licences, a small percentage (four percent based in the Maritimes Region and five percent in the Gulf Region) are commercial communal with revenues contributing to enhance the overall well-being of First Nations through employment in the fishing industry (Coates, 2019). With these reasons, it is evident that potential vulnerability of the system-to-be-governed is linked to the support it provides to the livelihoods of thousands of individuals, their communities, and the Nova Scotia economy.

Lobsters are also recognized by the lobster industry as fished for food by Indigenous peoples in Atlantic Canada for centuries (DFO, 2011, 2014) and, by the Mi'kmaq, as a renewed opportunity to earn a moderate livelihood from fishing. Despite the Constitutional protection and recognition in the *Marshall* decision for Mi'kmaq treaty rights, at the time of this research, there were no further legal or governance mechanisms in effect such as agreements between DFO and the community or an organization of fishers to conduct a livelihood fishery by Mi'kmaq bands or organizations. Thus, livelihood fishers assert their right to fish and do this without a licence or authorization to fish by DFO. While there is an acceptance of the food fishery by the lobster industry and authorized through DFO using agreements and licence conditions, some livelihood fishers are fishing for sale under the guise of the food fishery that prevents the sale, barter or trade of lobsters. As a result, gear is seized and impounded, and the lobsters are confiscated by federal Conservation and Protection officers. As noted previously, other tactics such as personal attacks as racism, unfair treatments, vandalism and opposition to fishing by preventing Mi'kmaq from fishing are evident. To protect themselves, Mi'kmaw fishers conceal their fishing activities despite having recognized rights and

prefer to fish outside of the commercial fishing season or in the dark to protect their personal safety and property such as vehicles and gear. Based on the findings obtained through this research, it is evident that the Mi'kmaw livelihood lobster fishery, as it is currently implemented, subject Mi'kmaw livelihood fishers to physical harm, vandalism of gear and other personal property, and criminal prosecution.

7.2.2.5 Summary of the Features of the Social System-to-be-Governed Properties

It is evident from the above description that the features of the social system-to-be governed exhibit high diversity, complexity, dynamics, and vulnerability. The large number of organized licenced lobster fishers along Nova Scotia's coast and the potential for an unknown proportion of Mi'kmaw livelihood fishers from the Mi'kmaq First Nations and off-reserve population creates a highly diverse system-to-be-governed. As a result of legal pluralism, complexity is evident as divergent perceptions of the rules governing stakeholders and right holders that subsequently arise in conflicting practices fuel tensions between lobster fishers and the Mi'kmaq. Complicating matters within the Mi'kmaw context are Mi'kmaq-specific concerns and challenges such as the abuse of licence conditions and treaty rights, the lack of involvement and shared rules and loss of cultural values to guide fishing. The influx of Mi'kmaw livelihood fishers from other areas in Nova Scotia into productive fishing grounds, especially during the closed season, adds to tensions already in play for resident livelihood fishers and residents of the area, contributing to a dynamic social system-to-be-governed. Furthermore, the current fisheries management system is not set up for livelihood fishers who may or may not need licences to fish, as the *Marshall* decisions was not clear in this regard, especially in

an already fully subscribed lobster fishery according to Federal/Provincial participant group perspective. Vulnerability, however, is concerning and expressed differently within the social system-to-be-governed. While the commercial fishery has continued to benefit from and generate increasing wealth from the resource, it is potentially vulnerable as a system-to-be-governed given the economic value and support it provides to thousands of licence holders, should the stock decline substantially. In contrast, the Mi'kmaw livelihood fishers are personally and physically vulnerable when asserting their recognized and affirmed treaty right to fish for a moderate livelihood. As such, the social system-to-be-governed presents extraordinary challenges to the governing system, by non-Indigenous fishers being not currently vulnerable but Mi'kmaw livelihood fishers being assessed as very vulnerable.

7.2.3 Recommended Modes of Governance Based on System-to-be-Governed Properties

As stated in Chapter Three and Chapter Six, and according to interactive governance theory, appropriate modes of governance are recommended that best match the properties of the system-to-be governed (Jentoft, 2007). Thus, the governability of the system-to-begoverned is "dependent on the extent to which the governing system can deliver (or transcend) the four essentials of the system-to-be-governed" (Jentoft, 2007, p. 5). An appropriate mode of governing is hypothesized to be one, or combination of, three modes (self-governing, co-governing, or hierarchical) based on the assessment of the system-to-be governed properties.

Based on the features of the natural system-to-be-governed identified for American lobster in Nova Scotia, it has low diversity, complexity, dynamics, and vulnerability. However, the Mi'kmaw social system-to-be-governed is highly diverse, complex, dynamic, and vulnerable. According to IGT, the recommended mode of governance is a hybrid where all three forms of governance are needed. The commercial lobster industry is considered healthy and subsequently less vulnerable given the status of the lobster populations in Nova Scotia (DFO, 2016c, 2016d, 2018b, 2019a). As such, the Mi'kmaq view the lobster fishery as an achievable opportunity to provide a livelihood under the *Marshall* decisions and as a treaty right. Given the state of the resource as healthy, there are no conservation issues that should limit Mi'kmaq access.

The following section explores the extent to which the governing systems responds to the extraordinary demands of the system-to-be-governed. Knowing that governability is already low (Chapter Five), this assessment is to determine the extent of how the current governance modes perform its functions and to identify currents limits to the governability of Mi'kmaq lobster livelihood fisheries.

7.3 Examining the Performance of the Governing Modes

For each of the governing modes, assessing the performance of the orders is a nuanced examination of "the effectiveness and legitimacy of the governing system as it executes and implements it principles and functions" in relation to the governing demands (Jentoft, 2015, p. 28). As noted in Chapter Five, legitimacy and effectiveness were identified as challenges thus the performance of the governing system is hindered. Furthermore, as a moderate livelihood fishery has yet to be established within the federal legal framework,

the governing system design is not in accordance to accepted and normative standards such as social justice and is thus considered to be poor (Jentoft, 2013).

The research revealed that the perceived lack of legitimacy of the Mi'kmaw governing system and lack of understanding of the Mi'kmaw context by the non-Mi'kmaw governing system and system to be governed is creating tensions. As the perceived legitimacy of the livelihood fishery is not achieved from the hierarchical governing system, it is subsequently considered illegal from the perspective of the industry. Furthermore, while the industry is currently governed under federal and provincial laws, policies, and sanctions, many of the laws, policies, and sanctions that apply to the industry do not apply to the Mi'kmaq livelihood context.

Focusing on the governance institutions, each of the current governing systems is examined in relation to how it can deliver on the needs of the system-to-be-governed. Specifically, what is the capacity of the current governing modes to meet the demands of the current lobster fisheries? While the focus of this chapter is the lobster livelihood fishery, it is important to discuss the livelihood fishery in context of the current governing system and perspectives, using a Two-Eyed Seeing approach.

7.3.1 Safeguarding Provisions of Hierarchical Governing Systems

As discussed in Chapter Three and Chapter Six, hierarchical governing arrangements are characterized largely as top down driven with superordinate and subordinate structures with laws, policies, and sanctions as the primary safeguarding provisions (Kooiman et al., 2005). The following sub-sections explores the legitimacy and effectiveness of current

laws, policies, and sanctions of the hierarchical governing system as it responds to the demands of the livelihood fisheries. The primary hierarchical fisheries governance institutions are Fisheries and Oceans Canada (DFO) and the Nova Scotia Department of Fisheries & Aquaculture (NSFA).

7.3.1.1 Laws, Regulations, & Case Law Governing Lobster Fisheries

The following section is discussed within the context of commercial and Indigenous
fisheries. Indigenous fisheries are those fisheries intended for FSC, as communal
commercial, and the moderate livelihood fishery that is specific to a select few nations
such as the Mi'kmaq. A recreational fishery for lobsters is currently prohibited.

7.3.1.1.1 Commercial Lobster Fisheries

Canadian law is both effective and legitimate in its application to the commercial and communal commercial lobster fisheries. Well-structured and hierarchical, laws and regulations are in place to safeguard Canadian fisheries resources. The *Fisheries Act* provides a framework for management and control of fisheries, conservation and protection of fish habitat (s.2.1). The minister is authorized to issue leases and licences for fisheries or fishing under the *Fisheries Act* (s.7(1)). Regulations made under the act that pertain to the lobster fishery are the Atlantic Fishery Regulations (Part II, Part VI, 1985) and Fishery General Regulations (1993). Other legislation that applies includes the *Coastal Fisheries Protection Act* (1985), *Department of Fisheries and Oceans Act* (1985), and the *Atlantic Fisheries Restructuring Act* (1985). *Species at Risk Act* and *Oceans Act* (1996) are also applicable to the operationalization of the lobster fishery for

bycatch (DFO, 2011) and for the licenced operation of a lobster pound (*Fisheries Act*, 1985, s.17.1).

The lobster fishery is one of Canada's oldest managed fishery. The primary fisheries management system is effort control by restricting entry through limiting the issuance of licences in lobster management areas. The restrictions are in place for productivity purposes, in particular, to keep lobster mortality moderate as a management measure but also as a management measure for prosperity to support the development of long-term business plans for current licence holders (DFO, 2011). Other forms of management include restricting number of traps, area of access, catch size, and fishing seasons. The primary management instrument is the harvest plan organized under the integrated fishery management plan (IFMP) and subsequent licence conditions authorized through the Fisheries General Regulations. In Nova Scotia, three IFMPs are developed and follow a similar structure but differ in content. Two IFMPs are for the inshore (Maritimes and Gulf Regions) and one is in operation for the offshore (Maritimes Region). Integrated Fisheries Management Plans (IFMP) are not legally binding documents. While the creation of an IFMP "does not fetter the Minister's discretionary powers set out in the Fisheries Act" (DFO, 2011, para 3), they promote enhanced responsibilities and shared stewardship for the resource with the industry (DFO, 2011, 2014, 2020b). Within the IFMPs, there is articulation of the recognition of the Sparrow decision (1990) and the priority of the Aboriginal FSC fisheries. Reference to livelihood fisheries is currently non-existent in the IFMPs despite statements of departmental objectives "to ensure

respect for the constitutional protection afforded Aboriginal and treaty rights" (DFO, 2011, s. 5.2) and "respect Aboriginal and treaty rights to fish" (DFO, 2020b, s. 5.2).

Diversity exists as the tools used to manage the fisheries. For example, there are differences between and within management plans. Following a review done for this research, it is apparent that not all conservation measures established are consistent with principles of lobster sustainability. Such management tactics result in questioning the legitimacy of current conservation measures and the role of DFO in establishing consistent regulatory parameters to ensure lobster sustainability. For example, within the IFMP, each LFA operates independently using conservation harvest plans that are reviewed and approved annually. Conservation measures such as trap limits, seasons, and minimum legal carapace length (CL), and v-notching vary among LFAs. Licence conditions are specific to each LFA. Four different trap limits are in existence and the offshore fishery is based on a quota system, currently set at 720t, without a trap limit. Three different minimum legal carapace length (CL) are found depending on the area fished (DFO, 2011, 2014, 2020b). Not all LFA's use the reproductive potential of female lobsters in formulating their minimum carapace size. This value, known as L50, is the size at which 50% of the females reach maturity before harvest and is a key metric of the reproductive capacity used in stock assessments and fisheries management (MacDiarmid & Sainte-Marie, 2006). For example, the offshore industry (LFA 41) harvests lobster at a smaller CL (82.5 mm) than the median size of lobster established for the offshore (92 mm CL) (DFO, 2020a). Similarly, LFAs 32, 33-34, 35-38 in the Maritimes Region also harvest at a minimum legal size below the range of sizes at which 50% of the females

reach maturity (DFO, 2011). In the Gulf Region, lobsters reach maturity at smaller sizes (72-75 mm CL) and one LFA permits harvests below the L50. It is noted, however, that prohibitions to protect large ovigerous females are applied to all female lobsters between 115 and 129 mm CL (DFO, 2019c). Evidently, the use of conservation measures to protect the reproductive potential of lobsters are not consistent among LFAs, between DFO Management Regions, or between the inshore and offshore sectors. Given the diversity of environments in which lobsters inhabit, differences in growth, rates of maturity, and moulting times do exist. However, LFAs 32 to 38 and LFA 40 do not incorporate conservation measures that are based median size or the L50 as other LFAs do and highlight the diversity that exists in both in the lobster fishery and inconsistencies in adopting conservation measures.

7.3.1.1.2 Mi'kmaw Lobster Fisheries

Recent amendment to the *Fisheries Act* as described in s.2.3, "...upholding the rights of Indigenous peoples recognized and affirmed by section 35 of the *Constitution Act*, 1982, and not as abrogating or derogating from them" offer protection to Indigenous fisheries. Indigenous fisheries, such as the communal commercial and access to lobster for FSC needs, are regulated through the Aboriginal Communal Fishing Licences Regulations (Aboriginal Communal Fishing Licences Regulations to Indigenous organizations carrying out their fisheries, the Aboriginal Communal Fishing Licences Regulations provide the means to "issue a communal licence to an aboriginal organization to carry on fishing and related activities" (s.4(1)). Thus, its legitimacy is achieved from the perspective of non-Mi'kmaw stakeholders and governments who view it as an effective measure to provide a licence for communal

commercial and regulated access to community members for FSC needs. However, access to lobsters is community negotiated and the licence is held by the community rather than the individual as a communal licence for both the communal commercial and FSC lobster fisheries.

A key component to the Aboriginal Communal Licence Regulations is the use of agreements via community negotiations to develop licence conditions. Agreements between DFO and Mi'kmaq First Nations are part of the federal legal framework. A such, agreements and negotiated licence conditions are used to regulate the FSC fisheries (DFO, 2012). For FSC as well as commercial purposes, the negotiated conservation measures are identical to the commercial fishery, with the exception that fall food fishing is permitted in LFAs that do not have a fall fishery. Under the communal food fishing licences, lobsters cannot be sold as licence conditions explicitly prohibiting the sale, trade, or barter of lobsters. However, it is noted that individuals are using food fishing tags and selling lobsters as other opportunities are unavailable for livelihood lobster fishers to sell their product. Furthermore, some First Nations have been successful to have 'barter' excluded from their agreement, questioning the effectiveness of the licence conditions to manage fisheries.

The lack of agreements between DFO and First Nations or organizations regarding a controlled harvest of American lobster as a treaty fishery fuels concerns for the lack of mechanisms to safeguard the system-to-be-governed from all perspectives. However, there are already allocations equivalent to one or more lobster licences provided to First

Nations under the federal agreements for FSC needs. Generally, the First Nations often have more tags in possession than community members wanting to use them to acquire lobsters as food (or social or ceremonial needs). As with salmon, one community continually rejects regulation by DFO and refuses tags for their lobster food fishery.

At the time of this research, there were no agreements in place to regulate the livelihood lobster fisheries. Negotiations continue to take place between DFO and the Assembly of Nova Scotia Mi'kmaw Chiefs as they have for several years and recently (2020) included livelihood fishers through community engagement processes (ANSMC, 2020). At the time of writing, First Nations were engaging with fishers through the ANSMC to develop templates for a *Netukulimk* Livelihood Fisheries Management Plan, and, since October 1, 2020, the number of community-initiated lobster livelihood fisheries continues to increase, thus the potential for increase in both number and diversity of communal approaches to livelihood fishing.

Undoubtedly, federal laws and regulations are ineffective as safeguarding provisions for the Mi'kmaq lobster livelihood fishery. The *Marshall* decisions itself emphasized the inapplicability of Canadian law and regulations to the recognized treaty-based fishery. In this case, examples include key Canadian fisheries management strategies to regulate access such as the unlicensed sale contrary to s.35(2) of the Fishery (General) Regulations and closed seasons contrary to Item 2 of Schedule III of the Maritime Provinces Fishery Regulations. Specifically, the *Marshall* decisions reinforced the regulated and limited right to fish for a moderate livelihood where justification is shown.

However, the question of authority remains in situations where justification cannot be shown. As such, whether the *Fisheries Act* will apply to livelihood fisheries is a question of when the regulatory authority extends to the livelihood fishery. Paragraph 33 of Marshall II, states that "Section 43 of the Act sets out the basis of a very broad regulatory authority over the fisheries which may extend to the native fishery where justification is shown." Thus, the corollary is that in situations where justification is not provided, such as in the case where conservation and sustainability of the resource is not threatened by the Mi'kmaw lobster livelihood fishery or when the fishery does not impact the participation of non-Aboriginal groups as an example of "other grounds" for justification (para 41), the regulatory authority of DFO does not extend to the Mi'kmaw livelihood fishery. According to s.43(a) of the Fisheries Act, the Governor in Council may make regulations "for the proper management and control of the sea-coast and inland fisheries, including for social, economic or cultural purposes;" but lacks reference to treaty rights or more specifically moderate livelihood fisheries. Consequently, there are federal authority and regulatory gaps for Mi'kmaw livelihood fisheries for which justification cannot be shown by DFO.

The interpretation of the moderate livelihood as securing necessities and not open-ended accumulation of wealth has largely been the breadth of discussions between the Mi'kmaq and DFO. The regulation of the treaty right itself, or even the opportunities presented within the *Marshall* decisions to fill the authority and regulatory gaps in fisheries where justification is not shown remain unaddressed. The following sections examines both limits and opportunities arising from the *Marshall* decisions.

7.3.1.1.3 Limits in the *Marshall* Decision

Marshall II reinforces species specific justifications to limitations on the treaty right to fish (para. 18, 21). Regulatory prohibitions, including licencing restrictions, "are inoperative... unless justified under the *Badger* test" (para. 26) and justification for a licensing requirement is dependent on facts (para. 28), including the use of closed seasons (para. 30). Justification according to the *Badger* test is expected for regulatory limits that take catch below the quantities reasonably expected to produce a moderate livelihood or other limitations imposed on treaty right (para. 39). As stated in R. v. Marshall (1999), Aboriginal people are entitled to be consulted about limitations on the exercise of Aboriginal and treaty rights that extend to the treaty beneficiaries, although the nature and scope of the duty of consultation will vary with the circumstances (para. 43(d)). Since the *Marshall* decisions (1990), there has been progress on the formalization of consultation with the recent use by DFO to consult on the Aboriginal right to fish for salmon (Denny & Fanning, 2016a). However, processes to include fishers are not fully established, even in situations where consultation is on-going, as in Atlantic salmon (Chapter Six). There is no formal consultation process for lobster. While conducting this research, the lack of inclusion of fishers in formalized consultation was noted as an identified challenge by livelihood fishers.

7.3.1.1.4 Opportunities in the *Marshall* Decision

Ultimately, the outcomes of *Marshall* underscore the need for improved governance between the Mi'kmaq and DFO as the authorities of both the Aboriginal community and the government of Canada are recognized in the *Marshall* decision. However, conflicting perspectives exist on whether treaty rights, as *Marshall II* discussed, are communal, thus

implying treaty rights do not belong to the individual (para. 17) and are asserted by the individual as beneficiaries of a collective right to support themselves and their family. Where justification is demonstrated, regulatory authority established under s.43 of the Fisheries Act may extend to the treaty fishery (para. 33). However, the Mi'kmaq perspective, based on the analysis of the data collected for this research, is that treaty rights are also individual and thus have been asserted and exercised individually with and without community support. Furthermore, Mi'kmaq communities, as Band Councils, derive their authority from the *Indian Act* (1985) with limited powers to create laws for their community as long as laws are consistent with the Act and regulations and the subject is within identified Council powers (s.81). Fisheries are a subject and thus are included but are limited to those contained within reserve boundaries (s.81(1)(o). Evidently, Mi'kmaq authority is limited by the *Indian Act* to make rules to govern rightsbased fisheries unless it occurs within reserve boundaries. Even so, the Listugui Mi'kmaq government enacted their lobster law under section (s.81(1)(o) Preservation of Fur-Bearing Animals, Fish, and Game with access to areas adjacent to their community (First Nations Gazette, 2019). However, the Fisheries Act can indeed accommodate other modes of governance and address limited jurisdiction identified in the *Indian Act* through agreements, programs and projects with an Indigenous governing body, defined as; means a council, government or other entity that is authorized to act on behalf of an Indigenous group, community or people that holds rights recognized and affirmed by section 35 of the Constitution Act, 1982; (Fisheries Act, 1985).

It is evident, and ironic, that the Fisheries Act can empower Band Councils or other Indigenous governing bodies to create opportunities for other forms of governance more than the *Indian Act* itself can. Under the *Fisheries Act*, agreements can be made with Band Councils and used to identify many of the limits identified in this assessment and the challenges identified by interviewees. For example, agreements can be used to enhance governance (4.1(1)), establish roles, powers, and functions (4.1(2)(a)), standards and codes of practices to be followed in the administration respective programs and projects (4.1(d)), processes for policy development, operational planning and communication (4.1(e)). The opportunity to enter into agreements may also address opportunities to incorporate historical governance and Mi'kmaw jurisdiction and take into consideration the perception of the individual's right to acquire a moderate livelihood by creating structure where necessary. Given the reliance on established governments under the *Indian Act*, and the marginalizing of Mi'kmaw fishers by community governments, the legitimacy of the Mi'kmaq governing system remains disputed by Mi'kmaw fishers. Thus, the opportunity to create a Mi'kmaw fisher organization, or organizations, are possible under the Fisheries Act.

Opportunities to legitimize a limited commercial fishery was one of the *Marshall II* outcomes. For example, the Governor in Council has the power to amend the Aboriginal Communal Fishing Licences Regulations to accommodate a limited commercial fishery (para. 34), which at the time of the Marshall decision, pertained to the FSC fishery. Presently, communal commercial fisheries are authorized through the Aboriginal Communal Fishing Licences Regulations. Based on a review of the regulations, it broadly

identifies that the Minister "may issue a communal licence to an aboriginal organization to carry on fishing and related activities" (Aboriginal Communal Fishing Licences Regulations, 1993, s.4(1)). Currently, the Aboriginal Communal Fishing Licences Regulations does not define the scope of fishing as FSC or communal commercial, and thus appears to accommodate a livelihood fishery as "fishing and related activities" authorized through DFO to the Mi'kmaw First Nation.

Ministerial responsibility is reinforced in *Marshall* whereby his/her authority extends to public objectives, such as economic and regional fairness and historic reliance and participation fisheries by non-Aboriginals, which may be taken in account in devising regulatory schemes (para. 40(c)). However, limits to how the Minister makes those decisions were also specified. Specific criteria must be established for the exercise of Ministerial discretionary authority to grant or refuse licences in a manner that recognizes and accommodates Aboriginal and treaty rights (para. 33). Such criteria were recently added to the *Fisheries Act* (s.2.5) including the application of a precautionary approach and an ecosystem approach (s.2.5(a)), the sustainability of fisheries (s.2.5(b)), and Indigenous knowledge (s.2.5(d)), to name a few of the considerations for ministerial decision-making.

Mi'kmaq also have the authority to incorporate their own conservation and management techniques, although until the fall of 2020, did not collaborate or coordinate to do so within their respective communities in Nova Scotia. Current resource management tools and techniques can be used provided their use is justified and the Aboriginal community

is appropriately consulted (para. 44(e)). However, Aboriginal concerns and proposals must be taken into consideration which may lead to different techniques of conservation and management that may be used in respect of the exercise of the treaty right (para. 44(e)). This complicates and furthers the challenges perceived by the commercial lobster fishery regarding a different set of rules but alternatively also allows for the use of Mi'kmaw-based fishing strategies based on *Netukulimk* as an opportunity. The Supreme Court of Canada recommended negotiation and reconciliation to accommodate the treaty right that properly considers the context, complexity of fishing, and competing interests (para. 22). To date, this research suggests this is not accomplished to the satisfaction of the Mi'kmaq people, especially Mi'kmaw livelihood fishers, as negotiations are exclusively between Mi'kmaq governments and DFO. This contributes to the challenge of disputing the legitimacy of the governing system and reinforces marginalization of fishers in discussions that impact their individual treaty right to fish (Chapter Five).

The *Marshall* decision addressed the harvest of eels as unlicensed sale but did not address the purchase of fish or fish product under current provincial regulations. The next sections examine the current provincial law and regulations that limit the sale and purchase of fish and fish products by livelihood fishers.

7.3.1.2 Laws & Regulations Governing the Sale of Fish and Fish Products
The purchase, sale, and processing of fish is the responsibility of the provincial
government once it reaches the wharves (Nova Scotia Fisheries & Aquaculture, n.d.-c).
Michael Stephens, a traditional harvester shares their frustrations similar to Chief Paul's
dissatisfaction over the lack of a legal framework to enable a moderate livelihood fishery,

especially in the legal framework currently limiting the sale of lobsters caught under the livelihood fishery;

Everything's illegal. Everything's black market. Like, I can't go put those 30-40 traps in the water right now, harvest them under food, social, ceremonial and then sell them and I can't do it under moderate livelihood either, because the Government is going around telling everybody, 'you buy native lobsters, we're shutting you down.' So, there is no reward for it. You got to do everything black market, under the table, behind closed doors, in the dark of night, wherever you can to move whatever product you can and there's always a risk with that, as well. You don't know who you're dealing with, you know what I mean? There're all these strangers. All these non-natives and it's just giving you a s**t price for whatever you could give them at that time.

Provincial regulations applicable to the sale of fish and fish products is the Fish Buyers' Licensing and Enforcement Regulations made under subsection 77(2) of the *Fisheries and Coastal Resources Act* (1996). Buyers' licences are required to both buy and sell fish and fish products (*Coastal Resources Act*, s.73) unless exempt in the regulations. Exemptions apply to the sale of less than 25 kg for personal consumption (s.3(1)(a)) or for resale by a non-profit organization (s. 3(1)(c)). However, prohibitions exist regarding the purchase and sale of lobster that do conflict with *Marshall* decision outcomes for the sale of fish or fish products greater than 25 kg, intended for resale, or sold in retail outlets for personal consumption such as restaurants. This being, prohibitions on the buying, selling and processing of fish and fish products that have been illegally caught and

harvested (s.19(1)(a)), where illegally refers to a lack of licence issued by DFO or without appropriate authorization from the Canadian Food Inspection Agency (s.19(2)(a)) or fish caught in contravention of federal or provincial regulations such as season (s.19(2)(b)). Current conditions for the fish buyer's licence require record keeping for catches from commercial fishers that include both the licence number and fishing vessel used to harvest the fish (Nova Scotia Fisheries & Aquaculture, 2020). Similarly, other prohibitions include purchase of fish or fish products from those who do not have valid commercial fishing licences (s.19(1)(b)) or caught under the FSC fishery pursuant to the Aboriginal Communal Fishing Licences Regulations (1993, s. 19(1)(d)).

Livelihood fishers currently do not have licences and any lobster acquired through food licences and sold to fish buyers by livelihood fishers puts fish buyers at risk of prosecution. Evidently, while the Mi'kmaq have a recognized treaty right to harvest without a licence and in contravention to current commercial fisheries law, it is illegal for fish processors, fish buyers, and restaurant owners to purchase fish and fish products acquired from the livelihood fishery or from individuals in excess of 25 kg/day. Thus, the provincial regulations together with the federal restrictions to sell, barter or trade lobster acquired through the FSC licence prevent unlicensed sale of lobster within Nova Scotia.

7.3.1.3 Policies

Commercial fisheries are governed through policies for licensing, new access, and emerging species. The Maritimes Region Commercial Fisheries Licensing Policy and the Gulf Region Commercial Fisheries Licensing Policy outline the rules of the fishery.

Many of the current policies applicable to the commercial lobster fisheries are exempt for

the licences issued under the Aboriginal Communal Fishing Regulations (DFO, 2002; DFO, 2021b) or are meant to be interpreted in conjunction with the Aboriginal Fisheries Strategy (AFS), such as the Atlantic Fisheries Licensing Policy for Eastern Canada (1996). The AFS is a framework that arose from the *Sparrow* decision to provide access through negotiation for fisheries that are managed by DFO and where land claims settlements do not have an existing fisheries management regime. The AFS policy is to issue licences to First Nations whether or not they reach an agreement with DFO, as indicated in Chapter Six (DFO, 2012, para 5 to 6).

The AFS have other objectives such as contributing to economic self-sufficiency, providing a foundation for the agreements, and enhancing the capacity and fisheries management skills of Aboriginal groups. Fisheries agreements could contain provisions for FSC purposes, terms and conditions in communal fishing licences, arrangements for co-operative management, and other provisions related to communal licenses (DFO, 2012). A policy regarding communal commercial fishing does not exist.

A related document, An Integrated Aboriginal Policy Framework, proposes a number of strategies as guidance to achieve its primary objectives of building and fostering relationships with Aboriginal peoples and upholding the honor of the Crown. It also includes guidance on facilitation of Aboriginal participation in fisheries economic opportunities and management of aquatic resources. Mostly containing background material and annexes, the Framework is guided by principles of respect, innovation in seeking solutions, participation of Aboriginal peoples, and balance in accommodation of

Aboriginal interests, conservation, and interests of other Canadians. It promotes seven key strategies, including "Taking into account Aboriginal and treaty rights - by carrying out its mandate in a manner consistent with the constitutional protection provided for existing Aboriginal and treaty rights of the Aboriginal peoples of Canada." (DFO, 2007). However, this document neglects to include treaty rights independent of land claims agreement as evidenced in paragraph 3 which states,

for Aboriginal groups who are not party to a land claim agreement and where DFO manages the fishery, DFO will continue the current AFS policy of conducting consultations and accommodating interests, including FSC fishing opportunities, through time-limited fisheries management agreements; which (often) includes communal fishing licences issued under the Fisheries Act through the Aboriginal Communal Fishing Licences Regulations (ACFLR);

Furthermore, there is no avenue for a treaty fishery in the absence of land claims agreement other than communal fishing licences. Paragraph 4, states "when agreement cannot be achieved, DFO accommodates FSC fishing through communal fishing licences issued under the ACFLR." Clearly there is a gap in policy specific on how to address Mi'kmaq treaty rights to fish in Nova Scotia other than redirecting efforts for implementing Mi'kmaq communal commercial fisheries.

Provincial policies relevant to the purchase and sale of fish and fish products is the Fish Processors & Fish Buyers Licence Policy. The policy articulates the value of an equitable environment in which to conduct fish buying and processing activities in Nova Scotia and recognizes the evolving nature of fisheries agreements with First Nations and DFO. The

policy also outlines specific requirements for the general fish buyers licence and conditions for which amendments to that licence fulfills the conditions as an independent buyer for lobster, including the requirement for a lobster holding and handling facility with a minimum capacity to hold 2,000 lbs of lobster as a wholesale buyer (Nova Scotia Fisheries & Aquaculture, 2017). Nova Scotia Fisheries & Aquaculture is not accepting applications for licences until the completion of the review of the current licence policy and to protect the industry from competition (CBC News, 2018). While current conditions for the fish buyers' licence include prohibitions on the purchase of fish or fish products caught under the FSC fishery pursuant to the Aboriginal Communal Fishing Licences Regulations (s. 19(1)(d)), there is no policy to differentiate between Aboriginal licences as both communal commercial and FSC lobster fishers are licenced under the same regulations.

To summarize, based on the review of existing federal and provincial policies applicable to the wide scope of Aboriginal fisheries, there is a lack of federal policies specific to safeguard the Mi'kmaw context of the social system-to-be-governed. While the Integrated Aboriginal Policy Framework promotes strategies, guidance to address federal government negotiations with First Nations regarding access or licences, the recognition of a treaty right to fish independent of a land claims agreement such as peace and friendship treaties are absent. Provincial policies clearly articulate the need to be flexible to the evolving nature of Aboriginal fisheries but without a commercial fishing licence, the policy does not make accommodations for the purchase of product for an unlicensed fishery. Furthermore, the Nova Scotia Fisheries & Aquaculture created licence conditions

that are in contravention of their regulations, thereby preventing the sale of lobsters that are caught under the Aboriginal Communal Fishing Licence Regulations.

7.3.1.4 Sanctions

The *Marshall* decision itself is evidence that sanctions arising from failing to follow fisheries laws and regulations are not applicable to Mi'kmaq individuals as they would be to other Canadians. As First Nations have not entered into livelihood agreements with the federal government, the limitations of provincial regulations on reserve, and the lack of policies regarding the rules surrounding a livelihood fishery, sanctions that could apply to Mi'kmaq individuals fishing for a moderate livelihood do not exist. Unless individuals fished under current food fishery licences and subsequently sold the product (this applies to only those First Nations under a current AFS agreement) or failed to adhere to the limits identified in the *Marshall* decision, livelihood fishers are exempt from federal and provincial laws and regulations unless justification is shown. Even so, there are no enforceable sanctions that exist to complement the *Marshall* decision, such as accumulation of wealth or revenue in excess of securing necessities, or fishing species beyond community's historical fishing grounds as examples, in the absence of agreements between Mi'kmaq First Nations and DFO.

Despite the lack of justification by DFO, federal conservation officers have resorted to seizing gear and product to prevent further fishing, or provoking fishers to initiate charges related to assault or disturbance. Efforts to prevent buying of product from livelihood fishers were also noted to deter both fishing and purchase of lobsters. Here, sanctions are applicable to fish buyers rather than the livelihood fishers. Such sanctions,

as described in the Processors & Fish Buyer's Licence Policy (2017), is the suspension and/or termination of their licences. Many livelihood fishers are aware of the sanctions applicable to fish buyers and do not want to impact the livelihood of other individuals. As such, sales from livelihood fisheries are based on individual requests for lobster for personal consumption which are not in contravention to current provincial fish buyer's licence, while others are intended for sale on the black market or traded for necessaries such as fuel.

7.3.1.5 Summary of the Performance of Hierarchical Modes

Based on a review of the current legal framework, it is evident that legal pluralism arising from the Constitution Act (1982) and its subsequent recognition by the SCC in the Marshall decisions creates challenges for the hierarchical institutions in its efforts to be legitimate and effective in safeguarding the systems-to-be-governed. Laws and regulations governing the harvest of lobster, while seen as legitimate for the commercial lobster industry, are ineffective for the livelihood lobster fishery unless justification to limits placed on the lobster livelihood fishery is demonstrated by DFO. Current fisheries management strategies used to protect the natural system-to-be-governed, such as closed seasons and effort controls, are inapplicable to the livelihood fisher unless justified. Sanctions related to the limits outlined in *Marshall* do not exist in current regulations to provide access and override current laws and regulations that are applicable to commercial fishery. Thus, there are no mechanisms for which sanctions can be applied without justification. Furthermore, the exemption of Aboriginal fisheries from current policies governing the commercial fishery and the lack of policies relevant to Aboriginal fisheries contribute to a lack of effectiveness of the hierarchical modes for safe-guarding

the systems-to-be-governed. It is noted that legal pluralism restricts governability (Jentoft & Chuenpagdee, 2015). In this case study, legal pluralism afforded by the Constitutional protection of treaty rights restricts the governability of livelihood lobster fisheries by DFO for fisheries where justification is not shown.

Several limits to the livelihood lobster fishery arising from hierarchical modes were identified in this research. In particular, the limited scope of authority and powers of the Band Councils for fisheries governance in the *Indian Act*, current provincial regulations that prevent the purchase of product by fish buyers, the lack of federal policy and sanctions applicable to the livelihood lobster fishery, and last but certainly not least, limits established from the Marshall decisions (1999) that govern the Mi'kmaw livelihood lobster fishers. The Marshall decisions (1999) identified limits such as scope and access to the fishery, controlled economic benefit through regulations, set geographic boundaries to limit areas of fishing, and conservation of the resource. Opportunities are available through current Aboriginal Communal Fishing Licences Regulations to licence a livelihood fishery via Band Council authority or tribal organization with negotiated conditions and through section 4.1 of the Fisheries Act to improve governance via agreements, programs, or projects. The Marshall decisions (1999) itself calls for improved governance and increased interaction between the Mi'kmaq and DFO. The intention was to resolve outstanding issues and provide opportunities to incorporate Mi'kmaq traditional practices but this has yet to be fulfilled. However, the use of decision-making criteria for the exercise of Ministerial discretionary authority to grant or

refuse licences in a manner than recognizes and accommodates Aboriginal and treaty rights (para. 33) is now incorporated into the *Fisheries Act* (s.2.5).

The *Marshall* decision, in the eyes of the Mi'kmaq, focused on federal limitations to the treaty right to fish for a moderate livelihood. There are, however, self-governing organizations that may be better situated to address legal pluralism as sensitivity is needed to address the governance of Mi'kmaq Aboriginal and treaty rights (Jentoft, 2007; Jentoft, 2011). The next section examines the capacity of current First Nations as self-governing organizations to meet the demands of the Mi'kmaw livelihood lobster fishery.

7.3.2 Contextualizing Provisions of Self-Governing Modes

As discussed in the Chapter Three, self-governing arrangements are characterized as having the ability to govern with little intervention or no support from the government. The following explores the extent of the legitimacy and effectiveness of Mi'kmaw self-governing institutions as it responds to the sensitivity needed to address the Constitutionally protected treaty rights in the context of Mi'kmaw livelihood fisheries.

The primary self-governing institutions are the thirteen Mi'kmaq First Nations in Nova Scotia. At the time of my research, many of these First Nations were engaged in a coordinated approach to govern livelihood fisheries through DFO negotiations while other First Nations are independently pursuing a community-specific approach. However, and since the fall of 2020, the focus has shifted to community-driven with support for the development of their fishing plan either independently or with the assistance of KMKNO. The template developed by KMKNO was shared for use with First Nations and

subsequently amended to reflect the areas of interest of First Nations interested in pursuing a lobster livelihood fishery. Potentially, this could result in 13 different lobster livelihood fishing plans in Nova Scotia.

As the number of Mi'kmaq First Nations in Nova Scotia derive their authority from the *Indian Act* have limited powers to preserve and manage fisheries within respective reserve boundaries, the assessment of how Mi'kmaq First Nations performance is based on fishing plans and policies developed by the First Nations or with the support of KMKNO. The following assessment of performance of two lobster livelihood fisheries management plans (Potlotek First Nation⁴⁷ and Listuguj First Nation, 2019) as selfgoverning initiatives was conducted using two sets of criteria. First, using Ostrom's (1990) eight design principles for self-governing of common pool resources, I assessed which of the principles are sufficiently or insufficiently met, and which were absent. The use of Ostrom's design principle was recommended by Jentoft & Chuenpagdee (2015) but noted that it may not be exhaustive. Second, given the importance of legal pluralism underpinning the case study, I incorporated Jentoft's (2007; Jentoft, 2011) recommendation to understand legal pluralism, in particular, how legal pluralism was addressed through sensitivity. Plan #1, developed by Potlotek First Nation and KMKNO, was recently developed as a livelihood lobster fishery policy and harvest plan. The assessment showed it had a well-developed harvest plan but lacked important aspects of the fishery policy. Given the short time in which it was developed (one month), gaps

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⁴⁷ Copy of the Potlotek First Nation Netukulimk Livelihood Fishery Plan and related documents are not publicly distributed and are on file with the author.

were identified in the policy and protocol documents as well as ways to achieve and operationalize *Netukulimk*. Plan #2, Listuguj First Nation, was recently developed in 2019 as a law with both policy and harvest plan aspects and adequate sanctions and monitoring but was found to be lacking opportunities for fisher participation beyond community consultation. In this application, I assessed the methods of gathering information and decision making, and how cultural practices were supported (Jentoft, 2007). Each of the criteria sets are discussed further in the following sections. Note, however, the use of a community authorized approach is new and understood to be evolving processes.

7.3.2.1 Ostrom's Design Principles for Self-Governing Common Pool Resources

Ostrom describes eight design principles for self-governing of common pool resources (CPR) such as fisheries. Each of the selected plans were discussed in relation to Ostrom's design principles (Ostrom, 1990) in the context of Mi'kmaw livelihood lobster fishery.

Appropriators, described by Ostrom (1990), are those who withdraw resource units from a resource area.

Table 10 Summary of the capacity of current First Nations as self-governing organizations to contextualize to meet the demands of the Mi'kmaw livelihood lobster fishery using Ostrom's design principles of CPR Institutions.

A. Ostrom's	Plan #1	Plan #2
Design	Potlotek First Nation	Listuguj First Nation
Principles		
of CPR		
Institutions		
Clearly defined	Insufficient	Insufficient
boundaries	Applicable to all members of the	Applicable to descendants of the
People	identified band who registers to	territory and community but must
Place	fish; no distinction between on and	have immediate family residing in
	off-reserve membership, as such	area. Fishing limited spatially to
	implies application to all members	one lobster fishing area of
	despite their area of residence and	historical reliance.
	other opportunities for	
	representation such as off-reserve	GAPS/INCONSISTENCIES:
	representation. Fishing restricted to	Lacks ability to exclude other
	area of traditional fishing for	Mi'kmaq from fishing to prevent
	community rather than the entire	overuse or over extraction.
	province. Identified areas of fishing	
	align with federal lobster fishing	
	areas.	
	GAPS/INCONSISTENCIES:	
	Lacks ability to exclude other	
	Mi'kmaq other than Band	
	employees from fishing to prevent	
	overuse or over extraction.	
Congruence	Insufficient	Insufficient
between	Justification for fishing based on	Access and allocation are
appropriation and	species stock status; limits follow	conservative; fishing is restricted
rules and local	commercial fishery for safety and	to one area of traditional fishing
conditions	ecological considerations. Access	

A. Ostrom's	Plan #1	Plan #2
Design	Potlotek First Nation	Listuguj First Nation
Principles		
of CPR		
Institutions		
Appropriation rules	(longer seasons; few fishers) and	rather than other areas in the
related to local	allocation (fewer traps) differ from	province.
conditions,	commercial fishery.	
provisional rules		GAPS/INCONSISTENCIES:
requiring labour,	GAPS/INCONSISTENCIES: The	Lacks information on stock
material, and/or	region of application broad and out	status. Monitoring excessive
money	of the normal scope for a lobster	given the short season and
	fishery conflicts with the image as	number of traps available to
	"small scale, artisanal fishery with	community thus the low risk
	commercial attributes" that implies	associated with the fishery.
	small scale with low technology	
	and low capital investments.	
	Monitoring excessive given the low	
	risk associated with the fishery.	
Collective choice	Insufficient	Insufficient
agreements	Committed to creation of fisher	Consultation is directed to
Participation in	committee limited to harvest plans	community rather than those
modifying	and conditions and provide	directly impacted, i.e fishers.
		· -
operational rules	recommendations to identified	-
operational rules	recommendations to identified Band and sanctions.	GAPS/INCONSISTENCIES:
operational rules		
operational rules		
operational rules	Band and sanctions.	Unclear whether fishers have a
operational rules	Band and sanctions. GAPS/INCONSISTENCIES:	Unclear whether fishers have a role in modifying operational
	Band and sanctions. GAPS/INCONSISTENCIES: Unclear whether fishers have a role	Unclear whether fishers have a role in modifying operational
Monitoring	Band and sanctions. GAPS/INCONSISTENCIES: Unclear whether fishers have a role in modifying operational rules.	Unclear whether fishers have a role in modifying operational rules.
Monitoring those who monitor are accountable to	Band and sanctions. GAPS/INCONSISTENCIES: Unclear whether fishers have a role in modifying operational rules. Insufficient	Unclear whether fishers have a role in modifying operational rules. Sufficient
Monitoring those who monitor	Band and sanctions. GAPS/INCONSISTENCIES: Unclear whether fishers have a role in modifying operational rules. Insufficient Identified use of community	Unclear whether fishers have a role in modifying operational rules. Sufficient Authorization of rangers via

A. Ostrom's	Plan #1	Plan #2
Design	Potlotek First Nation	Listuguj First Nation
Principles		
of CPR		
Institutions		
or are the	Excessive monitoring proposed to	both the Band and Band designate
appropriators	include economic, social,	and traditional governance with
	biological, spiritual, and cultural	clearly defined roles and
	well-being; landings, compliance.	responsibilities for monitoring.
		Monitoring is excessive given the
	GAPS/INCONSISTENCIES: Lack	short season and access provided
	of clarity of monitoring activities	to community members.
	that will be reviewed by the Band.	
	Monitors lack criteria for which	
	harvests will be assessed and the	
	authority to initiate sanction	
	procedures.	
Graduated	Insufficient	Sufficient
sanctions	Sanctions are specific harvesting	Sanctions are specific to
Assessed graduated	activities but not graduated. Current	harvesting activities and are
sanctions	sanctions include revoking harvest	graduated based on number of
sanctions depending on the	sanctions include revoking harvest privileges until graduated sanctions	graduated based on number of times offences occurred. Use of
	C	
depending on the	privileges until graduated sanctions	times offences occurred. Use of
depending on the seriousness and	privileges until graduated sanctions developed. Intent to develop	times offences occurred. Use of community board to review
depending on the seriousness and	privileges until graduated sanctions developed. Intent to develop	times offences occurred. Use of community board to review violations and advise Council for
depending on the seriousness and	privileges until graduated sanctions developed. Intent to develop graduated sanctions identified.	times offences occurred. Use of community board to review violations and advise Council for
depending on the seriousness and	privileges until graduated sanctions developed. Intent to develop graduated sanctions identified. GAPS/INCONSISTENCIES:	times offences occurred. Use of community board to review violations and advise Council for
depending on the seriousness and	privileges until graduated sanctions developed. Intent to develop graduated sanctions identified. GAPS/INCONSISTENCIES: Lacks how sanctions will be	times offences occurred. Use of community board to review violations and advise Council for
depending on the seriousness and	privileges until graduated sanctions developed. Intent to develop graduated sanctions identified. GAPS/INCONSISTENCIES: Lacks how sanctions will be addressed beyond a community	times offences occurred. Use of community board to review violations and advise Council for
depending on the seriousness and context of offence	privileges until graduated sanctions developed. Intent to develop graduated sanctions identified. GAPS/INCONSISTENCIES: Lacks how sanctions will be addressed beyond a community process.	times offences occurred. Use of community board to review violations and advise Council for appropriate resolutions.
depending on the seriousness and context of offence Conflict resolution	privileges until graduated sanctions developed. Intent to develop graduated sanctions identified. GAPS/INCONSISTENCIES: Lacks how sanctions will be addressed beyond a community process. Insufficient	times offences occurred. Use of community board to review violations and advise Council for appropriate resolutions. Insufficient
depending on the seriousness and context of offence Conflict resolution mechanisms	privileges until graduated sanctions developed. Intent to develop graduated sanctions identified. GAPS/INCONSISTENCIES: Lacks how sanctions will be addressed beyond a community process. Insufficient	times offences occurred. Use of community board to review violations and advise Council for appropriate resolutions. Insufficient Final decision-making authority

A. Ostrom's	Plan #1	Plan #2
Design	Potlotek First Nation	Listuguj First Nation
Principles		
of CPR		
Institutions		
		GAPS/INCONSISTENCIES:
		Conflict resolution process for
		subjects beyond violations.
Minimal	Sufficient	Sufficient
recognition of	Federal legislation under the <i>Indian</i>	Federal legislation under the
rights to organize	Act supports community	Indian Act supports community
Rights to devise	governmental organization;	governmental organization;
own institutions	organization to address fisheries is	organization to address fisheries
are not challenged	supported through the Fisheries	is supported through the Fisheries
by external	Act.	Act.
government		
Nested enterprises	Insufficient	Insufficient
All of above are	Use of ANSMC to review and	Band consulted with other
organized in	approve plan though not all	governments and user groups.
multiple layers of	communities are part of the	GAPS/INCONSISTENCIES:
nested enterprises	ANSMC.	Lack of clarity on processes for
	GAPS/INCONSISTENCIES:	continuous interaction or
	Lacking solidarity and unity among	indication of how Band is
	Mi'kmaq communities locally and	organized in nested enterprises.
	provincially. Limited to Mi'kmaq	No nesting within Mi'kmaq or
	processes with nesting within	other fishery or leadershio
	ANSMC.	processes.

Design Principle 1: Who and where: clearly defined boundaries for resource withdrawal Ostrom notes the need to clearly identify who has the right to withdraw resources and the boundaries for resource withdrawal. As described in each of the plans (Table 10), the ability to designate clearly define geographical boundaries was evident. Geographic boundaries for both plans were specific to areas adjacent to the community However, who could fish differed between the plans. For Plan #1, only fishers with Band membership could fish under the plan. In Plan #2, those who could fish was applicable to Mi'kmaq individuals with immediate family who are current community members, despite membership. Both plans did not have the ability to exclude Mi'kmaq from other communities fishing under other harvest plans. As such, both plans appear insufficient in their design to meet design principle 1.

Design Principle 2: Process for withdrawing resource units and provision rules fit the local conditions and reflect the attributes of the resource

Ostrom recounts that good fitting rules are necessary as are processes to ensure "fair, orderly, and efficient" methods for allocation of resources (Ostrom, 1990, p. 33). Based on the review of the plans, differences in alignment of provisional rules and process for withdrawing resource units to resource attributes are evident. Justification for extracting resource units in relation to species status is provided in plan #1 but lacking in plan #2. Similarly, differences are noted in the duration of the fishing season, and allocations and provisional rules for access. Plan #1 emphasises a longer season with few traps with individual and vessel limits while plan #2 takes the opposite approach. Plan #2 implements a community trap limit with priority of access for community food fishery

and remaining number of traps available to community members to use at their discretion. Access is based on first come - first serve basis without individual limits to share within community. The region of application for plan #1 is broad and conflicts with the image of their self-described image as small-scale commercial fishery while plan #2 restricts fishing to local and historically utilized areas. Common to both plan examples, however, is excessive monitoring given the healthy status of the resource and low effort of fishing in comparison to the commercial fishery. With this in mind, the use of good-fitting rules appears to be insufficient.

Design Principle 3: Appropriators affected by the rules can participate in modifying the operation rules

Rules can be better tailored to the local context when fishers who, over time, directly interact with each other, can modify rules to suit the characteristics of their settings (Ostrom, 1990). In each of the plans, there are opportunities through commitments to involve fishers. In plan #1, there is proposed initiation of a fisher committee to meet annually to modify harvest rules. However, in plan #2, consultation is directly with the community at large rather than those directly impacted. Common to both plans are the lack of clarity on whether there is opportunity to modify operation rules beyond harvesting. As such, both plans were assessed as insufficient in the application of whether fishers can participate in modifying operational rules.

Design Principle 4: Accountability of monitors to themselves or are themselves the monitors

Ostrom suggested that while those who develop the rules will not ensure all participants comply, there is the tendency to cooperate if others cooperate and monitor each other (Ostrom, 1990). As such, internal monitoring is characteristic of long enduring CPR institutions (Ostrom, 1990). In both plans, the use of community guardians or community authorized monitors are proposed and accountable to the Band Council rather than the fishers. With this in mind, on the surface, both plans do not seem to meet this design principle.

Design Principle 5: Violators are assessed graduated sanctions by other appropriators, officials accountable to the appropriators, or both

Here, Ostrom noted that appropriators create their own internal enforcement to deter those who may break the rules and to assure that rules are followed by the majority (Ostrom, 1990). Internal enforcement (Mi'kmaq) is proposed in both plans. However, only plan #2 meets the characteristic of clearly defined graduated sanctions and articulation of who assesses the violators. Sanctions are specific to harvesting activities that involve revoking harvesting privileges based the frequency of offences. A community board reviews violations and advises the Band Council for appropriate resolutions. Here, the board performs an advisory role while the Band Council addresses sanctions. In plan #1, who monitors is addressed and only one type of sanction is proposed (revoking harvest privileges) until graduated sanctions are identified. However, the process of how they will be addressed is proposed through a community process and

is not fully described. Thus, plan #1 is assessed as insufficient in meeting design principle 5 of addressing graduated sanctions by fishers or more broadly by other rights holders.

Design Principle 6: Conflict resolution mechanisms with rapid access and low-cost arena to resolve conflict among appropriators or between officials and appropriators

Conflict resolution can be an informal or formal process, but it is necessary to determine what is an infraction in order to maintain a complex system of rules in the face of ethical dilemmas. As Ostrom noted, in most cases, those selected as leaders are the ones who resolve conflicts (Ostrom, 1990). Conflict resolution is addressed in plan #2 through the use of the Band Council as having the final authority thus it meets the characteristic of a low cost, local area approach but fails to address how rapid the process intends to be.

Plan #1 does not mention a conflict resolution process. Thus, both plans appear to be insufficient in their ability to meeting a rapid access, low cost, conflict resolution mechanism.

Design Principle 7: Minimal recognition of the rights to organize that are not challenged by external governmental authorities

In cases where external governments presume sole authority to set the rules, the legitimacy of the rules created by the fishers will not be accepted by external authorities and even by other users, thereby compromising the perseverance of self-governing (Ostrom, 1990). While the *Indian Act* supports community governments and their ability to create law, this application does not extend Band authority to govern fisheries outside reserve jurisdiction. However, and as noted in 7.3.1.1.4, the *Fisheries Act* (s.4.1)

empowers Band Councils or other Indigenous governing bodies to create opportunities for other forms of fisher organization. As such, the current legal landscape supports the recognition of the rights to organize.

Design Principle 8: Governance activities are parts of larger systems as nested enterprises

Here, Ostrom observes that appropriators who are organized within multiple nested levels contribute to the sustainability of self-governing. Fisher are organized in nested levels which are then nested with levels that are part of local, regional and national governmental jurisdictions. Nesting allows fishers to address problems experienced and consequently appropriate rules are devised within each of the levels (Ostrom, 1990). For example, rules developed for single area resource withdrawal will differ from those that are shared among multiple users. In plan #1, there is evidence of being nested within the larger, political body for approval of the plan, though not all First Nations are part of the larger political body. As such, the nesting is limited to two levels (community and provincially) and only within Mi'kmaq processes. Plan #2 appears to operate within the community and independently, and without nesting in Mi'kmaq processes or otherwise. Because of this, both plans are assessed as insufficient for the design principle of being part of a nested enterprise.

To summarize, it was found that both plans were assessed as insufficient to meet all Ostrom's design principles. Only two design principles were met in both plans, monitoring (design principle 4) and minimal recognition to organize (design principle 7).

In addition, Plan #2 met design principle 5 regarding the assessment of graduated sanction by other appropriators.

Commonalities in gaps and inconsistencies are noted for the remaining principles. The inability to exclude others from fishing to prevent overextraction, excessive monitoring given the short season and small number of traps, lack of clearly defined opportunities to modify rules, resolve conflict, and lack of clarity surrounding organization in multiple layers of nested enterprises are noted. Both plans also emphasized the Band's authority and responsibility and reinforced limited participation of Mi'kmaw fishers in the process of modifying the rules, thus compromising the legitimacy of self-governing. This approach contradicts the definition of self-governing and perpetuates the challenge of marginalization of Mi'kmaw fishers by Mi'kmaq First Nations that was identified in Chapter Five. With this in mind, a limit identified for self-governing is the perseverance of Mi'kmaq First Nation's authority over the Mi'kmaq treaty right to fish for a moderate livelihood. This authority, albeit Mi'kmaq, may erode perceptions of legitimacy resulting in failure to meet Ostrom's design principles that ultimately may hinder its effectiveness.

Indeed, both examples may be viewed as a first step toward Ostrom's design principles and with modification, can address the gaps in each of the design principles. For example, organization of fishers is necessary in each community. By providing a forum, fishers can engage in problem solving and modify rules and create forums to work with other fishers from other communities. However, as the number of fishers is relatively small in each community, a fisher organization formed within Mi'kmaq traditional

districts could be beneficial as a forum to discuss rules around sharing access and exclusion rules for the lobster fishery. Monitoring, as proposed, could be reduced to match the species status. As lobster are not a species at risk and the industry is currently experiencing high landings, only the minimal data such as landings and effort should suffice.

7.3.2.2 Assessing Sensitivity: Methods of Gathering Information, Making Decisions, Supporting Cultural Practices, and Addressing Ethical Issues Using Jetoft's (2007) sensitivity description, four considerations were derived as criteria for the assessment. According to Jentoft (2007), sensitivity is the approach and method for gathering information, making decisions, the recognition for the support of cultural practices for ethnic minorities, and the role of ethics in relation to species conservation and ecosystem health. A summary of the sensitivity analysis of the two First Nation community's lobster livelihood fisheries management plans is provided in Table 11.

Table 11 Summary of the sensitivity analysis of two First Nations community driven lobster livelihood fisheries management plans.

Ability of self-	Plan #1	Plan #2
governing to be	Hierarchical approach	Hierarchical approach with
sensitive to the	blended with fisher	limited involvement of fishers to
demands of diversity in	development of consistent	make decisions yet allows for
the governing system	rules applicable to	variation in how fishing is
(Jentoft, 2007)	participants.	undertaken.
Method of gathering	Fisher committee	Public community level
information	Public community level	meetings
	meetings	Use of DFO Science information

Ability of self-	Plan #1	Plan #2
governing to be	Hierarchical approach	Hierarchical approach with
sensitive to the	blended with fisher	limited involvement of fishers to
demands of diversity in	development of consistent	make decisions yet allows for
the governing system	rules applicable to	variation in how fishing is
(Jentoft, 2007)	participants.	undertaken.
	External personnel	Monitoring
	Monitoring	
How decisions are made	Band asserts authority over all	Band asserts authority over all
	aspects of fisheries, including	aspects of fisheries; Band
	setting limits through research	designate develops annual
	or negotiations, through nested	fishing plan for consultation
	approval processes with the	with community that is carried
	ANSMC and through	out by a committee; effort as
	recommendations made from	number of traps and days fished,
	the fishers committee;	and area of traditional fishing;
	involvement of fishers in	less concerned with
	policy development for	standardizing fishing gear,
	graduated sanctions	season, or size limits;
Supporting cultural	Species conservation linked to	Plan is based on several
practices	Mi'kmaw value of Netukulimk;	Mi'kmaq Principles that reflects
	some opportunities to	cultural teachings with
	incorporate Mi'kmaw	prioritization of food security
	practices; largely follows	when distributing access,
	federal commercial fishing	
	regulations and the	
	incorporation of Mi'kmaq	
	treaty right	
Addressing ethical	Species conservation linked to	Discipline addressed through
issues	Mi'kmaw value of <i>Netukulimk</i> ;	community sanction process.
	Use of community justice	· 1
	process proposed but not	
	process proposed out not	

Ability of self-	Plan #1	Plan #2
governing to be	Hierarchical approach	Hierarchical approach with
sensitive to the	blended with fisher	limited involvement of fishers to
demands of diversity in	development of consistent	make decisions yet allows for
the governing system	rules applicable to	variation in how fishing is
(Jentoft, 2007)	participants.	undertaken.
	described; policy for graduated	
	sanctions currently absent but	
	proposed to be developed with	
	fishers;	

Besides noted differences in plan structure, such as separation of the policy from the harvest plan versus incorporation of law, policy, and plan into one document, several other differences were evident in how information is gathered, and cultural practices supported. For example, the primary means for gathering information in Plan #1 is through public meetings and the reliance of external knowledge such as DFO stock status reports. Within each plan, monitoring activities are proposed for gathering necessary scientific data. Reporting directly to the Band is required although no time frame is provided. Notably absent are processes for working with fishers to gather and incorporate Mi'kmaw knowledge despite having both plans developed with fishers. Despite this absence, the use of external information suggests a willingness to use other forms of information, from both Mi'kmaq and non-Mi'kmaw sources, to develop fishing plans, supporting a Two-Eyed Seeing approach.

Differences in how cultural practices are supported are noted. For both plans, there is an emphasis on Mi'kmaq values and teachings to support fishing. However, in Plan#1, there

is an adoption of current commercial conservation measures while Plan #2 prioritizes food security and limits traps and is less concerned with adopting commercial fishing conservation measures or strategies. However, Plan #2 limits fishing to a very short season while Plan #1 focuses on the ability to fish when needed, as *Netukulimk* implies. These differences suggest that fishing practices may be influenced by nuances in community values rather than the 'one-size-fits-all' application of Mi'kmaw values.

Both examples show similarities in how decisions are made and how issues of ethics are addressed. Both are dominated by hierarchical processes that reinforces the Band Council authority and responsibility for making decisions and lead the development of the fishing plan. Both organizations take recommendations from community governance processes though the structure of those processes differ. For example, plan #1 incorporates a community fisher committee while plan #2 uses an oversight board that is responsible for community consultation. In both examples, an elected Band Council member sits on the oversight/fishery management committee. Conflict resolution is the responsibility of the band in one example, but the responsibility of the fishers in the other example. It is noted, however, that the absence of the Mi'kmaq Grand Council is contradictory to traditional Mi'kmaw decision-making given their historical and current role to provide cultural and spiritual guidance. Regarding ethical issues, which can include species conservation, community justice processes are proposed. Plan#1 does not elaborate on the process, only that one will be developed in the future with the participation of fishers. However, it expects fishers' practice affecting species conservation to be linked to the Mi'kmaw value of *Netukulimk*. In plan #2, disciplinary actions are the responsibility of the fishery

oversight board. The similarities noted in the plans suggest that the role of the Band Council is that of facilitating and authorizing the fishery yet not responsible for disciplinary actions. This is a potential opportunity to enhance the role of traditional governance through the Mi'kmaq Grand Council in community disciplinary processes, especially if Band Councils are hesitant to do so. This could have the added advantage of enhancing legitimacy in community processes if the Mi'kmaq Grand Council itself is involved.

While the newly emerging and formalized community process may be legitimate for both fishers and community governments, the effectiveness of the structure is yet to be determined. With this in mind, limits identified for self-governing specific to its legitimacy are the limited involvement of fishers in making decisions, the lack of a role for the Grand Council in decision-making, and the differences in nuances of cultural practices in plans developed and in development.

7.3.2.3 Summary of the Performance of Self-Governing Modes

Based on the above, the use of written community plans is emerging as a formal mechanism for self-governing of the livelihood fishery. Within the two plans assessed, there is diversity emerging in the governing mechanisms for livelihood fisheries, specifically in the contents of the policy, the harvest plans, and means of providing access. In using the two approaches to assess the self-governing mode, the community plans were found to be deficient in several key areas. For example, a high degree of Band control is evident in both plans that contradicts the definition of self-governing and

continues to limit opportunities for fishers to modify the rules, gather and incorporate Mi'kmaw knowledge to inform decision-making, and access.

Limits to the self-governing modes are identified as gaps in Ostrom's design principles. Specifically, community developed policies and plans lack the ability to exclude others from fishing to prevent overextraction, subject fishers to excessive monitoring given the short season and small number of traps, lack clearly defined opportunities to modify rules and conflict resolution process, and lack clarity surrounding organization in multiple layers of nested enterprises. Despite the limited authority under the *Indian Act* to govern fisheries beyond reserve boundaries, Bands asserted their authority over livelihood fisheries for their community members and supported community-based fisheries but in the process, continue to marginalize Mi'kmaw fishers. Band authority is creating a layer of government control, albeit Mi'kmaq government, which is not necessary as it contradicts the concept and definition of self-governing. Taken together, the current selfgoverning mode maybe lacking legitimacy and effectiveness. Potential opportunities to facilitate the livelihood lobster fishery is through enhancing current policies and plans to improve self-governing so as to meet Ostrom's design principles and Jentoft's (2007) methods of gathering information, making decisions, supporting cultural practices, and addressing ethical issues.

To address gaps in Ostrom's design principles, processes could be developed between First Nations to share and create rules around exclusion to prevent overextraction.

Monitoring requirements could be tailored to the species status and the duration of the

fishing season and meet minimum standards of accountability. Fisher involvement in modification of the rules could extend to the policy rather than only the harvest plan. Conflict resolution strategies are likely needed at multiple levels, for example, within community governance processes and between communities. Lastly, clarification on the structure of fishers, communities, and decision-makers and how they can enhance representation is needed. Enhancing methods of gathering information, making decisions, and supporting cultural practices requires fine-tuning of current policies. Examples include having clearly defined processes for the use of knowledge in decision-making, improving efficiency by creating timelines for internal community processes to facilitate decision-making within the community and across nested enterprises, and balancing cultural practices with commercial conservation measures. Ethical issues could be addressed using external committees to the fisheries and culturally appropriate disciplinary actions.

As discussed in the previous chapter, co-governing arrangements are characterized as constructive partnership between fishers and government that draw on individual capacities "while compensating for the inherent disabilities of both" (Jentoft & Chuenpagdee, 2015, p.29). Co-governing modes can improve governability pertaining to issues of scale and complexity through interplay, in particular, through enhanced stakeholder participation, power-sharing, and democracy (Jentoft & Chuenpagdee, 2015).

Challenges identified in Chapter Five are specific to the marginalizing Mi'kmaw fishers, in particular the lack of shared power and stakeholder involvement, and the power

imbalance of scientific knowledge over Indigenous knowledge in decision making. Furthermore, other challenges identified were conflicting relations between Mi'kmaq and the industry and with the government, and internally within Mi'kmaq. Based on the identified challenges above, and the federal policy of issuing licences for FSC lobster fisheries when no agreement is met (DFO, 2012), it is apparent that a co-governing mode is absent for both the food, social, and ceremonial and livelihood lobster fisheries.

Consequently, the lack of co-governing mode(s) is a limit to current governance.

However, an absence of governance is also an opportunity to create something new that is specific to the challenges of a livelihood fishery and addresses the lack of participation and representation of Mi'kmaw fishers in current governance processes.

7.4 GOVERNING INTERACTIONS

Governing interactions occur between the systems-to-be-governed and the governing system and are the focus of the last stage of the governability assessment. The following section addresses the nature, type and quality of the governing interactions as well as the role of power relations currently in place for the lobster fisheries. Two types of interactions were identified as negotiation and advisory.

7.4.1 Negotiation

Interactions between Mi'kmaq First Nations and DFO for communal commercial and FSC fisheries occur between individual Mi'kmaq First Nations and DFO through negotiation, as per the AFS policy. Meetings occur annually to discuss allocations, including lobster for FSC needs. Overall, interactions for Aboriginal fisheries occur between community leadership and/or community fisheries departments and DFO rather

than between fishers and DFO. Interactions are limited and approached as top-down and reactive. Even for access affirmed under *Sparrow* (1990) for lobster as a food fishery, interactions are one-sided and imposed. Hubert Nicholas, director of fisheries for Membertou First Nation reflects on his dissatisfaction with communications and annual negotiations with DFO;

I mean, other than the obvious, about phone calls and emails, they communicate basically, what their regulations are and how they're going to impose things but how well they do it is the better question. I don't think they do well at all. I think it's, they try to impose regulations on us and when we don't agree, then they kind of back up and do the process that they should've done in the first place, where it's consult, approach each community or those affected and gather information and then try to make a decision that's beneficial to the Mi'kmaq communities. So, right now, it's more, they try to impose regulations or impose things on us that we don't agree with and afterwards, they're putting out fires and it's more of a reactionary instead of a 'let's deal with this in a way that's beneficial for all'....They kind of do everything backwards, it's whatever they think is best. They impose it. We argue and then changes are made and then we come to a consensus afterwards, rather than let's meet, discuss, develop a consensus, a go-forward kind of approach and then make your regulations based on that. I think the way that Governments are doing it is more backwards and putting out fires afterwards.

Similarly, negotiations with DFO regarding implementation of a moderate livelihood are held between the Mi'kmaq decision-makers and DFO and are described as "disheartening." The emphasis on negotiated governance and unwillingness to experiment prior to implementing a new type of fishery seems unresolvable. Bruce Wildsmith, legal counsel with the Assembly of Nova Scotia Mi'kmaq Chiefs and the *Kwilmu'kw Maw-klusuaqn* Negotiation Office explains,

It is very disheartening. Now they would say well, this is under discussion and the Mi'kmaq should be telling us this stuff at the negotiation table. When prior to the problem with the big scale negotiations was the genesis after the Calder case, the comprehensive claims process is you would have one-two hundred page agreement that wrapped everything up and sort a drove a stake through it all, it's a done deal and you're done. But we've moved it down a much smaller scale. Even on the smaller scale where you're seeking an arrangement for a limited number of years, they still want everything tied up in a knot. They want to know about this, they want to know about that. And so, they really don't want to approach it from the standpoint of, well, here's a dozen people from Acadia who have these kind of boats, why don't we give them this number of traps and let them catch and sell or deal with what they want on trial basis. Let's see how all that works out. They wouldn't want to do it that way. I think my own personal bias, is well, get something done, get something out on the water, see how it works, if there's problems, change it. If there's no problems, well, what's wrong with it?

The lack of opportunities for fisher input and participation is noted in all governing interactions.

7.4.2 Advisory

The commercial lobster fishery provides advice to DFO through advisory committees that meet annually. Both regions have large representation from each LFAs or groups of LFAs (DFO, 2011; DFO, 2014) through unions or other representative associations. Terms of reference for DFO advisory committees were found on-line for the offshore (LFA 41) lobster fishery but could not be located for the inshore fishery. The offshore industry is represented through an advisory committee with clearly defined terms of reference that includes conflict resolution, and with DFO administration of committee responsibilities. The committee is supported by a DFO working group who consolidate advice in draft fishing plans for consideration of the committee. Here, Aboriginal interests may be represented by DFO's Indigenous Fisheries Management Branch if required. Meeting minutes are not available on-line through DFO or the industry group's websites for inshore or offshore lobster fisheries. First Nations holding communal commercial licences are invited to attend commercial fisheries advisory committee meetings, but attendance is sporadic. Commercial fisheries liaisons are employed through two AAROM organizations to attend meetings to provide input on behalf of First Nations and share meeting outcomes.

A Mi'kmaq advisory process was established by KMKNO to advise the Assembly of Nova Scotia Mi'kmaw Chiefs on a potential path for current negotiations on the livelihood fishery. Comprised largely of selected community fishery managers and representation from technical AAROM bodies, specifically UINR and MCG, the Mi'kmaq Fisheries Advisory Committee discussions tended to drift to commercial fishery

issues. As discussions progressed to negotiations, commercial fishing issues tend to dominate the discussion. It is worth noting that fishers are not part of the process.

As advisory processes are only recently being employed in First Nations for the livelihood lobster fisher, from an assessment perspective, I am limited to noting their presence/absence. As such, advisory processes were not present in First Nations before 2019 and 2020 and were beyond the scope and timing of the research interviews.

7.4.3 Summary of Governing Interactions

The assessment of interactions based on the Mi'kmaw provided data indicates the quality of current interactions is poor, lacks fisher representation and does little to improve governance outcomes. Interactions for livelihood fisheries are restricted to government-to-government negotiations as the primary interaction and excludes fisher representation and participation. With this in mind, it is evident that current governing interactions reinforces the identified challenge of marginalizing Mi'kmaw fishers.

7.5 CONCLUSION

The governability assessment suggests that implementing the livelihood lobster fishery in Nova Scotia is fraught with many governing obstacles. Within the system-to-begoverned, the natural system-to-be-governed displayed low diversity, complexity, dynamics, and vulnerability while the social system-to-be-governed displayed high diversity, complexity, dynamics, and vulnerability. According to Jetoft (2007), the assessment of these levels of attributes requires all three modes of hierarchical, cogoverning, and self-governing modes for effective governance. Importantly, the

assessment revealed an absence of a co-governing mode for the livelihood lobster fishery. Given that IGT posits that co-governing is the appropriate mode of governance to address high levels of diversity and dynamism in the system-to-be-governed through learning and coordination, its absence likely contributes to the challenges of conflicting relations and marginalizing Mi'kmaw fishers identified in Chapter Five.

Other gaps include a lack of a federal policy to address treaty fisheries and the regulatory gap for Aboriginal fisheries when justification is not shown (*Marshall*, 1999b). While this is a challenge for DFO, this is indeed an opportunity for other forms of governance that may be better suited to address challenges and limits to current governance. However, it was found that self-governing by the Mi'kmaq is currently limited in its capacity to achieve effectiveness and legitimacy. Gaps in the design of self-governing were noted, in particular in the lack of its ability to meet several of Ostrom's design principles. In this case, its ability to exclude others to prevent overharvest, conflict resolution, use of sanctions, monitoring, and organization within nested enterprises. Furthermore, Band authority contradicts the self-governing concept and further marginalizes Mi'kmaw fishers in Mi'kmaw self-governing. For example, within the community developed plans that were reviewed, there were no opportunities to incorporate Mi'kmaw fishers' knowledge in decision-making beyond an advisory role as interactions between fishers and Mi'kmaq government(s) limit Mi'kmaw fishers to modify only fishing rules. Thus, incorporating Mi'kmaw traditional practices, including traditional Mi'kmaw governance, are at best limited within plans recently developed by communities.

Ironically, both federal regulation through a licensed lobster food fishery and self-governing of an unlicensed livelihood fishery is creating provincial policy and regulatory challenges regarding the sale of lobsters. Limits to current governance that impact livelihood lobster fisheries are provincial regulations prohibiting the purchase of lobster from unlicensed livelihood fishers and the policy that prevents the purchase of lobsters from the licensed FSC fishery.

On the whole, the *Marshall* decisions (1999) called for enhanced interaction, specifically negotiation and consequently reconciliation, between DFO and the Mi'kmaq. Such interaction to accommodate the treaty right that properly considers the context, complexity of fishing, and competing interests is needed. Given the findings of this research two decades later, this is currently not being achieved to the satisfaction of either DFO or the Mi'kmaq. Current interactions are high level government to government negotiations and exclude Mi'kmaw fishers from the process.

Identified opportunities include legislative support for enhancing governance in s.4.1 of the *Fisheries Act* and room within current Aboriginal Communal Fishing Licences Regulations to accommodate a limited commercial fishery. Identified opportunities for self-governing modes are those initiatives that, with modification, could be improved to meet self-governing design principles and methods of gathering information, making decisions, and supporting cultural practices. Although the lack of a co-governing mode is a limit to current governance due to a lack of self-organization by the Mi'kmaw fishers, it

also presents an opportunity to create co-governance specific to the Mi'kmaq context by addressing this gap.

In the following chapter, I will reconcile identified limits to governance using a cross-case analysis and subsequently use the knowledge acquired through this research to recommend an alternative governance model for Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia in Chapter Nine.

CHAPTER 8 TA'N WEJI-KINU'TMASIAP: CROSS-CASE ANALYSIS

8.1 Cross-Case Analysis & Identification of Patterns Across the Cases

As noted in the analysis of the data discussed in Chapters Five, Six and Seven, the challenges arising from the Aboriginal right to fish for salmon affirmed in the *Sparrow* decision (1990) and the treaty right to fish for moderate as affirmed in the Marshall decisions (1999) indicate that governability is low. As such, the poor performance of the governing system contributes to the governance challenges experienced in these fisheries. In particular, the identification of governance gaps as limits to governance contribute to other challenges identified such as marginalizing Mi'kmaw fishers, conflicting relations, and disputing legitimacy of the governing system (Chapter Five). Using a comparative analysis of the Mi'kmaw salmon fishery and livelihood lobster fishery, the aim of this chapter is to "compare or synthesize within-case patterns across the cases" (Yin, 2018, p. 196) to derive key lessons and insights on the current limits to governance. In Mi'kmaq, a similar concept is ta'n weji-kinu'tmasiap. It refers to what I learned. This chapter will address the final sub-question guiding my research, how can we reconcile limits to governance to effectively govern Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia?

The following presents the cross-case analysis as what lessons I have learned, *ta'n weji-kinu'tmasiap*, from the comparisons of the natural systems-to-be-governed, social systems-to-be-governed, legitimacy of the governing systems, effectiveness of the governing systems, and presence and quality of the governing interactions between the

Mi'kmaq salmon fishery and the livelihood lobster fishery. Considerations for enhancing governance are provided at the end of each section. Lastly, I will address the research sub-question as justification for an alternative governance model for Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia.

8.2 COMPARISON OF THE SYSTEMS-TO-BE-GOVERNED

The case studies presented in Chapter Six and Seven expressed differences in diversity, complexity, dynamics, and vulnerability of the natural system-to-be-governed but commonalities in the social system-to-be-governed. The following sections compares the natural and social systems-to-be-governed between the case studies.

8.2.1 Comparison of the Natural System-to-be-Governed

While the Atlantic salmon natural system-to-be-governed exhibited high diversity, complexity, dynamics, and vulnerability, and posed extraordinary challenges for the governing system, the opposite was determined for American lobster. For salmon, as a species with high diversity, complexity, dynamics, and particularly vulnerability, all modes of governance is necessary for effective governance. Safeguarding provided by the hierarchical mode is needed given the declining and genetically distinct populations of Atlantic salmon with little chance of rebuilding from neighboring salmon populations. In the case of American lobster currently experiencing high landings and assessed as 'healthy', little genetic diversity is noted, providing the ability to repopulate from other adjacent or offshore areas. Thus, associated diversity, complexity, dynamics, and vulnerability of the natural system-to-be-governed is much less concerning.

The concept of vulnerability, however, is critical to identifying the regulatory and legislative objectives for justification of infringements to Mi'kmaq Aboriginal and treaty rights according to the *Sparrow* (1990) and *Marshall* (1999) decisions. As the grounds for justification for infringement of Mi'kmaq Aboriginal and treaty rights, both articulated in the *Sparrow* (1990) and *Marshall* (1999) decisions, the exercise of Aboriginal and treaty rights is second to conservation of the resource. In the case of the Mi'kmaw Atlantic salmon fishery, conservation of the natural population of Atlantic salmon was considered a valid legislative objective for the role of DFO as the regulator and infringement of the right to fish Atlantic salmon. Even so, infringement must be reasonable in how it meets the needs of conservation of the resource thus calling for cogoverning rather than solely a hierarchical governing mode. In the case of American lobster where justification for conservation of the resource cannot be demonstrated as populations are assessed to be 'healthy', opportunities for federal infringement and regulatory authority is diminished and the opportunity for self-governing is elevated.

8.2.2 Considerations for the Natural System-to-be-Governed

Based on the analysis of the two case studies, and despite the vulnerability of the species fished, the most appropriate mode of governing for Mi'kmaw salmon and livelihood lobster fisheries was not found to be hierarchical. Rather, the analysis suggested a self-governing mode is more appropriate for species that are not considered vulnerable since demonstrating justification of infringement of rights may prove challenging for federal authorities. For vulnerable species, the research findings suggest co-governing as the more appropriate governance mode for Mi'kmaw fisheries, given the need for learning and coordination to determine reasonable infringement. While, in theory, hierarchical

governing is the recommended mode in IGT for addressing the vulnerability of the natural system-to-be-governed, this research suggests that the complexity and context of the situation play a key role in determining the most appropriate governance mode in practice and as such, co-governing was found to be more appropriate for the context of Mi'kmaq Aboriginal and treaty rights to fish vulnerable species.

Based on the research, species vulnerability does not play a pivotal role in determining an appropriate governing mode for the context of Aboriginal and treaty rights. While there may be justification for infringement for conservation reasons, it does not imply that federal regulation as the hierarchical governing mode is the adequate response of the governing system. Rather, in the context of Constitutionally protected Aboriginal and treaty rights, co-governing, rather than hierarchical, is the appropriate governing mode for vulnerable species.

8.2.3 Comparison of the Social System-to-be-Governed

For both case studies, the social systems-to-be-governed displayed high diversity, complexity, dynamics, and vulnerability. Among the properties of the social system-to-be-governed were commonalities. For example, high diversity arose in both non-Mi'kmaw salmon and lobster fisheries as many fisher organizations exist and are organized locally, provincially and regionally. In the case of Atlantic salmon, high diversity existed as evidenced by First Nations with or without agreements and associated licence conditions, assertion of rights as individuals, and the use of collaborative plans by many but not all communities. Similarly, in the Mi'kmaw livelihood lobster fishery, assertion of rights by individuals prevails thus there may be many ways of fishing among

Mi'kmaw individuals and communities. Salmon fishers, as appropriators of the resource, lacked self-organization. As expected, governability was reduced when social systems-to-be-governed are disorganized and fragmented (Jentoft & Chuenpagdee, 2015). Based on the salmon case study, the lack of self-organization furthered the identified challenges of fisher marginalization, fearing loss of Mi'kmaw identity, and contributed to low governability. However, and as the livelihood case study demonstrated, cohesion is possible as fishers organized with the assistance of community support and authority. Furthermore, the ability of fishers to develop the harvest rules is demonstrated in the livelihood lobster case study.

Legal pluralism underpinned current complexity, dynamics and vulnerability of the social systems-to-be governed between the case studies. Different rules and policies pertaining to the FSC salmon fishery, different rules among Mi'kmaq First Nations, and the perception of no rules when First Nations are not under agreements with DFO, created challenges to the current governing system between Mi'kmaw salmon fishers and enforcement officers. Similarly, different rules and polices for the communal commercial lobster fishery, lobster food fishery, and perception of a lack of rules for the livelihood lobster fishery contributed to conflicting relations with the federal government and between Mi'kmaq and non-Mi'kmaw fishers. It appears that conflicting relations are more pronounced in the lobster fishery where local economies and livelihoods of non-Mi'kmaw commercial fishers were perceived to be at stake. Non-Mi'kmaw lobster fishers act unjustly on their fear as the federal government is unable to control or regulate the Mi'kmaw livelihood lobster fishers.

8.2.4 Considerations for Governance Mode for the Social-System-to-be-Governed

Improving governability requires organized and cohesive social system-to-be-governed (Jentoft & Chuenpagdee, 2015). This requires self-governing which cannot be achieved without self-organization. Given that Mi'kmaq First Nations identified operational challenges, specifically the lack of adequate funding for addressing community needs, inadequate funding may be contributing to the lack of supported organization of fishers, at least within communities. Other contributing factors may be conflicting Mi'kmaq relations that may hinder the initiation of a fisher organization. Another consideration related to the design of the organization is legal pluralism and need to address conflict between the Mi'kmaw fisheries and commercial and recreational interests.

Legal pluralism must be taken into consideration when designing governance institutions as there are those who gain, and those who lose because of it (Jentoft, 2011). Based on both case studies and the underlying Supreme Court decisions supporting fisheries access, the Mi'kmaq are those who stand to gain while other fisheries may perceive to lose. For example, the commercial lobster fishery may perceive a loss of access and increase in competition to current resources and the recreational salmon fishery may perceive a loss to salmon sustainability that could further impact access to an important fishery. Loss of lobster as a resource are thus perceived by non-Mi'kmaw fishers as unfair and a loss in the portion of the resource that ultimately equates to economic losses and disruptions to their livelihood. As opportunities to incorporate Mi'kmaw practices are reinforced in case law, first access to the salmon resource may be considered a benefit to

the Mi'kmaq, especially since the ability to incorporate cultural practices or alternative management strategies. Importantly, in both case studies, governors lose governability of the fisheries as the rules of the governor are limited in their application to Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia, as evidenced by the outcomes of the *Sparrow* (1990) and *Marshall* (1999) decisions. While IGT recommends a co-governing mode to address challenges presented by legal pluralism (Bavinck & Gupta, 2014), this research suggests self-governing would be more appropriate for the context of Constitutionally protected Mi'kmaq Aboriginal and treaty rights to fish.

Self-governing may be perceived as a Mi'kmaw gain, however, there are gains to be made for non-Mi'kmaw goverors and fishers as well. For example, improved governability could be a gain should Mi'kmaw fishers engage to develop harvest rules such a those starting to be demonstrated in the livelihood lobster fishery by some communites. Rules could be shared and made transparent so that non-Mi'kmaw lobster fishers are aware of the harvest rules and sanctions associated with disciplinary actions. Furthermore, self-governing provides a point of contact with Mi'kmaw fishers rather than the current point of contact of Mi'kmaw fishery managers and community leadership, or their technical organizations. This may serve as places for continued education, collaboration, and building relations, or as described in Chapter Five, the opportunity to forge a [treaty] relationship. While non-Mi'kmaw fishers may not be in agreement with different rules for different categories of fishing, sharing of rules, landings or quantities of harvest, and policies may help reduce tensions and conflicts between fisheries.

As an opportunity identified in Chapter Five, creating a governance structure, in particular, one that is founded on the Mi'kmaw knowledge system allows for cultural integration and approaches, ways of knowing, and different ways to address deviations arising from fishing practices that conflict with Mi'kmaw values and beliefs.

Furthermore, a self-governing approach would align with the subsidiarity principle which dictates that the governing responsibility should be at the lowest, capable level of organization (Jentoft, 2007). Within a self-governing mode, instruments could be incorporated using formalized and appropriate rules, policies, and sanctions to safeguard species such as Atlantic salmon rather than reliance on a hierarchical mode by the DFO, to govern Aboriginal and treaty rights to fish.

Based on the research, alterations to IGT predictions for the most appropriate theoretical mode may be needed when addressing Constitutionally protected Aboriginal and treaty rights in Canada. Given that co-governing, rather than hierarchical, is a more appropriate mode of governing regardless of species vulnerability, and self-governing rather than co-governing is more appropriate to address legal pluralism, IGT predictions are found to be, at least theoretically, not applicable to all contexts. This suggests that IGT, while theoretically is appropriate for most situations, requires alterations when used to predict the most appropriate governing mode for the context of Aboriginal and treaty rights to fish in Nova Scotia, and more broadly in Canada.

8.3 Comparison of the Legitimacy of the Governing Systems

Legitimacy plays an important role in fisheries management and ocean governance initiatives. Legitimacy is perceived to be right or just "in the eyes of the beholder"

(Jentoft, 2000, p. 143) and has important consequences for compliance of regulations, rules, and authorities (Guirkinger et al., 2021; Oyanedel, Gelcich, & Milner-Gulland, 2020; Parés, Dresdner, & Salgado, 2015; Raakjær-Nielsen, 2003), institutional design (Jentoft, 2000) and acceptance of initiatives (Dehens & Fanning, 2018). Thus, comparing the legitimacy of the governing system provides insights into what mode of governance is accepted, or not accepted, as right and just for Mi'kmaq and non-Mi'kmaw fishers alike. Failing to take the legitimacy of the governing system into consideration, and as a principle for building governing institutions, will hinder governability and exacerbate current challenges regarding the legitimacy of the governing system as identified in Chapter Five. The following section compares the legitimacy of the governing modes between the case studies and concludes with considerations for enhancing legitimacy.

8.3.1 Legitimacy of the Hierarchical Governing Mode

Between the cases studies examined; the primary current governing system is hierarchical. While it appears to be considered legitimate by non-Mi'kmaw salmon and lobster fisheries, there are challenges to perceptions of legitimacy when governing constitutionally protected rights-based fisheries for Mi'kmaw fishers. For example, even though the low status of Atlantic salmon may be seen as justifying federal legislative objectives, it remains contested by some First Nations resulting in the rejection of FSC licences. Even First Nations accepting licences do so under 'duress'. In the livelihood lobster case study, the perception of the lack of legitimacy of the current mode of governance is more pronounced. Fishing without licences is perceived as 'illegal' by non-Mi'kmaw fishers and federal and provincial authorities. Yet, from the Mi'kmaq perspective, and supported by the *Marshall* decisions, the regulatory authority of DFO

may only extend when justification is shown. As such, where vulnerability of the fished species is or is not an issue, the legitimacy of the hierarchical governing mode is not met by Mi'kmaw fishers.

8.3.2 Legitimacy of the Self-Governing Mode

Given the emphasis on federal and provincial division of powers under the *Constitution Act* (1982), and Ministerial decision-making authority for fisheries, the legitimacy of governance is disputed by Mi'kmaw fishers. While Mi'kmaw fishers exercised their rights independently and/or under communal authority in both case studies, their lack of organization as Mi'kmaw salmon fishers to develop rules and, as such, govern themselves, hinders the legitimacy of self-governing. Similarly, legitimacy is compromised in the livelihood lobster fishery as fishers are organized under the Band (Mi'kmaw community) who exercise authority over the Mi'kmaq treaty right to fish. This contradicts the self-governing concept, restricts the responsibility of fishers, neglects the role of traditional governance in the process and hinders its ability to develop appropriate rules and disciplinary actions for and by the systems-to-be governed. Even so, based on the livelihood lobster case study, the organization of fishers and formalizing community processes for inclusion and modification of harvesting rules is gaining legitimacy with Mi'kmaw fishers and communities.

8.3.3 Legitimacy of the Co-Governing Mode

The co-governing mode is absent in both Mi'kmaw salmon fishery and the Mi'kmaw livelihood lobster fishery case studies. Co-governing is an appropriate way to sort out legal pluralism and conflicts that arise due to differences in law, culture, and social

organization. As such, and as articulated by Jentoft, Bavinck, Johnson, & Thomson (2009), "legal pluralism puts heavy demand on the conflict resolution capacity of the management systems" (p.29). For co-governing modes, the node of interaction between stakeholder groups is where legitimacy is established through procedures and rules for negotiations, voting and appeal (Jentoft et al., 2009). Without opportunities for interplay through enhanced participation of fishers, power-sharing, and democracy, as demonstrated in both case studies, legitimacy is compromised.

8.3.4 Considerations for Enhancing Legitimacy

Based on both case studies, the lack of governing modes needed are indeed governance gaps. In the salmon case study, the hierarchical mode did not achieve legitimacy from the Mi'kmaw perspective. On the other end of the governing spectrum, the opposite is found. The legitimacy of Mi'kmaw self-governing is disputed by the non-Mi'kmaw fishers and government yet is gaining legitimacy with Mi'kmaq First Nations and fishers. This suggests that alternative governance that incorporates top-town hierarchical approaches, such as the current approach of the Band asserting authority over the livelihood lobster fishery, may compromise its legitimacy especially for a self-governing approach. As such, autonomy must be provided to fishers and authority and decision-making must be devolved from Mi'kmaq First Nations to Mi'kmaw fishers.

In both case studies, co-governing was absent. In IGT, co-governing is not possible until self-governing, or at the very least, self-organization is demonstrated. As such, the Mi'kmaw governance gap of lack of Mi'kmaq fisher organization hinders the application of co-governing arrangements for Mi'kmaq Aboriginal and treaty rights to fish. This

suggests that the lack of Mi'kmaw organization is the primary governance gap to addressing legitimacy issues. Self-governing is a necessary precursor to co-governing. In other words, co-governing cannot be undertaken before self-governing is established (Bavinck, et. al., 2005).

Based on the comparisons of the social system-to-be-governed, self-governing rather than co-governing is needed to address legal pluralism arising from the protection of Aboriginal and treaty rights recognized and affirmed in s.35 and s.52 of the *Constitution Act* (1982). Furthermore, establishing Indigenous self-governing would enhance the legitimacy for Aboriginal and treaty rights-holders.

8.4 COMPARISON OF THE EFFECTIVENESS OF THE GOVERNING SYSTEM

Effectiveness is a principle for which first order governance activities are, as stated by Bavinck (2005) "assessed according to their efficacy in attaining goals" (p. 51). By comparing the effectiveness of the governing systems, insights into whether current instruments are indeed effective for the task at hand were determined. Examples of effective and ineffective governing instruments were highlighted. The following section compares the effectiveness of the governing modes between the case studies and concludes with considerations for enhancing effectiveness.

8.4.1 Effectiveness of the Hierarchical Governing Mode

Based on a review of existing legislation, regulations, policies, and sanctions, the hierarchical governing mode was found to lack effectiveness in its application to Mi'kmaw salmon and lobster fisheries, even when justification to infringe the Mi'kmaq right may be deemed by some to be valid.

While legal mechanisms such as regulations and use of licence conditions through community-negotiated agreements provide First Nations access using the current legal framework, thus legitimate in the eyes of governing authorities and non-Mi'kmaw fishers, current licence conditions prevent the sale of FSC accessed lobster. Furthermore, fisheries authorized through the Aboriginal Communal Fishing Licences are exempt from other regulations intended to safeguard aquatic resources. Having harvest rules created with the community leadership and community fishery managers, or in the case of the CHP for Atlantic salmon, federal, provincial, and Mi'kmaq representation are thus necessary to safeguard the resource. Licence conditions as the primary instrument enforceable by federal and provincial enforcement officials vary among Mi'kmaq First Nations and as such may have different stipulations that create confusion for enforcement officers. Furthermore, not all Mi'kmaq have equitable access to fish resources as negotiations are community specific.

Policies for effective governance were absent or not effective due to inconsistencies or exemption in current fisheries management policies. In the salmon case study, a lack of policy was noted for harvest rules for FSC fisheries and a lack of policy to consult with Mi'kmaq in fisheries management that may impact Aboriginal rights. Furthermore, DFO's ability to be sensitive to Indigenous fisheries is hampered due to multiple and competing needs with non-Mi'kmaw fishers. Inconsistent Aboriginal-specific policies

were noted. In particular, the imposition of licences under the Aboriginal Fisheries Strategy conflicts with the Integrated Aboriginal Policy Framework to build and support relations in a way that upholds the honor of the Crown. One effective policy, the Government of Nova Scotia Policy and Guidelines: Consultation with the Mi'kmag of Nova Scotia is effective in that in provides rules for consultation that were adopted by the DFO for salmon. The livelihood lobster case study revealed a lack of use of this policy document. Other examples include exemption of the communal commercial lobster fishery from commercial fishing policies, yet licences and associated licence conditions are imposed for lobster FSC fishery if agreement cannot be reached with First Nations and DFO. Specific to the lobster livelihood fishery, policies to address treaty fisheries are not yet developed despite the recognition afforded to the right to a moderate livelihood over two decades ago. Provincial policies regarding the sale and purchase of fish and fish products face challenges from the sale of lobsters obtained through the FSC fishery as First Nations are licenced under the same regulations for both the food fishery and the communal commercial fishery.

Likewise, sanctions are ineffective or do not exist. In the salmon case study, while there are fines for those who are found guilty of failing to comply with licence conditions, special protocols are in place for minor fisheries infractions. In the livelihood lobster case study, sanctions do not exist for the limits identified in the *Marshall* decisions (1999) for the accumulation of wealth or revenue in excess of securing necessaries, or fishing beyond community's historical fishing grounds.

Overall, the comparison of effectiveness of the hierarchical mode for fisheries revealed effectiveness is hindered by inadequacies and inconsistencies in federal and provincial legislation, regulations, policies and sanctions for fisheries despite authorization by DFO. Given that the DFO approached the *Marshall* decision with federal communal commercial licences and has not invested in enhancing or developing similar mechanisms for fisheries based on treaty rights, it is understandable that there are federal governance gaps for implementing a treaty right to fish. However, the application or extension of current and deficient governing mechanisms to treaty rights to fish is not a logical approach as it perpetuates governance that is not effective. Thus, current policies must be revised to accommodate the Mi'kmaq Aboriginal and treaty rights context.

8.4.2 Effectiveness of the Self-Governing Mode

Self-governing mode is absent for the Mi'kmaw Atlantic salmon fishery case study and insufficient in its current capacity for Mi'kmaw livelihood lobster fishery. The lack and insufficient capacity for self-governing contributed to identified challenges, in particular, fearing the loss of Mi'kmaq identity and marginalization of Mi'kmaw fishers. While the livelihood lobster case study did have self-governing attributes and is gaining legitimacy, the effectiveness of formalization of the rules is yet to be realized. However, its progression is similar in structure to Atlantic salmon where each community develops or modifies existing plans potentially resulting in 13 different plans for similar geographic areas. This suggests that First Nations are utilizing the current federal model for Mi'kmaw fisheries governance as community-specific negotiated agreements. In addition, the use of similar plans across the 13 First Nations may continue to marginalize Mi'kmaw fishers as the livelihood policy limits opportunities to modify the rules, gather

and incorporate Mi'kmaw knowledge to inform decision-making, and access to the resource. Thus, self-governing should not simply be an extension of an already ill-aligned hierarchical governance mode. Rather, the design of self-governing must take into consideration the unique cultural, legal, historical, and political context.

8.4.3 Effectiveness of the Co-Governing Mode

In both cases studies, co-governing modes were absent. As the mode recommended to address complexity in the system-to-be-governed, in particular complexities arising from legal pluralism (Jentoft et al., 2009), its absence as a governance gap is thus a limit to current governance. The lack of a co-governing mode contributes to the lack of opportunities for learning and coordinating needed for effective governance. Examples of such opportunities include the ability to resolve conflicts arising from the lack of understanding of the Mi'kmaw context by non-Mi'kmaw fishers and enforcement officers and having appropriate forums in place to facilitate coordination among Mi'kmaq communities. Here, addressing effectiveness could simply be providing the opportunity to create relationships and meeting space to learn about each other's' knowledge system, fishing practices and legal and historical context under which the Mi'kmaw fisheries occur.

8.4.4 Considerations for Enhancing Effectiveness

While the current hierarchical mode appears to be deemed effective for non-Indigenous Canadian citizens to safeguard Atlantic salmon, it lacks effectiveness for the Mi'kmaw salmon fishery. Based on the assessment of Mi'kmaw salmon fishery and legal pluralism created as a result of the Constitutional protection of Aboriginal and treaty rights, the

current hierarchical mode is found to be ineffective and laden with governance gaps, thus any extension of the current mode and instruments to the livelihood lobster fishery will likely also be ineffective. As self-governing was only recently initiated in the livelihood lobster fishery, effectiveness is yet to be tested, but its progress appears to follow the community-by-community approach. Consequently, this will perpetuate current challenges and may further marginalize fishers. By having both self-governing and cogoverning modes essentially absent or ill-fitted as in the lobster livelihood case study, there is room for innovation to re-invent governance that may be better suited to the systems-to-be-governed and the legal pluralism underpinning Mi'kmaq Aboriginal and treaty rights. Likewise, enhancing effectiveness begins with an opportunity to come together to address coordination and conflict. As such, these processes must be developed between the self-governing body and other organizations.

Based on the research, the application of only the hierarchical mode to the context of Aboriginal and treaty rights is ineffective. Enhancing the effectiveness of Indigenous governance requires both self-governing and co-governing modes.

8.5 COMPARISON OF THE PRESENCE AND QUALITY OF GOVERNING INTERACTIONS

Based on both case studies, there is variation in the nature and quality of governing interactions between the case studies. As noted in section 8.2.2, the lack of self-organization of fishers largely contributed to a limited or lack of participation in the identified governing interactions. The following compares the presence and quality of the

governing interactions identified in the case studies and concludes with considerations for enhancing governing interactions.

8.5.1 Negotiation

Negotiation is the most used governing interaction with Mi'kmaq First Nations. As the primary interaction undertaken to develop agreements and licence conditions since the Sparrow decision (1990), negotiations are viewed as imposing on the Aboriginal right of Mi'kmag as DFO decides for the Mi'kmag or imposes recreational measures that fail to take into consideration Mi'kmag values and cultural practices. To the DFO, this is adequate as the Aboriginal Fisheries Strategy reinforces this strategy and the power of DFO in their approach. Similarly, in the livelihood lobster fishery, there is an unwillingness on DFO's part to compromise on a path forward which is counterproductive to the negotiation itself. Other forms of power are evident in the salmon fishery case study. For example, limited funding to carry out associated responsibilities keeps First Nations stagnant and inhibits their ability to enhance community fisheries operations. Furthermore, while the agreements and licence conditions are negotiated with rights-holders, i.e., community leadership and Mi'kmaw fisheries departments, negotiations occur without the involvement of fishers who are impacted by interactions for which they have no power to be involved. With this in mind, power imbalances exist between DFO and the Mi'kmaq in negotiations that are reinforced in the current federal policy, and between the Mi'kmaw leadership and Mi'kmaw fishers due to a lack of process.

To address power imbalances, a co-governing structure is recommended where there is equal representation of self-governing and hierarchical parties and an equitable process for which decisions are made. Furthermore, learning, adapting, and coordinating forums based on Two-Eyed Seeing may be helpful to support evidence, promote equality, and enhance understanding of the different perspectives underlying fisheries management and fishing strategies between user groups.

8.5.2 Consultation

Consultation as a governing interaction was identified in one of the two case studies. In the Mi'kmaq salmon fishery, consultation is formalized and under the established Terms of Reference (TOR). Despite the exclusion of fishers, there were many advantages to this process from both the Mi'kmaq, Mixed and non-Mi'kmaw participants who contributed their knowledge to this research as it provided an opportunity that created and maintained relations by improving trust and accountability. Importantly, and fundamental to the process, were spaces for on- and off-record discussion as opportunities for enhanced learning among the decision makers, resource managers, and scientists. However, challenges exist that have implications to both the legitimacy and effectiveness at the fisher level. These included a requirement for confidentiality, not requiring parties to reach an agreement, lack of inclusive Mi'kmaq participation, and lack of transparency, all of which limited sharing of consultation outcomes more broadly. Even so, consultation can be viewed as a first step towards collaboration among federal, provincial, and Mi'kmaw governing bodies.

Modifications to this process to overcome the challenges identified above may lead to improved governability and serve as a potential process for co-governing. For example, the use of working groups as learning forums representing multiple departments and organizations to collectively solve the issues or engage in opportunities could include conflict resolution mechanisms and be organized as task-specific forums. Furthermore, accommodation by DFO to respond to requests from the Mi'kmaq for consultation needs be incorporated into the TOR so that the Mi'kmaq are not dependent on federal political will to collaborate or address issues.

8.5.3 Advisory Committee

Advisory committees are the governing interactions by which DFO interacts with the salmon recreational fishers and the commercial lobster fisheries. As the Mi'kmaw salmon fishery does not fit into the recreational category, and while DFO recognizes Aboriginal and treaty rights, the Mi'kmaq do not have complementary processes for engagement. To illustrate, unlike non-Mi'kmaw fishers, Mi'kmaw fishers are not organized into associations. Similarly, each Mi'kmaq community did not have similar processes for fisher engagement or participation at the time of the research. One advisory process was noted in the Mi'kmaw salmon fishery case study for the five Mi'kmaq First Nations through UINR. While a broader forum was developed with the inclusion of community fishery managers, the Mi'kmaq Grand Council, KMKNO, and technical support, many of which already have opportunities to interact with DFO in other forums, the inclusion of fishers is limited to a select few in the advisory committee forum. This arose despite invitations to Mi'kmaw salmon fishers to attend. As such, current Mi'kmaw advisory processes are effective and legitimate for those in attendance and while successful in

integrating cultural practices into harvest plans, can further marginalize fishers as key members within the process. Improvements to governability may be achieved if fishers were involved in the current process, or if another process was initiated that is fisher specific and reflects the needs and concerns of fishers, or directly through a self-governing fisher organization.

8.5.4 Considerations for Enhancing Governing Interactions

The case studies show there are power imbalances in federal negotiations that are reinforced through federal policy. Current interactions do little to share power or democracy between DFO and Mi'kmaq representation. Amendments to the current process to remove oppressive policies and practices and make room for shared decisionmaking are necessary given Bill C-15 that supports a framework for implementation of UNDRIP in Canada passed the third reading June 16, 2021 by the Senate and is now, as of June 21, 2021, law in Canada (LEGISinfo, 2021). With modification, the current consultation processes may serve as a tested process for co-governing. For the Mi'kmaq, the lack of and/or limited fisher inclusion in negotiation, consultation and advisory processes need to be addressed through self-organization so that the Mi'kmaw fisher voice is represented and included in governing interactions. In the livelihood lobster fishery, this gap is more pronounced as there was no inclusion or participation of Mi'kmaw fishers as both rights holders and stakeholders in negotiations. This suggests that there is a lack of federal political will and abuse of power to prevent the muchneeded governing interactions to address how the livelihood fishery could be implemented. Improvements to the governing interactions are needed to include Mi'kmaw fisher participation and provide opportunities for power sharing between

Mi'kmaw stakeholders and Mi'kmaq leadership and federal governing authorities. Rather than top-down, consultation type interactions, or pseudo-negotiations, inclusive interactions that respect Mi'kmaw fishers as governing authorities in implementation of their fisheries are needed.

Based on the research, Aboriginal and treaty rights-holders face marginalization and exclusion at multiple levels which, in turn, creates challenges specific to legitimacy. Without the involvement and agreement of the Indigenous rights-holders who have a stake in the fishery, it is likely that any negotiated agreements and subsequent licence conditions between First Nations leadership, their negotiators, and the state will not be considered legitimate in the eyes of Indigenous rights-holders. Importantly, and because of marginalization and exclusion, this will result in perpetuating current governance issues, including low governability.

8.6 RECONCILING GOVERNANCE LIMITS: JUSTIFICATION FOR AN ALTERNATIVE GOVERNANCE MODEL

The research conducted for this thesis has contributed to an increased understanding of the current limits to governance affecting the Mi'kmaq salmon fishery and the lobster livelihood fishery in Nova Scotia. By comparing the results obtained from the case studies focusing on constitutionally protected Aboriginal and treaty rights and different spectrums in vulnerability of the species fished, the research revealed several key findings that can be used to address the final sub-question guiding the research, how can we reconcile limits to governance of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia?

To answer this pressing question, evidence provided by the research on the two case studies suggests co-governing is better suited to address species considered to be vulnerable, while self-governing is more appropriate to address legal pluralism arising from the constitutional protection of Aboriginal and treaty rights. In this context, these findings deviate from IGT. For example, IGT recommends co-governing for legal pluralism, however, in the context of the current legal protect from the Constitution Act (1982) and subsequent case law, self-governing would be more appropriate. Second, the current governing mode lacks legitimacy and effectiveness for constitutionally protected Mi'kmaq rights-based fisheries, and extensions of the current policies and sanctions for FSC fishery to treaty rights to fish will likely also not be legitimate or effective. Third, governance gaps are not only in policy or process but rather as gaps in governing modes themselves that are necessary for effective governance. For instance, the research findings suggest self- and co-governing modes could serve to enhance the effective governance of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. This is not surprising as both the Sparrow (1990) and Marshall (1999) decisions called for less control and more sharing, interacting, and collaborating, of which little has been accomplished to date, especially for the livelihood fishery. However, current attempts at Mi'kmaq self-governing appear to model the federal top-down approach and as such, run the risk of continuing to marginalize Mi'kmaw fishers by limiting opportunities to modify rules, gather and incorporate Mi'kmaw knowledge to inform decision-making, and access to the resource.

As co-governing is absent, there are no forums to resolve conflict between Mi'kmaq and non-Mi'kmaw fisheries and between Mi'kmaq and DFO. Lastly, governing interactions suffer from poor quality and power imbalances, or are absent in Mi'kmaw processes.

This gap further marginalizes Mi'kmaw fishers at multiple levels and are reinforced in federal policy and between Mi'kmaw leadership and fishers due to a lack of process.

Based on these findings, an alternative governance model is recommended to reconcile governance limits to effectively govern Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. While the analysis recommended self-governing and co-governing modes as gaps to be addressed by the Mi'kmaq and DFO, the alternative governance model must incorporate all modes of governance given the properties of the natural and social systems-to-be-governed. Here, self-governing, co-governing modes and hierarchical modes could be utilized to enhance legitimacy and effectiveness that is specific to the context of constitutionally protected rights.

CHAPTER 9 ANKUKAMKUA'TU: DOING TREATY

...treaties are meant to be done. That's the way I have been taught that treaty is not a noun it's a verb. So, you know, just because we sat down and we agreed to something, it doesn't mean we now can't go back and sit down. We actually have to do treaty now. You know, have to treaty now. What does that mean? How, what are we gonna do together? How are we going to implement this? (Squid)

Identifying the challenges is not all that difficult; finding workable resolutions is the real problem. If resolving such differences was easy, it surely would have been done a long time ago (Ken Coates, 2000, p. 197).

9.1 CHAPTER OVERVIEW

As *Squid* and Ken Coates allude, finding solutions to fisheries governance for Mi'kmaq Aboriginal and treaty rights is complex and goes beyond implementing case law outcomes. However, and as this research suggests, finding solutions for differences within the current governance mode is not appropriate. Given the underlying governability challenges with Mi'kmaw constitutionally protected rights, treaties protecting the Mi'kmaw way of life, differences in knowledge systems, and over 150 years of oppressive legislation, "such differences" referenced by Ken Coates is likely an understatement, and the noting of "do treaty' is less concrete. These differences are not only attributed to differences in culture or epistemology but also embedded in a system of legal rights for which the current governance mode cannot adequately address, and which the Mi'kmaq in Nova Scotia are only beginning to [re]explore. This chapter answers the

overarching research question, how can Mi'kmaq Aboriginal rights and treaty right to fish be governed in Nova Scotia? Through the lenses of Interactive Governance Theory and Two-Eyed Seeing and drawing on the considerations to address governance limits as described in Chapter Five and Chapter Eight, this chapter describes the components of the governing system that are required for an alternative governance model, that reflects the objective of 'doing treaty', *ankukamkua'tu*⁴⁸.

Based on the assessment of governability on different expressions of vulnerable species and case law underpinning legal pluralism in Canada, the social systems-to-be-governed for Atlantic salmon and American lobster is diverse, complex, dynamic and vulnerable. As such, a hybrid arrangement as an alternative mode of governance was identified to address the poor performance of the current governing system while focusing on issues of legitimacy and effectiveness. However, also noted was the lack of self-organization of Mi'kmaw fishers in the community or as a geographical unit. Thus, the first recommendation is to create a self-governing organization of Mi'kmaw fishers. This is a governance gap but, importantly, also the opportunity to address marginalizing Mi'kmaw fishers, enhance legitimacy, and found governance on the Mi'kmaw knowledge system.

The following elaborates on how self-governing can enhance the legitimacy and effectiveness, thus governability, of Aboriginal and the treaty rights to fish in Nova Scotia. Using the components of the governing system, based in Interactive Governance Theory: the governance mode, governance orders, elements of governance, and

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⁴⁸ Ankukamkua'tu refers to doing in the treaty way or manner.

governing interactions, the 'how' each of the components may be achieved are discussed. Using the identified opportunities arising from the data discussed in Chapter Five, the alternative governance model is proposed that addresses the identified governance gaps, forges a [treaty] relationship, reflect governance founded on the Mi'kmaw knowledge system, and where still possible, uses aspects of current governance processes.

9.2 A Proposed Fisheries Governance Model for the Mi'kmaq in Nova Scotia

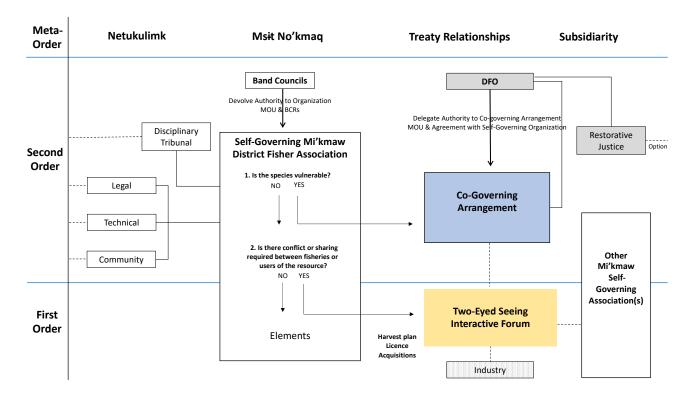
Historically, the Mi'kmaw way of life was not thought of as an Aboriginal right or a treaty right. It was a way of life before colonization and agreed to with the settlers through treaties. Separating a way of life into two 'ways' of rights based on different case law outcomes contributes to challenges for legitimacy of governance and its effectiveness. Many Mi'kmaw fishers refer to "Aboriginal rights" and "inherent rights" interchangeably and reflect that the inherent rights, as a way of life, was protected through the treaties. While the use of the term 'Aboriginal' is powerful in that it describes the historical connection to the land and resources and self-governing prior to the arrival of settlers, the term 'treaty right' in the context of this research refers to an agreement for co-existence and agreement to a political order based on that historical connection and the protection of the Mi'kmaw way of life, and the ability for economic gain through fishing. Both connotations have implications for governance. Recognizing Aboriginal as self-governing but as an image without settlers thus lacks an image of mutual or economic benefits or co-existence. The term treaty, however, imparts an image of shared responsibility through co-governing while maintaining a way of life and Mi'kmaq sovereignty through self-governing. Given the gaps in self-governing and co-governing

modes for the Mi'kmaq and DFO, the image of 'treaty' is apt and imparts an image of two societies agreeing to share the same space and resources, and ultimately, responsibility. Thus, rather than designing governance for Mi'kmaq Aboriginal and treaty rights to fish separately as they are underpinned by Canadian case outcomes, I suggest that both fisheries should be governed as "Mi'kmaw rights-based fisheries." This would also be distinguished from the communal commercial fisheries which are undertaken as a commercial fishery that ultimately follows commercial fishing harvest rules granted through the privilege of a licence.

There are advantages and disadvantages to conceptualizing Mi'kmaq Aboriginal and treaty rights to fish as distinct or combined. As distinct fisheries, a fishery based on an Aboriginal right is grounded in pre-settler context that recognizes Mi'kmaq sovereignty and authority over their lands and people but neglect the reality of a modern context. The legal right of the treaty right to fish for a moderate livelihood honor the treaties, recognize shared history, and incorporate legal outcomes from both the *Sparrow* and *Marshall* decisions and other case law. Treaty also imparts an image of the fisheries as not only the 'what' of the image, but the 'how'. The 'how' being societies co-existing, and with their own capacity to govern. However, while the concept of treaty rights to fish is indeed apt and reflects a modern context, for the purposes of this thesis and to avoid confusion, I will continue to refer to both Aboriginal and treaty rights to fish as distinct but governed together. In the context of Nova Scotia, this would allow the sale of lobster for personal or economic benefit regardless of how it was acquired as the same regulation applies to both Aboriginal and communal commercial fisheries that permit the sale of

product. However, revisions to Aboriginal Fisheries Strategy or the creation of regional based Aboriginal fisheries policy are needed to include treaty right to a moderate livelihood as the extension of personal use for FSC to include sale.

Arguably, self-governing is not a new concept. Also theorized in collective action theory, its premise is built on the ability of those dependent on common pool resources, such as fish, to have the ability to collectively organize and determine rules to improve their outcomes (Ostrom, Gardner, & Walker, 1994). The Mi'kmaq governance model I propose for governing fisheries based on Aboriginal and treaty rights is illustrated in Figure 16.



Proposed Mi'kmaq Governance Model for Mi'kmaq Aboriginal and treaty rights to fish displayed according to the IGT governance orders, as indicated by the blue solid line separating the orders. Non-shaded areas indicate Mi'kmaw self-governing and supporting organizations. Shaded areas indicate DFO organizations; checkered box indicate industry. Blue box indicates a Mi'kmaq-state co-governing arrangement. Solid lines represent direct links; dashed lines represent linkages to processes needed to inform the co-governing arrangement or linkages between Mi'kmaq organizations and other processes. Yellow box indicates inclusion of multiple organizations specific to the topic or task to represent governing interactions that use Two-Eyed Seeing to learn, share knowledge, resolve conflict, coordinate or communicate, including other district-based Mi'kmaw self-governing fisher associations.

The proposed model is supported by the opportunities identified by the research participants' perspectives (Table 5). For example, the model recognizes the shared perspectives to forge a [treaty] relationship as the basis for governance, the need to interact to build relationships, understand the significance of fisheries to the Mi'kmaq, and is built upon principles of sharing through a Two-Eyed Seeing interacting forum. The model also takes into consideration the desire for solidarity among the Mi'kmaq, as emphasized by the Mi'kmaq, as well as founding governance on the Mi'kmaw knowledge system. Here, the need to incorporate Mi'kmaw ways of knowing, values, *Netukulimk*, traditional governance approaches, and the need to address deviations as when rights are wronged are also taken into consideration. From the Mixed and federal/provincial participants' perspectives, there are shared values of incorporating traditional governance approaches, including self-governing, and Mi'kmaq ways of knowing, but also the recognition of the need to re-invent governance where necessary. The federal/provincial participants also emphasized the value of using current governance processes that were shared across all participants. In particular, these included integrating western law to support fisheries and governance, using agreements as tools to clarify roles and responsibilities to improve governance and utilizing established processes for fisheries governance based on the experience of federal and provincial regulatory bodies. Lastly, the model addresses governance gaps by creating structure where necessary, building capacity in First Nations and community processes, incorporating decisionmaking criteria, and making room for Mi'kmaw fishers in the processes.

To understand the proposed governance model recommended for the Mi'kmaw context to enhance both legitimacy and effectiveness of the governance of Aboriginal and treaty rights to fish, it is necessary to begin with the governing components, starting with the governance orders, identified on the extreme left of the diagram (Figure 16). Governance orders refers to the nested and related functions of governance as the meta-order focusing on the principles and values; second order, the institutional arrangements; and first order, where actors and their organizations interact to solve problems and identify opportunities (Kooiman et al., 2008; Kooiman, 2005).

9.2.1 Meta-Order: Principles and Values Governance Orders

Described as the principles underpinning governance, meta-order principles are related to ethics such as those that bind and evaluate governance (Kooiman et al., 2008; Kooiman, 2005). Notions of sustainability principles, Code of Conduct for Responsible Fisheries, and United Nations Declaration on the Rights of Indigenous Peoples are examples of potential meta-order governance. Mi'kmaq, however, identify with *Msit no 'kmaq*, meaning 'all my relations'. As a governance principle, this concept recognizes the interconnectedness of all people, animals, plants, and the non-living. Having governance guided by *Msit no 'kmaq* suggests that relations and responsibility to maintaining those relations are important whether they are with people, animals, Mother Earth, in the past, now, and in the future. As all-encompassing yet expressed in simplistic terminology, the principle of *Msit no 'kmaq* reflects a cultural understanding of governance, whether internal or external to Mi'kmaw society, to guide Mi'kmaw actions, and is a fitting principle for Mi'kmaw self-governing of Aboriginal and treaty rights to fish. As discussed in Chapter Five, and as an important component to knowledge systems (Giles

et al., 2016), incorporating Mi'kmaw beliefs and values are pivotal to enhancing governability.

An important value derived from *Msit no'kmaq* is the sustainability of self with the natural world without jeopardizing the ecological integrity, *Netukulimk* (McMillan & Prosper, 2016; Prosper et al., 2011). Describing how one relates to the environment, *Netukulimk* describes actions at the individual level and is, in the English language, a concept embedded with multiple values applicable to fisheries management (Chapter Five, s.5.2.2). Incorporating both *Msit no'maq* and *Netukulimk* as meta-order governance are the foundation principle and value respectively for which to base Mi'kmaw governance in relation to the Mi'kmaw knowledge system, and thus incorporating a key opportunity identified in the research.

As an opportunity identified in Chapter Five that was shared among participant categories, forging a [treaty] relationship is an important value that underpins a relationship not only between nations but within nations. It denotes the need for solidarity on the part of the Mi'kmaq, the recognition of treaty as foundational to understanding the significant of the fisheries to the Mi'kmaq, sharing, interacting, collaborating, and benefitting economically, the need for trust, and the application of rights in the modern context. This implies more than relationship building with government or as nation to nation. Further, and as Pictou (2015) suggests, small 't' treaty relationships as relationship with industry are equally valuable given the need to resolve conflict

experienced between the commercial and livelihood fisheries and non-Mi'kmaw and Mi'kmaq fishers.

As legal scholar Palmater (2014) notes, "Both sides of this treaty relationship have an obligation to take action. Canada, for its part, must (1) create the legal, policy and social space for Indigenous peoples to exercise their right to be self-determining, (2) officially abandon the current federal assimilation policy, and (3) amend the *Indian Act* to eliminate gender and racial discrimination. Indigenous First Nations and Nations, for their part, must also take action to address the current inequities amongst their peoples, regardless of Canada's positions" (p. 48). Clearly, amending the *Indian Act* may, hopefully, be part of UNDRIP review as the space for self-determination and abandonment of assimilation policies are needed immediately, as is the Mi'kmaq obligation to act.

And lastly, subsidiarity as a principle affirms governing responsibility to at the lowest, capable level of organization (Jentoft, 2007). The fisher association, supported by staff and Mi'kmaw organizations, would act as the lowest and capable level of organization. This principle is a key principle in Canada's Constitution and Canadian federalism underpinning the division the powers between federal and provinces. However, as Cyr (2014) notes, legislative power is not necessarily required. Rather, subsidiarity relies on consideration of proximity and to a lesser extent, effectiveness;

concerns of proximity must come first, and concerns of effectiveness only come second. Indeed, the principle of subsidiarity does not require the allocation of legislative power to the institution that would be the *most effective* in dealing with a

particular matter, it rather means that the *most proximate* institution must govern the matter *unless it is unable* to do so (Cyr, 2014, p. 27).

Given that the sharing of powers between Canada and the Mi'kmaq is not yet part of Canadian federalism, the principle of subsidiarity is a current governance concept and mechanism to support Mi'kmaw self-governing of Aboriginal and treaty rights to fish in Nova Scotia.

9.2.2 Second Order: Focusing on Institutions of the Mi'kmaw Fisheries Governance Model

Based on the research results, the proposed governance model incorporates two different modes of governance depending on two considerations related to the Sparrow and Marshall decisions within the self-governing mode. The first consideration is based on the assessed vulnerability of the species being harvested. The second consideration is based on sharing and the potential or presence of conflict based on economic and historical dependence and regional fairness, and treaty relations. If answers to both considerations are negative, a self-governing mode is followed as illustrated to the left by the blue coloured rectangle while a positive response to the first consideration follows a co-governance approach as illustrated to the right by the blue coloured rectangle. A positive response to consideration two follows enhanced interactions between state and industry in the Two-Eyed Seeing Interacting Forum (shown as yellow in Figure 16). As current federal management areas may not align with Mi'kmaw district, it is conceivable that coordination and communication, and potentially resolving conflict between other adjacent district based Mi'kmaw self-governing organizations may be required. The model facilitates continued reassessment such that should the status of the species

change, the first consideration regarding species vulnerability remains the priority in determining the governing strategy.

Self-governing in the context of Canada's Indigenous peoples, is often synonymous with self-government. However, there are important differences between the two. Selfgovernment arrangements are possible to assume greater responsibility, control and govern the internal affairs of Indigenous peoples. The default mechanism for selfgovernance is through opportunities provided by the self-governance policy. While these long and cumbersome processes that include all governing activities as part of the selfgovernance 'package' are widely accepted means for attaining self-governance, they are often part of comprehensive claim settlements. In such situations, also referred to as modern day treaties, they are negotiated and implemented over an extended period of time, and specific acts are created to give effect to newly created land claims agreements. In such cases, the *Indian Act* no longer applies except for the definition of Indian status. The policy entitled *The Government of Canada's Approach to Implementation of the* Inherent Right and the Negotiation of Aboriginal Self-Government (Crown-Indigenous Relations and Northern Affairs Canada, 2010) recognizes the inherent right of Aboriginal peoples and outlines the process to self-government as a flexible and context driven but lays out several relevant limits for self-governing of natural resources. Namely, Indigenous law cannot replace federal or provincial laws but can "co-exist" with rules of priority established for those laws found to conflict. Furthermore, primary authority will continue to reside with federal and/or provincial authorities in cases of fisheries comanagement thus not permitting sharing of power as in 'true' co-management or

recognition of self-governance (Boudreau & Fanning, 2016). Clearly, the policy infringes on s.52⁴⁹ of the *Constitution Act* (1982) as the continuity of customary practices of Aboriginal peoples is priority and have few rules limiting is application. The infringement may be viewed as a mechanism to extinguish existing current Aboriginal and treaty rights and replace with new agreements for self-government. This is not the intent of this research or proposed governance model. Rather, self-governing in IGT refers to situations in which actors take care of themselves, "without the purview of government" (Kooiman et al. 2008, p. 9).

In context of the research, 'government' also includes Mi'kmaq governments. Thus, for self-governing to occur, it must do so with the agreement of the Mi'kmaq governments, yet outside the purview of Mi'kmaq governments. As such, I suggest an alternative approach that does not involve relinquishing treaty or Aboriginal rights, respects legal pluralism arising from s.35 and s.52 of the *Constitution Act* (1982) and does not involve the purview of Mi'kmaq governments as communal authorities of Mi'kmaq Aboriginal and treaty rights to fish. This can be accomplished using current legal and governance instruments, specifically, the Aboriginal Communal Fishing Licences Regulations (SOR/93-332) and a Memorandum of Understanding to set out the political commitment, and the *Indian Act* whereby individual Mi'kmaq First Nations via Band Council Resolutions (BCR) devolve community authority to a self-governing organization (Figure 16). This also addresses the opportunity to address governing gaps, in particular, to create

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⁴⁹ Section 52 states that law that is inconsistent with the Constitution is not valid (*Constitution Act*, 1982).

structure where necessary and address conflicting relations between the Mi'kmaq (Table 5).

The recognition of the rights to organize is already available in the Aboriginal Communal Fishing Licences Regulations (SOR/93-332). For example, an Aboriginal organization rather than the band-based approach could be utilized, and without the use of timely and drawn-out negotiations for self-governance. To establish self-governing, a tribal council or an organization that represents a territorially based Aboriginal community or First Nations can carry on fishing and related activities with associated conditions and the ability to delegate the responsibilities from the community to the organization (Aboriginal Communal Fishing Licences Regulations, 1993). Thus, the organization could be the licence holder and authorizes fishers similar to how licences are provided to communities. While the use of licences is a sensitive topic for Mi'kmaq people and many Mi'kmaw fishers understand that they 'do not need licences' as evidenced by the Marshall and Sparrow outcomes, the acceptance of licences will enable fishers to sell their catch and not have to rely on the "black market" or selling at a very small scale. Furthermore, the use of licences aligns with the findings of this research which identified the shared opportunity of using appropriate current governance processes for integrating western law as a shared subtheme.

To accomplish this requires authorization to act on behalf of an Indigenous group, community or people that hold rights recognized and affirmed by section 35 of the *Constitution Act* (1982), *Fisheries Act*, 1985, s.2(1)). Here, decision-making could be

devolved to a self-governing unit. This can be accomplished by doing two things. First, to use a Memorandum of Understanding to authorize the self-governing unit to act on behalf of the Mi'kmaq First Nations, such as in Canada's approach to make the powers of the federal and provincial governments and jurisdiction to the provinces under the *Constitution Act* (1982, s.91,92). Second, the use of Band Council Resolutions to devolve authority to the established governance structure as lowest level of organization as a district-based fisher organization(s) is not the only requirement for which the principle of subsidiarity is to be enacted. The organization must also be capable of governance (Cyr, 2014).

To enhance legitimacy and effectiveness and counteract current fragmentation in Mi'kmaq society and marginalization, thus improving governability, fishers must build capacity to design institutions "that allow for interactions between the governor and governing system and effective sharing of power...in a way that make both proactive and responsible" (Jentoft & Johnsen, 2015, p.717). How this is achieved is shared between the design of the institution and first order governing activities. Second-order governance is "...the meeting ground of those being governed and those governing" (Kooiman et al., 2005, p. 20). This implies, at least in self-governing, that second order and first order are not distinct but rather are integrated and overlapping. The following section will present the second-order and first order governance as the institutional design and problem-solving and opportunity creation as both are integrated within self-governing.

9.2.2.1 Second & First Order: Designing the Self-Governing Mi'kmaw District Fisher Association and Co-Governing Arrangement

Using Ostrom's design principles for collective action (Ostrom, 1990) later refined by Cox, Arnold, & Tomás (2010) and proponents of IGT, the following set of eight recommendations are used to guide the institutional design of the self-governing institution I proposed for the Mi'kmaw fisheries governance model. Using the design principles proposed by Ostrom (1990) and later Cox et al. (2010) (Table 12), I suggest how it may be accomplished, although I reordered the design principles to improve the flow of the description of the governance model.

Table 12. Modified design principles for self-governing institutions. Taken from Cox et al. (2010).

Principle	Description
1A	User boundaries: Clear boundaries between legitimate users and nonusers must
	be clearly defined.
1B	Resource boundaries: Clear boundaries are present that define a resource system
	and separate it from the larger biophysical environment.
2A	Congruence with local conditions: Appropriation and provision rules are
	congruent with local social and environmental conditions.
2B	Appropriation and provision: The benefits obtained by users from a common-
	pool resource (CPR), as determined by appropriation rules, are proportional to
	the amount of inputs required in the form of labor, material, or money, as
	determined by provision rules.
3	Collective-choice arrangements: Most individuals affected by the operational
	rules can participate in modifying the operational rules.
4A	Monitoring users: Monitors who are accountable to the users monitor the
	appropriation and provision levels of the users.
4B	Monitoring the resource: Monitors who are accountable to the users monitor the
	condition of the resource.

Principle	Description
5	Graduated sanctions: Appropriators who violate operational rules are likely to be
	assessed graduated sanctions (depending on the seriousness and the context of
	the offense) by other appropriators, by officials accountable to the appropriators,
	or by both.
6	Conflict-resolution mechanisms: Appropriators and their officials have rapid
	access to low-cost local arenas to resolve conflicts among appropriators or
	between appropriators and officials.
7	Minimal recognition of rights to organize: The rights of appropriators to devise
	their own institutions are not challenged by external governmental authorities.
8	Nested enterprises: Appropriation, provision, monitoring, enforcement, conflict
	resolution, and governance activities are organized in multiple layers of nested
	enterprises.

legislation. In Nova Scotia, First Nations are categorized as 'on' and 'off' reserve despite having membership to the First Nation community. Furthermore, many First Nations are working to address the discrimination regarding who has status under the *Indian Act* and develop their own standards as to who is Mi'kmaq. Until such details are worked out, the *Indian Act* definition would be the criterion to determine the legitimacy of appropriators. Recognizing these challenges, the self-governing organization would represent both 'on'

and 'off' reserve status Mi'kmaq in Nova Scotia. Besides, future rules could be made to

established and First Nations and Mi'kmaw fishers have created processes to address this

broaden who is Mi'kmaq and who are treaty beneficiaries once the organization is

Mi'kmaw with Indian status are legitimate rights holders under the current Indian Act

Design Principle 1A. Clearly Defined Boundaries for Appropriators

9.2.2.2

issue.

9.2.2.3 Design Principle 1B: Resource Boundaries

Historically, Mi'kmaq traditional governance was organized into districts and this concepts of geographical organization of people to the environment remains an important link in Mi'kmaw history. As fishers describe themselves as the minority within their communities, using the concept of Mi'kmaq districts, fishers from geographically similar areas and off-reserve residents can enhance their representation. Should participation of Mi'kmaw fishers remain marginal, districts can be aggregated to improve efficiency and reduce confusion as to what fishing rules apply to whom and where.

Mi'kmaw districts are not clearly defined in contemporary terms, and the impact of reserve systems created through the *Indian Act* created pockets of reserves throughout Nova Scotia. These concentrations of populations of smaller and dispersed Mi'kmaq populations create confusion and challenges as to where individuals can fish. In the interim, Nova Scotia can be used as the geographical boundary with possible subdivisions as *Unama'ki* (Cape Breton Island) and Mainland, with the understanding that the mainland may further sub-divide and utilize a Mi'kmaq district approach.

9.2.2.4 Design Principle 3: Collective Choice Arrangements

Collective choice arrangements imply the use of processes for modifying rules but also the incorporation of local knowledge (Cox et al., 2010). Furthermore, the lack of such arrangements or the use of weak arrangements leads to the demise of the management of the common pool resource (Cox et al., 2010). Given the importance of the collective choice arrangements to the success of self-governing, careful consideration must be given

to how decisions are made, the local context, and what knowledge is used to inform decision-making.

A Mi'kmaw fisher association is proposed as the collective choice arrangement and as an opportunity to strive for solidarity among the Mi'kmaq, address governance gaps especially the creation of structure where necessary to make room for Mi'kmaw fishers (Table 5). While all Mi'kmaq have the legal right, not all Mi'kmaq are engaged in the fishery. Thus, the reduction in membership to those considered to be stakeholders will be manageable and demonstrate that while the right is collective among Mi'kmaq, not all Mi'kmaq are indeed fishers. Should membership increase, then there is a point of contact to address sharing of access. The association will be the governing body authorized by the First Nations leadership under the *Indian Act* to take collective action that apply to Mi'kmaw fishers who are part of the association. This may also provide the advantage of removing conflict between leadership from different communities and enhance relationships between fishers from different communities. Here, opportunities emerge to found governance on the Mi'kmaw knowledge system to incorporate Mi'kmaw ways of knowing, values, harvesting practices, governing principles, and culturally appropriate ways to address issues of ethics or deviations from harvest plans and/or policies.

The use of an association type of organizational structure is largely a western concept and is both effective and legitimate for fisheries governance. Associations serve their members and give order and structure, with members as the ultimate decision-makers (IFLA, n.d.). However, in the proposed model, such an association must be structured

according to Mi'kmaq culture and traditions. Typical components to the association are the board of directors who have authority over policy and finances as examples, an executive committee with elected representation, and the use of committees to develop harvest rules, sanctions, address disciplinary needs and appeals, and monitoring. Opportunities to include traditional governance leadership and continuity of Mi'kmaq values could be through the inclusion of the Mi'kmaq Grand Council as the, or some of, the Board of Directors and/or members of the disciplinary tribunal (Figure 16) thus instilling Mi'kmaq Grand Council traditional roles as both guiding and resolving conflict and including Mi'kmaq in the decision-making process. The proposed Executive Committee would be elected from the membership and a coordinator and potentially other support staff would be paid positions within the association to coordinate meetings, committees, issue licences, and other needs. This conceptualization aligns well with opportunities for founding governance on the Mi'kmaw knowledge system, in particular incorporating Mi'kmaw ways of knowing, traditional governance approaches, and selfgoverning. Moreover, the ability to address deviations differently will enhance the governability of the Aboriginal and treaty right to fish when legal means are ineffective. Identified as opportunities, there is a recognized need to re-invent governance and create structures where necessary. Other ways to re-invent governance is to create linkages to support services from already established Mi'kmaw organizations. Legal, technical, and community support is possible with existing organizations such as KMKNO and APC, UINR and/or MCG, and Mi'kmaq First Nation fishery departments where fishery guardians are already employed in most of the communities, or other Mi'kmaq fisheries organizations serving off-reserve members such as Native Council of Nova Scotia.

Linking already established services as support services for fishers and fisher associations enhances the operation of all organizations and is practical, given limited capacity.

Furthermore, the self-organization with established connections through its supporting organizations offers opportunities for linkages for participation in consultation processes and advisory groups with other organizations that may enhance fisher participation in such processes where they were previously not included.

Expanding on the Self-Governing Mi'kmaw District Fisher Association illustrated in the white coloured box in Figure 16, a suggested self-governing structure for the Mi'kmaw fisher association is illustrated in Figure 17. The shaded areas indicate processes and linkages that are external to the self-governing organization that provide support to association processes such as committees or as the disciplinary tribunal. Membership is the highest level of decision-makers in the association. Members of the organization would be Mi'kmaw fishers who are registered Indians under the *Indian Act* (1985) who fish in a geographical area. Committees can be used for specific tasks and processes needed and are at the discretion of the association. A selection of committees is illustrated, however, the need to develop sanctions is another task of the association and is not specifically identified in the illustration below. Opportunities to incorporate traditional governance are possible in multiple areas of the suggested self-governing organization. For example, it could be accomplished using the Mi'kmaq Grand Council in an advisory role as members of the Board of Directors, or as part of the executive committee, disciplinary tribunal or in committees such as those to develop harvest rules. Ultimately, it should be the self-governing organization, with the Mi'kmaq Grand

Council, to determine how and who fulfils positions related to the Board of Directors, Executive Committee, and disciplinary tribunal.

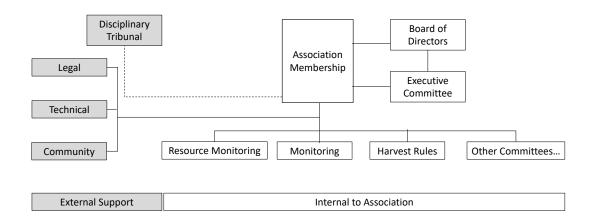


Figure 17 Suggested structure for Self-Governing Mi'kmaw District Fisher Association.

9.2.2.5 Design Principle 2B. Congruence of Appropriation and Provisions Appropriation rules can be developed by the self-governing organization. With members from the participating First Nations representing the geographical unit where fishing takes place, the development of organizational and fishing access operational policies, harvest rules, reporting structure, licensing, and sanctions can be accomplished. While this may be an intensive endeavour initially, the following years may require only modifications based on changes to local conditions.

9.2.2.6 Design Principle 2A. Congruence with Local ConditionsRules must be compatible to local conditions in order to be effective (Ostrom et al.,1994). Local conditions indicated by resource status vary with the species fished that may

have implications for justifiable infringement to Mi'kmaq fishing. Furthermore, there may be differences in resource abundance within provinces. Thus, the mode of governance employed is depended on the vulnerability of the species locally (Figure 16). As such, should species not be vulnerable, rules can be created based on species status that may be derived from federal or organizational means, Mi'kmaw knowledge or other sources. However, should the status of the fish be vulnerable, then co-governing would be utilized as illustrated in Figure 16 by the blue coloured rectangle. To illustrate, based on the case studies researched for this thesis, institutional rules created for lobster would be pursued as self-governing while rules for fishing Atlantic salmon would be pursued as a co-governing arrangement. Furthermore, decision-making may be shared for species of high vulnerability thereby recognizing a treaty foundation for governance. A suggested co-governing structure for the Mi'kmaw fisher association is illustrated in Figure 18.

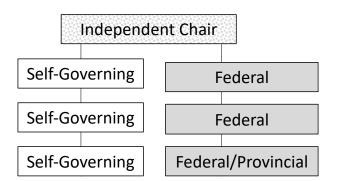


Figure 18 Suggested structure for co-governing arrangement for species of high vulnerability. Shaded areas indicate federal and/or provincial organizations depending on the issue and authority; white indicates self-governing appointments; patterned indicates independent, external organization or individual to be the nominated chair.

Co-governing can be created using agreements. As tools already in use for the Mi'kmaq and other Indigenous peoples for licence conditions, agreements can be made with the self-governing organization and authority delegated from the Minister of Fisheries to Regional Director Generals for both the Maritimes and Gulf Regions to support the cogoverning arrangement. According to DFO, many decisions are "sub-delegated to regional authorities" such as Regional Directors General for fishers management actions (Government of Canada, 2020b). As this is not intended to be a land claims management board or involves multi-regional fisheries, ministerial decisions are not required (Government of Canada, 2020b). The suggested approach is similar in structure to other co-management models such as the Torngat Mountains National Park Co-Management Board with the nomination of an independent chair (Nunatsiavut Government, 2021). Furthermore, this is an opportunity to incorporate traditional governance, in particular, the traditional role of the Mi'kmaq Grand Council in the co-governing structure as one of the self-governing fishery association representatives. Should consensus not be achieved, the representatives could use voting to achieve the decision. Voting can be used to address lack of consensus if it does arise. If the vote was split equally, independent chair could serve as the tiebreaker. Similarly, this could be applied to situations where selfgoverning organizations share space and resources and where conflict over sharing may arise. In this example, rather than having federal/provincial authorities involved, the cogoverning structure would be between the Mi'kmaw districts sharing space and resources, such as for Atlantic salmon where more productive rivers in one district may be able to provide for other fishers from other districts, or where Mi'kmaw districts

overlap in LFAs, salmon management areas, or other management areas or traditional fishing areas for other fishers.

9.2.2.7 Design Principle 4A: Monitoring Users

For this design principle relating to monitoring, three options are considered. Monitoring by users, monitoring by Mi'kmaw guardians, and external monitoring has its own advantages and disadvantages (Fanning, 2000; Guirkinger et al., 2021; Oyanedel, Gelcich, & Milner-Gulland, 2020; Raakjær Nielsen, 2003). As there are currently no sanctions for failing to comply with Mi'kmaw ethics, Mi'kmaq rights, and practices of *Netukulimk*, monitoring does not necessarily have to be accomplished by enforcement officers. In this case, monitoring of users can be accomplished by First Nation community guardians as they currently lack federal authority to enforce the Fisheries Act and fisheries regulations, thus are not in conflict of interest. It may also be accomplished by other appropriators, or those designated by the self-governing association. A monitoring and reporting structure can be developed within the self-governing association to deal with situations when 'rights are wronged' and ensure that monitors are accountable to the association. Currently, in situations where co-governing and licence conditions are co-developed, restorative justice could be used to address violations (Figure 16).

Restorative justice and alternative measures programs are in place for offences occurring in the DFO Gulf region. The agreement is the first of its kind signed between DFO Gulf, the Public Prosecution Service and the Mi'kmaq Confederacy of Prince Edward Island (MCPEI). It provides "an alternative to the traditional court system that allows

Indigenous and other groups to use a process based on holistic community values" (DFO Gulf & MCPEI, 2018). Having its basis in restorative justice principles, restorative justice centers the crime as a violation of people and relationships, creates obligations and liabilities, and aims to "heal and put right the wrong" (Department of Justice, 2017). While not in place in the Maritimes Region, a National Action Plan for restorative justice as a standard enforcement tool for all regions is in development (DFO Gulf & MCPEI, 2018). The MCPEI Indigenous Justice Program has developed a guide to provide a knowledge base to assist justice personnel and clients to make more informed decisions when determining programs or sentences for Indigenous offenders (MCPEI Indigenous Justice Program, 2017).

Restorative justice is already utilized in some fisheries related offences in the Gulf Region and is the more culturally appropriate means to address violations from failing to abide by agreements and co-developed licence conditions. If adopted for Nova Scotia Mi'kmaq, this could be coordinated through DFO, the provincial justice department, and the supporting Mi'kmaw organization such as the Mi'kmaw Legal Support Network in Nova Scotia through their customary law program. Similarly, and as suggested by McMillan (2014), "the idea of creating justice committees to help with customary law and order were perceived as ways to empower community decision making" (p. 959).

An option could be available to link restorative justice processes back to the self-governing disciplinary tribunal to be addressed through the Mi'kmaq customary law procedures. This would have the benefit of using similar processes for self-governing, or

when individuals fail to adhere to the agreements through co-governing arrangements, thereby enhancing both legitimacy and effectiveness of processes to address situations when rights are wronged for the Mi'kmaq.

9.2.2.8 Design Principle 5: Graduated Sanctions

Sanctioning is used to deter excessive violations while maintaining group cohesion and punishing severe violations (Cox et al., 2010). Graduated sanctions are developed in proportionality to the severity of violations and increase incrementally for repeat offences (Cox et al., 2010; Ostrom, 1990; Ostrom et al., 1994). Graduated sanctions should also be in proportion to the vulnerability of the resource.

Taking inspiration from how sporting associations deals with behaviour and other ethical issues, infractions can be reported by other association members, individuals in authority, or chaperones, and can be dealt with via a disciplinary committee, also known as a tribunal. Using respected members such as the Mi'kmaq Grand Council who are the ones who traditionally let others know when they were in the wrong, or when 'rights were wronged', can help both deter infractions and created processes to invigorate traditional governance. A disciplinary committee, or disciplinary tribunal, would, for example, 'hear' the offence, interpret the rules, educate, and deliver sanctions based on those developed or suggested by the association, Executive Committee, or Board of Directors. Examples of graduated sanctions are present in fishing plans developed by other Mi'kmaq First Nations such as Listuguj First Nation although they lack species specific sanctions based on resource vulnerability (Listuguj First Nation, 1995, 2019).

9.2.2.9 Design Principle 4B: Monitoring the Resource

Monitoring of the resource by appropriators has been shown to enhance communication and information sharing, while other studies revealed the use of external knowledge to support sustainable fisheries (Cox et al., 2010). Again, to integrate values of founding governance on the Mi'kmaw knowledge system, it is likely that both sources of information could be used to develop and modify rules as local conditions change. Here, the use of federal stock status updates coupled with Mi'kmaw knowledge could be used to enhance evidence-based decision-making. Processes to gather and interpret Mi'kmaw knowledge must be included in the design of the association or using support organizations such as technical AAROM organizations.

9.2.2.10 Design Principle 6: Conflict Resolution Mechanism

Conflict resolution mechanisms are required throughout the self-governing organization. Wherever there is a process such as a committee or decision-making forum, conflict resolution processes must be incorporated. Using terms of references to establish committees or responsibilities of the Board could be utilized to define responsibilities and provide clarity in what is to be accomplished. Furthermore, conflict resolution processes should be included in the terms of reference for the association and the Two-Eyed Seeing forum. Conflict regarding failing to abide by policy or harvest rules requires a specific form of conflict resolution achieved through a disciplinary tribunal. Conflict external to the self-governing association may be dealt with using co-governing processes such as those recommended for governing interactions in this chapter (9.2).

9.2.2.11 Design Principle 7: Minimal Recognition of the Rights to Organize The development of the self-governing organization is depended on whether First Nations leadership as established under the *Indian Act* will delegate authority. Given the interest and desire for Mi'kmaw fishers to be able to fish without conflict and a legal framework for Mi'kmaw livelihood fisheries, Mi'kmaq First Nations will likely see benefit to an innovative approach for governing of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia.

On the federal side, opportunities to recognize a self-governing organization currently exist through the Aboriginal Communal Commercial Licence Regulations. Once authority is transferred from the Mi'kmaq First Nation to the district based self-governing fisher association, licences can be issued to the organization rather than the community itself. Ministerial authority is needed to issue new fishing licences and can be arranged through DFO (Government of Canada, 2020b).

9.2.2.12 Design Principle 8: Nested Enterprises

Cox et al., (2010) noted the need to include horizontal linkages among appropriators in addition to Ostrom's (1990) vertical linkages among levels of jurisdictions. Thus, nesting of enterprises may occur between user groups and larger governmental jurisdictions or between user groups (Cox et. al., 2010). While legal, technical, and First Nations-based organizations can provide support, they can also be considered part of the nested enterprise. The self-governing body is both the decision-maker and a point of contact for other initiatives requiring fisher participation. Consultation based on the current tri-partite process in Nova Scotia would be enhanced with fisher representation and addresses the

lack of fisher input into the process. Similarly, Mi'kmaq perspectives on issues and work to support fisher needs by technical bodies such as UINR and MCG would be enhanced if a fisher body was established. Likewise, a fisher organization governed with the Mi'kmaq Grand Council as part of the Board of Directors, or other processes, would also re-establish a link replaced by the *Indian Act* over a century ago. It would also serve as a point of contact for building relations with non-Mi'kmaw organizations and fisher associations, and other Mi'kmaw self-governing fishing associations from different geographical areas.

9.2.3 Elements of Self-Governing

The three elements of governance are those that are "an intentional activity" (Kooiman et al., 2008, p.6) and are key tasks of the self-governing Mi'kmaw Fisher Association. In this component of the governance model (Figure 16), the image, instruments and action are intentional activities that describe where the fishery is, where it needs to be, and how to get there, thus informing the governance design (Jentoft, Chuenpagdee, Bundy, & Mahon, 2010; Kooiman et al., 2005).

9.2.3.1 Image

As noted in Chapter Two, images may come from a wide range of sources (Bavinck et al., 2005). However, images that are shared by groups, organizations or cultures serve as the bond for cohesion. According to Song, Chuenpagdee, & Jentoft (2013), not only do images describe "but they prescribe what the world ought to be" (p.170). Thus, the formulation of an image, or images, are fundamental to governance design (Partelow et al., 2020). In contrast to the 'tragedy of the commons' image where open access and lack

of regulations may result in collapse of resources currently influencing fisheries governance (Feeny, Berkes, McCay, & Acheson, 1990), the image of Mi'kmaq fisheries developed from the knowledge shared by Mi'kmaw participants for this research (Chapter Five) is reflective of the Mi'kmaw cultural values and is needs-based. The image of the Mi'kmaw fishery is described as one that supports the individual's and collective's physical, spiritual, cultural, and economic needs yet is self-governed, shared, responsible, conservative, respectful, and intermittent. Much of the image is captured in Mi'kmaq as *Netukulimk* and suggests that governance based on the image of *Netukulimk* is tangible. However, the legal definition of the 'right' as Aboriginal or treaty also imparts an image that should be taken into consideration and for governing purposes needs to be visualized.

In the Mi'kmaw language, Mi'kmaw fisheries is conceptualized as a way of life, without reference to a treaty or Aboriginal right. By combining 'Aboriginal', viewed as FSC by the Supreme Court of Canada, subsequently DFO, and reference by the Mi'kmaq and 'treaty' as livelihood fishing, it allows for the creation of an image of one fishery that can be used for either food, trade, barter, or sale as an economic gain that is issued under one licence for the purpose as determined by the Mi'kmaw district self-governing fisher association. An integrated image of the Mi'kmaw fishery that encompasses both Aboriginal and treaty rights to fish may reduce confusion for Mi'kmaw fishers, provincial governments and federal enforcement officers as to what one can do with one's catch, as demonstrated in the example of many and varied licenced lobster food fisheries and provincial policies developed to counteract potential sale of FSC lobster.

9.2.3.2 Instruments

Instruments come in a range of tools such as management plans, regulations, sanctions, and policies (Kooiman et al., 2005). However, instruments are not widely applicable to all situations or contexts, but rather should be developed for the problem it intends to solve (Bavinck et al., 2005; Kooiman et al., 2005) or as the governing means to achieve the image of the fishery (Partelow et al., 2020).

As evidenced in the assessment of hierarchical governing mode, regulations and subsequent sanctions are ineffective to restrict and regulate Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. Thus, the need for developing and formalizing 'law' may not be necessary. Rather, the focus could be in developing other instruments to support self-governing and the above-described image of the fishery, such as utilizing those identified by Ostrom (1990) and later refined by Cox et. al. (2010). Instruments such as policies, harvest rules, graduated sanctions and disciplinary process, reporting processes, and processes for scientific assessments are necessary to ensure a level of access for FSC needs. Ensuring such a level of access is analogous to the basic needs level (BNL) in s. 5.6.19 and s.5.6.20 Nunavut Lands Claim Agreement (NLCA, 1992) and as suggested by Giles et al., (2016). As treaty rights to fish implies the ability to retain for personal needs in addition to economic gain, a level of certainty is needed to ensure the resource is available to meet the FSC needs of the Mi'kmaq as described in *Sparrow* (1990).

9.2.3.3 Action

Actions are undertaken to remove obstacles, gain political will and follow new paths (Kooiman et al., 2008). Action is thus viewed as the governing interactions that occur between the governing system and the system-to-be-governed. In self-governing, the system-to-be-governed becomes the governing system (Jentoft & Chuenpagdee, 2015). In essence, within self-governing, primary actions are mandate-centred where all members could be included. Annual general meetings, committee meetings, knowledge gathering, and sharing are types of interactions to support decisions. Regardless of the actions undertaken, procedural principles such as the 'TACARIE' principles, or a subset of these principles, could be adopted to strengthen governance systems, such as those found in Table 13 (Kooiman, 2005). In IGT, governance interactions emerge from actions. The following discusses how governing interaction can occur.

Table 13 'TACIRIE' Procedural Principles. Adopted from Fanning, Mahone & McConney, (2011).

Principle	Interpretation
Transparency	Participants are aware of who make decisions and how they are
	made.
Accountability	Decision-makers are accountable to who they represent.
Comprehensiveness	From the onset, all interest groups will be consulted relative to
	the duration of the problems and opportunities and prior to any
	management decisions.
Inclusivity	Those with legitimate interests, in particular livelihood
	dependent groups, should be involved.
Representation	Decision-makers should represent all interest groups.

Principle	Interpretation
Information	All interest groups understand the objectives of the
	participatory process and have adequate and timely access to
	relevant information.
Empowerment	Equal opportunities for active participation in decision-making
	in a non-dominated environment for women and men.

9.2.3 Governing Interactions

Keeping in mind that governing interactions occur between the system-to-be-governed and the governing system, in self-governing, these interactions are internal to the selfgoverning process. However, the interactions between the self-governing system and the hierarchical governing system requires an approach that must support equality between self-governing and hierarchical modes and as mechanisms to learn between the industry and Mi'kmaq self-governing organizations. Addressing conflicting relations, learning, coordinating and adapting can also be accomplished using co-governing interactions of interplay. For example, resolving conflict, learning, adapting, and coordinating functions are needed for different knowledge systems to work and for Two-Eyed Seeing to be undertaken. To do this, a Two-Eyed Seeing forum for learning, adapting, coordinating, and communicating is recommended (Figure 16). Such forums can be task-specific such as issuing licences as a coordinating function, or more broadly as forums to learn about culture, conflict resolution, industry needs, or learning from each other for the purpose of adapting new or innovative management strategies. Structured like the working groups utilized in the tri-partite consultation process, these forums can be for learning, sharing, and understanding different perspectives and include those who can contribute

knowledge to the process and for which western and Mi'kmaw knowledge systems are equally valued. Knowledge can come from multiple sources including policy, regulations, Mi'kmaq or fisher knowledge, or as scientific based assessments. They can inform the co-governing arrangement or act as forums for sharing information and resources, resolving conflict, or to encourage learning as an outcome.

9.3 RECOMMENDATIONS FOR HIERARCHICAL MODE

Presently, there is an existing legal avenue to implement a self-governing model for Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. To enhance the legitimacy of the model, however, requires revisions to current hierarchical policies to enable cogoverning. Thus, recommendations required to support the proposed Mi'kmaq governance model for Mi'kmaq Aboriginal and treaty rights to fish are policy related. To start, however, DFO must reconceptualize Mi'kmaw fisheries from those that arise as case law outcomes to an integrated understanding of how both fisheries are indeed both legally and historically interdependent, unique, and in stark contrast to current regulated non-Mi'kmaw fisheries. To do this, DFO must also 'do treaty'. This implies sharing responsibility and authority with the Mi'kmaq as part of Canada's treaty obligation. This also requires policy that is context specific.

While a national policy may serve some purpose to unite a concept from coast to coast, given the diversity in nations, self-governance agreements, modern day treaties, historical treaties, and involvement in communal commercial fisheries, a 'brush-stroke' approach to Indigenous fisheries policy is not practical or fit the reality of Canada or Indigenous peoples, including First Nations. Rather, policy revision should be geographically based

with treaty rights to fish to be inclusive of the Aboriginal right to fish. It is not uncommon for DFO to develop policy based on geographical application such as the Commercial Fishing Licensing Policy for Eastern Canada. Furthermore, DFO has policy developed for commercial and non-commercial (i.e. recreational) fisheries. Similarly, and under the federal Aboriginal Fisheries Strategy, updates to reflect self-governing capabilities and need for co-governing of species that are vulnerable for the Atlantic region could be reflected in regional policies. Rather than only recognizing case law in the current policy, the recognition of historical treaties needs to be updated to reflect the current image of the Mi'kmaw fisheries. Because of geographic considerations and policy to reflect regional contexts, the unilateral issuing of licences regardless of whether First Nations communities agree should be replaced with incorporating co-governing mechanisms to respect the treaty relationship. Furthermore, existing policies will need to be amended to implement the proposed model as currently, ministerial decisions are required for "new or deviations from existing policy" (Government of Canada, 2020b).

Overall, there is a need to align provincial regulations and policies so that they are consistent with the implementation of fisheries arising from the treaty right to fish for a moderate livelihood instead of only the recognition of treaty or Aboriginal rights. As such, a coordinated approach between the federal and provincial government is needed to identify inconsistencies in policies and regulations for licences and the sale of product and align policies to include treaty recognition and implementation of a moderate livelihood fishery as a new category for fisheries.

Understanding the Mi'kmaw context is important to all areas of DFO. As such, important opportunities to forge relationships and educate non-Mi'kmaw on the Mi'kmaw context could be through establishing linkages to key outreach activity supported by the provincial efforts coordinated through the Office of L'nu Affairs (OLA), formerly the Office of Aboriginal Affairs (OAA) and Treaty Education (Office of L'nu Affairs, 2013). The Office of L'nu Affairs arose in 1997 out of the Tri-partite Forum partnership of the three governments promoting collaborative action on social and economic issues, to facilitate opportunities to resolve issues of mutual concern. The OLA has two responsibilities: one, to coordinate government's approach to consultation with the Mi'kmaq of Nova Scotia on matters that may impact their rights; and two, increase public awareness and understanding of Aboriginal issues via co-developed resources for the general public, schools and targeted audiences through Treaty Education. The government's approach is based on forming a new relationship based on partnership, respect and mutual understanding. With the introduction of the Made-in-Nova Scotia Process and subsequent agreements, the OLA coordinates discussions, negotiations, and consultation efforts with the Mi'kmaq of Nova Scotia (Office of L'nu Affairs, 2013).

9.4 BENEFITS AND CHALLENGES OF DOING TREATY, ANKUKAMKUA'TU

The model, as it is based on the challenges and opportunities identified by the participants and an assessment of current governance, can be beneficial to overcoming the current challenges experienced in Nova Scotia. I acknowledge that the application to the research and my proposed model is based on knowledge specific to Nova Scotia and is focused on the context of fisheries governance. While the recognition of the need for a relationship is valued by both parties, the Mi'kmaq in Nova Scotia desire a treaty

relationship while the non-Mi'kmaw see value in establishing and improving current relationships. While recognizing this difference, the research provides an alternative governance model based in current western law but underpinned by Mi'kmaq values and opportunities to integrate traditional governance processes as Mi'kmaw law. This may be seen as a limitation as it does not specifically address the larger and outstanding issues of sovereignty, jurisdiction, and Aboriginal title in Nova Scotia and more broadly in Mi'kma'ki. However, what it does contribute to is a feasible way forward that has the potential to show how these bigger issues might be addressed.

The thesis concludes that there is a way forward that is based on the creation of governing processes rather than restructuring law, although policy revisions are needed by DFO and the province of Nova Scotia. The model provides a way forward by addressing the identified challenges, shared opportunities, and a space to work through those that are not shared or may arise in the future. For the Mi'kmaq in Nova Scotia, it provides an opportunity for fishers to work together using traditional governance processes such as organizing through Mi'kmaq districts. It enhances accountability of Mi'kmaw fishers to Mi'kmaq through the Mi'kmaq Grand Council and a process is identified for addressing "when rights are wronged", specific to addressing Mi'kmaw accountability for which the current governing system could not address. By having fishers making decisions brings fishers out of the margins to enhance legitimacy of fisheries governance and removes the barriers of delayed decision-making by the Mi'kmaq First Nations leadership to facilitate decision making at the local level. For DFO, and the province, there is an understanding that DFO has the authority to govern

and *Marshall*, their authority is limited for governing Mi'kmaw fisheries. As such, their laws are not effective to govern Aboriginal and Treaty rights to fish. The authority of Mi'kmaq to govern their fisheries results in legitimacy issues found within DFO and society at large and must also be addressed through creation of new policies that are regional specific rather than national in scope and in modifying the current governing regime. Treaties vary across Canada and are distinct between nations. As such, a more regional focus could facilitate cooperation between Indigenous nations and DFO. For example, an Atlantic policy approach would address the sensitivity required for the Indigenous nations within the Atlantic region covered under the Peace and Friendship treaties. This would allow for a context specific policy within clearly defined boundaries. The exception would be Quebec, however, a more regional approach to policy development may likely enhance opportunities to ensure policies are relevant to Indigenous nations within the region.

Understanding that Bill C-15 regarding the legal framework to implement UNDRIP was only just recently accepted by Canada and received royal ascent on June 21, 2021, there is much more work needed to ensure Canada's laws are consistent with UNDRIP. However, this may take a while as it took a decade for Canada to legally support UNDRIP. Furthermore, it is the action plan, not the legal review, which will be developed over the next two years thus it may be several years before the legal review is completed, and much longer for the law to be amended. Even so, for fisheries, there is intent to build off current processes and collective arrangements rather than revise the

law (Department of Justice, 2021). The Mi'kmaq have waited for more than two decades for a legal framework for livelihood fisheries. With the conflict escalating between fisheries, and First Nation communities, more recently between First Nations in Unama'ki (Cape Breton Island), as Chief Wilbert Marshall of Potlotek First Nation noted (pers. comm.), both the Mi'kmaq and DFO need a solution now.

The model as presented does come with challenges. First and foremost, the delegation of First Nation authority to another organization may be a larger barrier than the use of cogoverning by DFO, as that is a current process already in use in co-management agreements. There is no example in Nova Scotia where the elected Mi'kmaw leadership has provided that authority to another organization where they are not involved in some capacity, such as the Board of Directors. In the case of the Nova Scotia Native Council, the authorization from all First Nations was not provided to the organization to represent their membership thus the organization does not have legitimacy in the perspective of First Nations in Nova Scotia. Clearly, creating a new organization without the permission and delegation of authority will not enhance legitimacy and can contribute to conflicting relations within the Mi'kmaq in Nova Scotia. More recently, in 2020, the creation of the Atlantic First Nations Water Authority and subsequent governance model is based on First Nations collaborating for the delivery of essential water and wastewater services. However, the Board is specific to one technical member and the First Nation leadership or selected representatives thereby maintaining a level of First Nations involvements (Atlantic First Nations Water Authority, 2021). This is evident in how the technical member of the board is selected. For example, recommendations on selecting technical

experts are made by the Chiefs who are part of the board (Atlantic First Nations Water Authority, 2021). While this authority delivers the water and wastewater services, it is not independent from the influence of First Nation leadership.

Given the examples provided above, conceptualizing governance outside the box of First Nation autonomy is a larger challenge to overcome. Thus, a challenge confronting the implementation of the model is for First Nations leadership to recognize the need to govern differently and to take a step back to allow Mi'kmaw fishers, the Mi'kmaq Grand Council, and the community membership to be part of governance and for the Mi'kmaw fishers, the Mi'kmaq Grand Council, and the community membership to take the responsibility to do so. The colonial impact of over a century of *Indian Act* governance engrained in the Mi'kmaq will likely be difficult to overcome, at least conceptually for First Nations in Nova Scotia, for their leadership, membership and the Mi'kmaq Grand Council. The legal tools are already in place to make the governance model a reality.

9.5 RECOMMENDED PATH FORWARD: TEST THE MODEL

Clearly, there are steps needed to make the model 'work'. While much of this is discussed in the model itself, an agreement from all parties going forward is needed to make the model a reality. There is reason to hope since the model was developed based on knowledge shared by both Mi'kmaq and non-Mi'kmaw participants, including Federal/Provincial Governments. The potential barrier is whether it will be supported through political will, accepted responsibilities, better relations, and ultimately, governing differently.

While the next steps might suggest the 'peddling' of the model to each group, perhaps a more effective step is to put the model to the test. My participation in former Mi'kmaq-DFO negotiations suggest that both DFO and the Mi'kmaq would be amendable to testing a fishery. Considering the current conflict in the lobster fishery, the lobster fishery could be the first test of the model that could be used and evaluated and refined where necessary.

To test the model, the following five steps are suggested.

- 1) Build an understanding of the process with the Mi'kmaq, federal and provincial governments, and industry. In the interim, communication on the governance model could be developed and communicated with the Mi'kmaq, state, and industry at multiple levels, in particular the role of Aboriginal and treaty rights and justifications for the model, and importantly, the role and space for Mi'kmaw fishers and industry in the governance of lobster fishery.
- 2) Secure cooperation among parties involved through MOU's and agreements. Ideally, all First Nations in Nova Scotia and the two administrative regions of DFO are in agreement to test a district based Mi'kmaw self-governing fisher association and co-governing process for a limited time.
- 3) Frame the test to a period of 5 years following the development of agreements and MOU's.
- 4) Secure administrative support for Mi'kmaw self-governing fishery association staff, in particular a liaison. In the interim, AAROM bodies could provide administrative support such as payroll; communities could provide space for

- logistics; securing association registration in Nova Scotia could be completed by the legal support from KMKNO.
- 5) Priority of access to Mi'kmaw districts as fishery rules must be defined. As such, an assembly of current Mi'kmaw lobster livelihood fishers could be arranged to discuss items of sensitivity with other fishers and the Mi'kmaq Grand Council who could provide cultural and ethical guidance. In turn, the access rules could be consistent across districts without impeding access yet based on local abundance and fisher needs.

CHAPTER 10 CONCLUSION

10.1 THESIS OVERVIEW

Current fisheries management in Canada is based on Western epistemology with decision making as hierarchical, 'command and control', and paternalistic. This creates challenges for effective management, especially in light of climate change (Fanning, et al., 2011; Holling, 2001). Alternate models of governance better suited to address and adapt uncertainties arising from climate change (Bundy et al., 2008; Campbell & Salagrama, 2001; FAO, 2009) and reliable indicators of species abundance (Baum & Fuller, 2016) are needed. Moreover, alternative models are needed that promote and integrate the elevated legal position of Indigenous people recognized in the Canadian Constitution and jurisprudence, history and historical treaties, and international policy (Wiber & Milley, 2007).

In this dissertation, two case studies illustrating how fisheries are undertaken were researched to explore the interface between Western and Mi'kmaw knowledge systems and fisheries governance. The first focused on the Aboriginal right to fish salmon, as supported by the *Sparrow* decision (1990) while the second focused on the pursuit of a moderate livelihood in the lobster fishery, as supported by the *Marshall* decisions (1999). Using Two-Eyed Seeing to explore this interface, the three research objectives were:

- 1. describe the Mi'kmaw image of their fishery;
- 2. assess the governability of these fisheries to understand how a system, or systems, work and provide insight into why it does not; and
- 3. propose an alternative Mi'kmaw fisheries governance model.

This final chapter provides the concluding statements from my research journey conducted on the assessment of governability of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. It concludes the dissertation by summarizing the research findings, assesses the theoretical propositions underpinning the research with the results, addresses the Two-Eyed Seeing methodological framework used to examine the selected case studies and development of the alternative fisheries governance model, and lastly, my reflection of the journey I have undertaken over the past seven years.

10.2 SUMMARY OF RESEARCH FINDINGS

The underlying premise of this thesis is that the current mode of fisheries governance is mismatched to the task of governing Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. The IGT framework for analysis suggests that governability can be described as the governing system, the systems-to-be-governed, and the governing interactions occurring between the two systems (Kooiman & Bavinck, 2013; Kooiman et al., 2005). Furthermore, the recommended governing mode is based on the properties of the systems-to-be-governed (Jentoft, 2007). As such, an assessment must take into consideration how these components work together to govern Mi'kmaw fisheries. An examination of the challenges identified in the research indicated low governability arising from poor performance and consequently recommended an assessment of the governing orders.

The research conducted suggests that the current mode of governance suffers from poor performance arising from a lack of legitimacy and effectiveness of the governing system for both Aboriginal and treaty rights, even when there is a legislative authority for the

infringement of the right based on the vulnerability of the species being fished. Within the hierarchical mode, a lack of legitimacy and effectiveness were found in federal legislation, policy and sanctions. Inconsistent and conflicting policies specific to Aboriginal fisheries and Indigenous relations and the absence of policy specific to fisheries based on the treaty right were noted, thus any extension or application of the current legal framework to the treaty right to fish for a moderate livelihood can be expected to suffer the same consequence. In addition, legal pluralism underpinning the Mi'kmaw context is further exemplified among Mi'kmaq First Nations which creates confusion for both the Mi'kmaq and the hierarchical governing system.

While the theoretical assessment of the systems-to-be-governed indicated that a hybrid approach of self-governing, co-governing, and hierarchical modes is suitable, self-governing was found to be absent or relied exclusively on the responsibility of the Mi'kmaq First Nations, and a co-governing mode was also absent. Similarly, governing interactions were found to be occurring without the participation of Mi'kmaw fishers or were absent in Mi'kmaq communities. Governing interactions such as negotiations and consultation reinforced federal power and offered little sharing of power or support for democratic processes. Other interactions such as advisory processes are slowly gaining fisher participation but largely occur with Mi'kmaq organizations to inform Mi'kmaq and DFO processes, with no mechanisms for seeking input from fishers at the community level. The research contributed knowledge previously undocumented but also contributed new theoretical knowledge.

The research contributed new theoretical insights contrary to existing IGT. While hierarchical governing is the recommended mode in IGT for address vulnerability of the natural system-to-be-governed, this research suggests that co-governing is more appropriate for Mi'kmaq rights-based fisheries on vulnerable species given the need for learning and coordination to determine reasonable harvest levels. Self-governing was found to be the most appropriate mode for species not considered to be vulnerable as justification based on conservation cannot be demonstrated by federal authorities.

Moreover, while IGT recommends a co-governing mode to address challenges presented by legal pluralism, this research suggests self-governing would be more appropriate for fisheries undertaken under Mi'kmaq Aboriginal and treaty rights. Taking these findings into consideration, an alternative governance model was developed.

The proposed alternative fisheries governance model is a self-governing Mi'kmaw fisher association with opportunities for co-governing for vulnerable species. An emphasis is placed on governing interactions through Two-Eyed Seeing. Here, learning, adapting, and coordinating through a Two-Eyed Seeing forum can reinforce equality between Mi'kmaw fishers and hierarchical fisheries authorities, knowledge, and as opportunities for discussions with industry to forge the treaty relationship through co-learning.

By assessing the factors of legitimacy and effectiveness in the governance of Mi'kmaq rights-based fisheries in the two case studies, the degree of consistency with the theoretical propositions regarding the governability of Mi'kmaq Aboriginal and treaty rights to fish was assessed.

10.3 Assessment of Theoretical Propositions

As described in Chapter One, the research approach was guided by three propositions which provided the theoretical underpinning for understanding governability. This was accomplished using the two examples of how the governing system performed for two different types of Mi'kmaq rights and vulnerability of species fished. The propositions, developed as part of the Fish-WIKS research project, provided the rationale to explain the governability in two different legal fishing contexts for Mi'kmaq rights-based fishing in Atlantic Canada, and in particular, Nova Scotia as the selected area of research. They also reflected the use of Two-Eyed Seeing in governance as divergence away from exclusive hierarchical domination of governance to one that reflects the values of both parties.

The lessons from the two case studies point to the reasons for low governability of Mi'kmaq Aboriginal and treaty rights to fish by hierarchical governing modes. While each context of fisheries is based in Nova Scotia for the Mi'kmaq, the case study methodology could allow for the research findings to apply to other Indigenous nations who are signatories to the historical treaties, such as the Pestomuhkati and Wolastoqiyik, residing in other provinces. As such, a comparison of the results obtained for the two case studies was used to evaluate their consistency with the stated propositions.

Proposition #1: The homogeneity of the western governance bureaucratic theoretical model seems at odds with the multiplicity of Indigenous knowledge systems.

Proposition #1 refers to the mismatch of a western hierarchical mode of governing with the varied Indigenous contexts. In the case of the Mi'kmaw salmon fishery, the research identified the mismatch as being based in how the governing system performs for this fishery. As such it was determined that the current legal framework contributed to the challenges experienced by Mi'kmaw salmon fishers. It was found to be neither legitimate nor effective for fisheries based on Aboriginal rights for species even when federal infringement may be valid, such as for fish species with high vulnerability and thus warranting infringement of Mi'kmaq rights. Furthermore, the other two modes of governing, self-governing and co-governing, were absent, as was fisher participation in current consultation processes. This finding suggests that the current legislation, policy and sanctions, and lack of appropriate governing modes and fisher inclusion as well as participation in community-based and other processes, contributed to the challenges experienced by Mi'kmaq fishers, industry, DFO, and the provincial department of Fisheries and Aquaculture.

For the Mi'kmaw livelihood lobster case study, the research also identified a mismatch in how governance performed. In this case, the hierarchical framework was inadequate or undeveloped, co-governing was absent, and self-governing was insufficient. As such, the findings suggests that the western bureaucratic model is neither legitimate nor effective to implement Mi'kmaq Aboriginal and treaty rights to fishing Nova Scotia. Thus, the research provided support for proposition #1.

Proposition #2: Understanding the challenges and opportunities arising from the interplay of these different knowledge systems can lead to mutually beneficial outcomes for both parties, including the effective management of the fisheries.

Regarding proposition #2, understanding challenges and opportunities in particular contexts are key components to governability assessments (Jentoft & Chuenpagdee, 2015) and can lend itself to enhancing understanding of meta-order governance issues embedded in social values, norms, and principles (Jentoft & Chuenpagdee, 2013). Thus, as proposition #2 infers, the interplay of knowledge systems provides an understanding as to why they conflict and how the use of shared opportunities can lend itself to mutually beneficial outcomes, in this context, for Mi'kmaw fisheries governance. Given the similarities of the fisheries from the Mi'kmaw perspective, challenges and opportunities were aggregated. This provided a holistic approach for Mi'kmaq Aboriginal and treaty rights to fish as they are viewed as interdependent. Many Mi'kmaq fish using their Aboriginal and treaty rights, even though only the mechanisms to implement the Aboriginal right to fish salmon for FSC purposes is supported by DFO following the *Sparrow* decision in 1990.

The use of opportunities identified within each of the case studies was key to the development of the alternative model. Opportunities for mutually beneficial outcomes were identified as addressing governance gaps, forging a [treaty] relationship, founding governance on Mi'kmaw knowledge system, and using current governance processes, all of which were incorporated into the alternative Mi'kmaw fisheries governance model. An

important recognition is the understanding by the non-Mi'kmaw perspectives of the significance of the Mi'kmaw knowledge system underpinning governance and the shared desired for the use of current governance processes by the Mixed and non-Mi'kmaw participants. As such, the potential role for shared opportunities and common ground for model development lend itself, based on the outcome of the research, to support the proposition #2.

Proposition #3: Implementing a self-governing arrangement for Mi'kmaq

Aboriginal and treaty rights to fish is more likely to be successful using shared values and beliefs from both Western and Mi'kmaq knowledge systems.

The results provide limited evidence to support proposition #3 as the model has yet to be tested. Self-governing was an identified gap or was insufficient in its current application in the livelihood lobster case study. Self-governing is necessary for co-governing arrangement to be enacted. Self-governing serves as the keystone to the alternative governance model to enhance legitimacy and effectiveness for fisheries governance. While values and beliefs differ between knowledge systems, thus creating conflict, the use of shared values and beliefs can bridge these knowledge systems and lead to greater understanding of the differences (Fanning & Denny, 2020; Giles et al., 2016; Whyte, 2013). This is the theoretical underpinning to the use of Two-Eyed Seeing in the development of the alternative governance model.

10.4 REFLECTION OF TWO-EYED SEEING AS A METHODOLOGICAL TOOL

Two-Eyed Seeing was used both as a methodology and methodological tool to understand challenges and opportunities from multiple perspectives and to develop an alternative fisheries governance model for the Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. By assessing the governability of selected fisheries using Two-Eyed Seeing, the research aimed at understanding the Mi'kmaq and non-Mi'kmaw perspectives on how the current hierarchical governing mode was performing as governors of Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. Having applied Two-Eyed Seeing to the research to understand challenges and opportunities from different perspectives as well as assessing governability of two specific examples of rights and species vulnerability, a reflection of Two-Eyed Seeing as a methodological tool is provided.

Overall, I was pleased with the lens Two-Eyed Seeing provided. It challenged me to think and experience governance from Mi'kmaq and non-Mi'kmaw perspectives, and to consider the experiences of those who operate in both knowledge systems. Limits that may arise are those that occur on the onset when developing the method. To examine perspectives as a tool offered by Two-Eyed Seeing, recruiting participants and analyzing data requires separation. Otherwise, multiple perspectives cannot emerge. Furthermore, not all individuals relevant to the case studies were interviewed. As such, limits to who participated were encountered for different reasons. Challenges arose when First Nations did not inform the general public of their research protocols or were unavailable to address requests for research in a timely manner. As such, more Mi'kmaq individuals may have been interviewed if community protocols were made explicit. From the non-

Mi'kmaw perspective, many were uncomfortable or felt they did not have the knowledge to contribute to the research thus did not agree to participate.

When using Two-Eyed Seeing to develop the model based on Mi'kmaq shared values and beliefs, there is currently no prescribed method for how it can be applied when integrating western values and beliefs and how those that are shared between the two knowledge systems could be utilized. Relying on considerations for the systems-to-begoverned, the governing system, and the governing interactions, I had to develop my own approach to determine how the opportunities presented could be utilized to take the best from both knowledge systems for the benefit of all, while ensuring that challenges were not recreated. This required me to be fair to both knowledge systems and it took time to move from one knowledge system to the other. Given the vast options for co-creating knowledge through Two-Eyed Seeing, this method is broadly applicable and useful for both understanding and addressing governance problems and opportunities.

10.5 CONTRIBUTIONS AND APPLICATIONS OF THE RESEARCH

Several contributions and applications of the research are noted. The following illustrates the contributions as a recommended path for the successful implementation of Mi'kmaq Aboriginal and treaty rights to fishing Nova Scotia, refinement of Two-Eyed Seeing as the interdisciplinary research framework, and the use of a governability assessment to an Indigenous context. Potential applications of the research include implications for Bill C-15 UNDRIP in Canada and the application of the governance model to other Indigenous contexts in Canada.

10.5.1 Feasible Path as an Alternative Governance Model

The research contributed new knowledge that addressed a governance gap for fisheries in Canada to govern Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. The development of an alternative governance model for Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia was the purpose of the research project. This was achieved by understanding and addressing the challenges and opportunities identified from multiple perspectives, using a novel research approach for governance. Given the past and present societal conflict arising from the lack of governance for livelihood fisheries, a model developed from all perspectives now exists and can be tested. While this model proposed a new path forward, it also proposed a treaty relationship that is tangible and does not require dismantling the current governance for fisheries or constitutional reform. My research shows that this is achievable within the current legislation, i.e. the *Fisheries Act* and the *Indian Act*, should Mi'kmaq fishers, Mi'kmaq leadership and DFO agree and demonstrate their willingness to share power and responsibility.

In addition to the major contribution of my research being the development of an alternative fisheries governance model for the Mi'kmaq in Nova Scotia based on empirical findings, other noteworthy contributions and potential applications are provided below.

10.5.2 Refinement of Two-Eyed Seeing as the Interdisciplinary Research Framework

One of the interesting and significant research contributions is shedding light on the application of Two-Eyed Seeing as the interdisciplinary research framework. Applying

my understanding of Indigenous knowledge enabled me to develop and importantly, illustrate a solution-based research framework. Using the knowledge system approach to the research, i.e. understanding the role of values and beliefs underpinning how knowledge is acquired, transmitted, practiced, and adapted, provided the necessary conceptualization to develop the methodology and to work towards determining the solution.

10.5.3 Consideration of Cultural Context Important to IGT

The research findings showed that the most appropriate mode of governance for Mi'kmaw fisheries with legal protection in the *Constitution Act* (1982) of Canada, deviated from what was anticipated by IGT. For example, hierarchical governing in IGT is theorized to be better suited to address species considered to be vulnerable. The research, however, demonstrated that co-governing is better suited to address species considered to be vulnerable for Mi'kmaq Aboriginal rights to fish. Furthermore, co-governing is recommended in IGT to address legal pluralism. However, it was found that self-governing is more appropriate to address legal pluralism arising from the constitutional protection of Aboriginal and treaty rights. Thus, and without understanding the social construct of the Mi'kmaq context, IGT recommendations on the appropriate governing mode would not be best suited for the features of the system-to-be-governed. This highlights the importance of the cultural context derived from a constructivist approach as key to explaining the findings. As such, the importance of understanding a constructivism approach should be incorporated in IGT going forward.

10.5.4 Potential Implications for Bill C-15 UNDRIP in Canada

Emerging in both Indigenous and Canadian discourses is the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The rights recognized within the Declaration sets minimum standards for the wellbeing of Indigenous peoples. Within the Declaration includes 46 articles including the right to self-determination (article 3) and state provisions of effective mechanisms to prevent and to compensate for any actions causing loss of cultural integrity and identities, and participation in decision-making in matters affecting their rights (article 18). Of particular relevance to coastal resource management is article 26 which establishes Indigenous rights "to own, use, develop and control their lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired" and legal recognition and protection "with due respect to the customs, traditions and land tenure system of the indigenous peoples concerned" (Capistrano & Charles, 2012; Borrows, 2019; United Nations, 2007, p. 10). Failing to be implemented as law in 2019 when proposed as a private bill, Bill C-292, Canada committed to co-developing legislation that would reflect a partnership and "made in Canada" approach (Barrera, 2019).

While UNDRIP is important and aims to "facilitate the exercise of Indigenous peoples' right to self-determination, as part of contributing to better and more equitable economic, social, health and other outcomes", it is finally part of Canada's legal framework (LEGISinfo, 2021). Given that Bill C-15, a framework to advance the federal implementation of UNDRIP, had only just became legislation at the time of writing this dissertation, it will be many years before laws are reviewed and revised. In contrast, treaties are presently affirmed and recognized in Canada's legal framework. As such,

rather than wait, my research has shown that there is enough legal support and mechanisms using current governance processes to implement Mi'kmaw self-governing and co-governance with DFO now. Through this research, I have provided a governance model that demonstrates order, partnership, and a reasonable path forward for fisheries governance, and potentially, more broadly to natural resources. This is accomplished without major changes to the current legal structure, providing an encouraging way forward for both Canada, provinces, and Indigenous peoples to advance UNDRIP as a reality in Canada. For example, the proposed alternative governance model provides for a more robust application that can support UNDRIP implementation for fisheries. Central to the model is a governing space for treaty relations, and opportunities for Free Prior and Informed Consent (FPIC), through a co-governing process at a decentralized scale. Here, opportunities for interaction with Mi'kmaq rights holders who would be represented through their association offers a unique opportunity to learn, engage, and decide thereby enhancing the legitimacy of those decisions by Mi'kmaq rights-holders. As the association would be supported by multiple organizations who would be affiliated with Mi'kmaq First Nation chief and councils, this would offer an opportunity to have those may be potentially impacted, who are organized, involved in decision-making processes.

10.5.6 Application of the Model to Other Indigenous Contexts in Canada While the focus of the research was for the Mi'kmaq Aboriginal and treaty rights to fishing Nova Scotia, the model has broader application. For example, it has potential for application to other natural resources in Nova Scotia such as for moose harvesting, or as a governance model for other Indigenous nations in Canada. While the challenges and opportunities may differ among nations, there are similarities in how Indigenous peoples

relate to their natural landscape, application of constitutional protection of Aboriginal and Treaty rights, case law, and current governance of Indigenous peoples in Canada. Should a generic model be utilized, principles relating to cosmology (worldview) and key values such as relationships with people and animals, and nation to nation or historical and/or legal relationship instead of specific treaty relationship could be substituted. The principle of subsidiarity, however, should remain as it is the principle underpinning decentralized governance in Canada. The presentation of a potential way forward could advance some of the articles under UNDRIP politically and assist in solving some of the challenges experienced in more local and immediate contexts.

10.6 CONCLUDING REFLECTION

The proposed alternative fisheries governance model for Mi'kmaq treaties is dependent on several key actions undertaken by the Mi'kmaq leadership, Mi'kmaw fishers, DFO, the Province of Nova Scotia, and the fishing industry itself. Undoubtedly, the success of the governance model is dependent on the political will of both Mi'kmaq leadership and the current hierarchical mode to make room for a governing body with the autonomy to make decisions on behalf of the membership, and on behalf of the federal, provincial and Mi'kmaq government. By the same token, industry must be willing to share and engage in opportunities with (relatively) open minds for cross-cultural learning. This research demonstrated that the fisheries governance of today clearly lacks legitimacy and effectiveness for Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia. As noted by the research participants, the opportunity for 're-inventing governance' may be at Nova Scotia's doorstep. The issues plaguing the outcomes of the *Marshall* decision in 1999 resurfaced again in 2020-2021 and will likely continue to do so until they are

resolved. Like much of governance, experimentation is necessary (Jentoft, 2007), and a new approach is a necessity. While we think of a treaty relationship as between leaders of nations, treaty relationships permeate societies. As such, 'doing treaty' involves more than leadership and political will. The following is my "felt knowledge", and the most eye-opening of my findings.

The ability and capacity of Mi'kmaw fishers to organize as an association is fundamental to the model. Should fishers continue to remain fragmented and lack organization, it will only further cement the current DFO governance model, which has been shown to lack legitimacy and effectiveness among Mi'kmaw fishers. The research revealed that Mi'kmaw fishers have difficulty accepting imposed licence conditions and the authority of DFO as legitimate, even when there is a valid legislative objective such as when the vulnerability of the species requires safeguarding. Such a governance challenge is an example of governmentality. Summarized as the belief of those being governed in the governing system's ability and tools for governing, thus its legitimacy, and the willingness to be governed, governmentality is closely related to governability in that governability is "hampered by indifference or resistance" (Jentoft & Johnsen, 2015, p. 707). Resistance to imposed rules and agreements and an understanding of the treaty relationship established in the 18th century that has been replaced with federal legislations contribute to current governmentality challenges. A necessary condition for governmentality, and, consequently governability, is a new mindset referred to as adaptamentality (Jentoft & Johnsen, 2015).

Adaptamentality relates to innovation that is "nourished by the broader view of one's own role within the larger fisheries system, which makes small-scale fishing into a more meaningful and hence more attractive occupation" (Jentoft & Johnsen, 2015, p. 720). Adaptamentality is not a 'new mindset' to the Mi'kmaq. Historically, they clearly understood their role and responsibility to their fisheries. However, over time and without their permission, Mi'kmaq responsibility was replaced with a governing authority established through the *British North America Act*, *Fisheries Act*, and *Indian Act*. In this case, adaptamentality is the re-awakening of the mindset to reverse the impacts of colonialism and incongruence between knowledge systems to recognize the Mi'kmaw role in the fisheries as Mi'kmaw responsibility.

Responsibility has many connotations but for this study it is ultimately related to the duty to be accountable for that which is within one's power, control or management, and the obligation to follow established norms of behaviour. Unfortunately, socio-economic challenges and the recognition of Mi'kmaq rights have resulted in ethical conflicts within Mi'kmaq society to determine for themselves whether to continue fishing in historical locations or have a provincial-wide approach. Furthermore, Mi'kmaw fishing raised concerns regarding whether there are impacts to the sustainability of aquatic resources for Mi'kmaw people, especially those important for FSC needs. Ultimately, these are Mi'kmaq issues for the Mi'kmaq to address. Since the safeguarding of the social-system-to-be governed is directly linked to the safeguarding of the natural-system-to-be governed, this provides the opportunity for re-instilling the Mi'kmaw knowledge system, thus re-awakening Mi'kmaq responsibility to improve governability. It is promising that

adaptamentality is evident where fishers quasi-organize to work with others to develop a fishing plan for livelihood lobster fishing in the absence of federal regulation. As such, movement toward fisher-based advocacy is evident and a necessary first step towards self-governing, and a welcomed glimmer of hope at the end of a long, dark, and turbulent tunnel.

In an early chapter, I reflected on knowledge as a verb. Knowledge is not only the what, but it can also be the how. Like Squid, I see the same for treaty. It is the agreement between nations as the *what*, but more importantly, it is the *how*. Treaty as a verb is about 'doing treaty'. It is about how we work in partnership, recognizing the sovereignty of multiple nations, and co-existing. Doing treaty may not always be harmonious but having a suitable governance model that recognizes other modes of governance as potentially legitimate has promise for enhancing effectiveness of fisheries governance for Mi'kmaq Aboriginal and treaty rights to fish in Nova Scotia and the mechanisms for addressing disharmony when it arises. Undoubtably, the slogan, 'we are all treaty people', recognizes the role of treaties in Canadian history and a necessary first step, but we, as Canadians and sovereign Indigenous nations, must go beyond the recognition of the existence of treaties and simply 'do treaty' as reconciliation. With a few modifications to the current legal framework, and the development and incorporation of other modes of governing thus enabling the sharing of both power and responsibility, 'doing treaty' for Mi'kmaq Aboriginal and treaties rights to fish in Nova Scotia may be closer than we realize.

BIBLIOGRAPHY

- Abbott, K. W., & Snidal, D. (2000). Hard and Soft Law in International Governance. *International Organization*, *54*(3), 421–456. doi:https://doi.org/10.1162/002081800551280
- Aboriginal Communal Fishing Licences Regulations, SOR/93-332. Retrieved from https://laws-lois.justice.gc.ca/eng/regulations/sor-93-332/index.html
- Al-Hakim Aya. (2020, November 10). Mi'kmaq coalition acquires 50% of Nova Scotia-based seafood giant Clearwater Seafoods. Global News. Retrieved from https://globalnews.ca/news/7452416/mikmaq-coalition-nova-scotia-clearwater-seafoods/
- Ansell, Chris, & Torfing, J. (2016). Introduction: theories of governance. In *Handbook on Theories of Governance* (Vol. 3, pp. 1–17). Beaverton: Ringgold, Inc.
- ANSMC. (2008). Mi'kmaq of Nova Scotia Nationhood Proclamation. Retrieved from https://electriccanadian.com/history/novascotia/mikmaq.htm
- ANSMC. (2020). Exercising our rights to what the waters provide. Retrieved from https://livelihoodfishery.com/#faq04
- APTN. (2021). DFO interim agreement with Mi'kmaw communities in Nova Scotia shows Ottawa's plan working: minister. *APTN News*, October 14, 2021. Retrieved from https://www.aptnnews.ca/national-news/dfo-interim-agreement-with-mikmaw-communities-in-nova-scotia-shows-ottawas-plan-working-minister/
- Aquaculture Association of Nova Scotia. (2019). Who Are We? Retrieved from http://seafarmers.ca/about-us/who-are-we/

Aquaculture Management Regulations. N.S. Reg. 118/2019

Aquaculture Licence and Lease Regulations. N.S. Reg. 186/2019

- Armitage, D, Berkes, F., & Doubleday, N. (2007). *Introduction: Moving beyond Co-Management. De: Armitage, D., F. Berkes, N.* In *Adaptive Co-Management: Collaboration, Learning, and Multi-Level Governance* (pp. 1–15). Doubleday (eds.).
- Armitage, Derek, Berkes, F., Dale, A., Kocho-Schellenberg, E., & Patton, E. (2011). Comanagement and the co-production of knowledge: Learning to adapt in Canada's Arctic. *Global Environmental Change*, *21*(3), 995–1004. doi:https://doi.org/10.1016/j.gloenvcha.2011.04.006
- Armstrong, J. D., Kemp, P. S., Kennedy, G. J. A., Ladle, M., & Milner, N. J. (2003). Habitat requirements of Atlantic salmon and brown trout in rivers and streams. *Fisheries Research*. doi:https://doi.org/10.1016/S0165-7836(02)00160-1
- Asch, M. (2014). *On being here to stay: treaties and Aboriginal rights in Canada*. Toronto: Toronto: University of Toronto Press.
- Asch, M., & Macklem, P. (1991). Aboriginal rights and Canadian sovereignty: An essay on R. v. Sparrow. Alberta Law Review, 29, 498.
- Atlantic First Nations Water Authority. (2021). Board. Retrieved from https://www.afnwa.ca/about/directors/
- Atlantic Policy Congress. (2018a). About. Retrieved from https://www.apcfnc.ca/governance/about
- Atlantic Policy Congress. (2018b). First Nation Members. Retrieved from https://www.apcfnc.ca/about-apc/first-nations-members/
- Atlantic Policy Congress. (2020a). Fisheries and Integrated Resources. Retreived from https://www.apcfnc.ca/fisheries/
- Atlantic Policy Congress. (2020b). AAROMs. Retrieved from https://fisheries.apcfnc.ca/aaroms

- Augustine, Patrick J. (2016). Mi'kmaw Relations. In M. Battiste (Ed.), *Living Treaties Narrating Mi'kmaw Treaty Relations* (pp. 52-65). Sydney: Cape Breton University Press.
- Ayllon, F., Martinez, J. L., & Garcia-Vazquez, E. (2006). Loss of regional population structure in Atlantic salmon, *Salmo salar* L., following stocking. *ICES Journal of Marine Science*. doi:https://doi.org/10.1016/j.icesjms.2006.03.023
- Bailey, M. (2020). Nova Scotia lobster dispute: Mi'kmaw fishery isn't a threat to conservation, say scientists. *The Conversation*, October 20, 2020. Retrieved from https://theconversation.com/nova-scotia-lobster-dispute-mikmaw-fishery-isnt-a-threat-to-conservation-say-scientists-148396
- Barnhardt, R., & Kawagley, A.O. (2005). Indigenous knowledge systems and Alaska Native ways of knowing. *Anthropology & education quarterly*, 36(1), 8-23.
- Barrera, J. (2019). Trudeau government moving forward on UNDRIP legislation, says minister. *CBC Dec. 4, 2019*. Retrieved from https://www.cbc.ca/news/indigenous/trudeau-undrip-bill-1.5383755
- Barsh, R. (2002). Netukulimk past and present: Mikmaw ethics and the Atlantic fishery. *Journal Of Canadian Studies-Revue D Etudes Canadiennes; J.Can.Stud.-Rev.Etud.Can.*, 37(1), 15–42.
- Barsh, R., & Henderson, J. (1997). The Supreme Court's Van Der Peet Trilogy: Naive Imperialism and Ropes of Sand. *McGill Law Journal*, 42(4), 993-1010.
- Bartlett, C., Marshall, M., & Marshall, A. (2012). Two- Eyed Seeing and Other Lessons Learned within a Co-Learning Journey of Bringing Together Indigenous and Mainstream Knowledges and Ways of Knowing. *Journal of Environmental Studies and Sciences*, (4), 331–340. doi:https://doi.org/10.1007/s13412-012-0086-8
- Battiste, J. (2008). Understanding the progression of Mi'kmaw law. *Dalhousie Law Journal*, 31, 311.
- Battiste, J. (Ed.). (2010). Honouring 400 Years Kepmite'tmnej. J. Battiste.

- Battiste, J. (2016). Treaty Advocasy and Treaty Imperative through Mi'kmaw Leadership: Remembering with Joe B. Marshall. In M. Battiste (Ed.), *Living Treaties Narrating Mi'kmaw Treaty Relations* (pp. 138-165). Sydney: Cape Breton University Press.
- Battiste, M. A. (2000). Reclaiming Indigenous Voice and Vision. Vancouver: UBC Press.
- Baum, J. K., & Fuller, S. D. (2016). *Canada's Marine Fisheries: Status, Recovery Potential and Pathways to Success*. Retrieved from https://www.oceana.ca/sites/default/files/heres the catch low-res.pdf
- Bavinck, M. (2005). Understanding fisheries conflicts in the South—a legal pluralist perspective. *Society and Natural Resources*, 18(9), 805-820.
- Bavinck, M, Chuenpagdee, R., Diallo, M., van der Heijden, P., Kooiman, J., Mahon, R., & Williams, S. (2005). *Interactive governance for fisheries: a guide to better practice*. Delft,: Eburon Academic Publishers.
- Bavinck, M & Gupta, J. (2014). Legal pluralism in aquatic regimes: a challenge f or governance. *Current Opinion in Environmental Sustainability*, 11, 78–85. doi:https://doi.org/10.1016/j.cosust.2014.10.003
- Benestan, L., Gosselin, T., Perrier, C., Sainte-Marie, B., Rochette, R., & Bernatchez, L. (2015). RAD genotyping reveals fine-scale genetic structuring and provides powerful population assignment in a widely distributed marine species, the American lobster (*Homarus americanus*). *Molecular Ecology*. doi:https://doi.org/10.1111/mec.13245
- Berkes, F. (2009). Indigenous ways of knowing and the study of environmental change. *Journal of the Royal Society of New Zealand*, 39(4), 151–156. doi:https://doi.org/10.1080/03014220909510568
- Berneshawi, S. (1997). Resource management and the Mi'kmaq nation. *Canadian Journal of Native Studies*, 17(1), 115–148.
- Birks, M., & Mills, J. (2011). Grounded theory: A practical guide. Los Angeles: Sage.
- Bologna, P. A. X., & Steneck, R. S. (1993). Kelp beds as habitat for American lobster

- Homarus americanus. Mar. Ecol. Progr. Ser, 100, 127. doi:https://doi.org/10.3354/meps100127
- Booth, S. P. (2019). *Uncommon Waters: Intercultural Conflict over the Atlantic Salmon of the Restigouche Watershed*. University of Guelph, Guelph.
- Burrows, J. (2016). Legislation and Indigenous Self-Determination In Canada and the United States. In P. Macklem & Sanderson, D. (Eds.), *From Recognition to Reconciliation* (pp. 474-505). University of Toronto Press.
- Boudreau, S., & Fanning, L. (2016). Nunavut Fisheries Co-management and the Role of the Nunavut Land Claims Agreement in Fisheries Management and Decision Making. *Ocean Yearbook Online*, 30(1), 207-241. doi:https://doi.org/10.1163/22116001-03001009
- Bradbury, I. R., Hamilton, L. C., Sheehan, T. F., Chaput, G., Robertson, M. J., Dempson, J. B., ... Bernatchez, L. (2016). Genetic mixed-stock analysis disentangles spatial and temporal variation in composition of the West Greenland Atlantic Salmon fishery. *ICES Journal of Marine Science*, 73(9), 2311-2321. doi:https://doi.org/10.1093/icesjms/fsw072
- British North America Act, 1867, SS 1867, c 3, https://canlii.ca/t/l0zw retrieved on 2021-12-14
- Bundy, A., Chuenpagdee, R., Jentoft, S., & Mahon, R. (2008). If science is not the answer, what is? An alternative governance model for the world's fisheries. *Frontiers in Ecology and the Environment*, 6(3), 152–155. doi:https://doi.org/10.1890/060112
- Calder et al. v. Attorney-General of British Columbia, 1973 CanLII 4 (SCC), [1973] SCR 313, https://canlii.ca/t/1nfn4, retrieved on 2021-12-14
- Campbell, J., & Salagrama, V. (2000). *New approaches to participation in fisheries research*. Food and Agriculture Organization of the United Nations (FAO).

- Canada National Parks Act (S.C. 2000, c. 32), from https://lawslois.justice.gc.ca/eng/acts/n-14.01/page-1.html
- Capistrano, R. C. G., & Charles, A. T. (2012). Indigenous rights and coastal fisheries: a framework of livelihoods, rights and equity. *Ocean & Coastal Management*, 69, 200-209.
- Carlisle, K., & Gruby, R. L. (2019). Polycentric systems of governance: A theoretical model for the commons. Policy Studies Journal, 47(4), 927-952.
- Carlson, K. M. (2014). Political failure, judicial opportunity: The Supreme Court of Canada and Aboriginal and treaty Rights. *American Review of Canadian Studies*, 44(3), 334-346.
- Castañeda, R. A., Burliuk, C. M., Casselman, J. M., Cooke, S. J., Dunmall, K. M., Forbes, L. S., ... & Mandrak, N. E. (2020). A brief history of fisheries in Canada. *Fisheries*, 45(6), 303-318.
- Castro, A. P., & Nielsen, E. (2001). Indigenous people and co-management: implications for conflict management. *Environmental Science & Policy*, 4(4-5), 229-239.
- CBC News. (2018). *Nova Scotia limits new entry into shore side of lobster industry*. Retrieved from https://www.cbc.ca/news/canada/nova-scotia/ns-limits-new-entry-into-shore-side-of-lobster-industry-1.4492309
- CBC News. (2019, April 3). Global salmon farming company eyes \$500M expansion along Nova Scotia coast. Retrieved from https://www.cbc.ca/news/canada/nova-scotia/nova-scotia-fish-farms-mitsubishi-cermaq-1.5083342
- Charmaz, K. (2009). Shifting the grounds: Grounded theory in the 21st century. In J.M. Morse et al (Eds.), *Developing grounded theory: The second generation* (pp. 125-140). New York: Routledge
- Charmaz, K. (2014). Constructing grounded theory (2nd ed.). Thousand Oaks: Sage.

- Chuenpagdee, R., & Jentoft, S. (2013). Assessing Governability What's next? In M Bavinck, R. Chuenpagdee, S. Jentoft, & J. Kooiman (Eds.), *Governability of Fisheries and Aquaculture: Theory and Applications* (pp. 335–349). doi:https://doi.org/10.1007/978-94-007-6107-0
- Chuenpagdee, R., & Jentoft, S. (2009). Governability assessment for fisheries and coastal systems: A reality check. *Human Ecology*, *37(1)*, 109-120. doi:https://doi.org/10.1007/s10745-008-9212-3
- Chuenpagdee, R., & Jentoft, S. (2015). Exploring challenges in small-scale fisheries governance. In S. Jentoft & R. Chuenpagdee (Eds.), *Interactive governance for small-scale fisheries* (pp. 3-16). Dordrecht: Springer.

Coastal Fisheries Protection Act (R.S.C., 1985, c. C-33)

- Coates, K. (2000). *The Marshall Decision and Native Rights*. Quebec City: McGill-Queen's University Press.
- Coates, K. (2003). Breathing New Life into Treaties: History, Politics, the Law, and Aboriginal Grievances in Canada's Maritime Provinces. *Agricultural History*, 77(2), 333–354.
- Coates, K. (2019). Marshall Decision at 20 Two Decades of Commercial Re-Empowerment of the Mi'kmaq and Maliseet. Retrieved from https://macdonaldlaurier.ca/files/pdf/20191015_Marshall_Decision_20th_Coates_P APER_FWeb.pdf
- Cobb, J. S., & Castro, K. M. (2006). Homarus Species. In B. F. Phillips (Ed.), *Lobsters: Biology, Management, Aquaculture and Fisheries* (pp. 310–339). Oxford: Blackwell Publishing.
- Constitution Act, 1982, being Schedule B to the Canada Act 1982 (UK), 1982, c 11.
- Cooke, S. J., & Murchie, K. J. (2015). Status of Aboriginal, commercial and recreational inland fisheries in North America: past, present and future. *Fisheries Management and Ecology*, 22(1), 1-13.

- Cornell, S. (2015). Processes of Native nationhood: the Indigenous politics of self-government. *International Indigenous Policy Journal*, 6(4).
- Corntassel, J. (2012). Re-envisioning resurgence: Indigenous pathways to decolonization and sustainable self-determination. *Decolonization: Indgeneity, Education & Society* 1(1):86-101.
- COSEWIC. (2010). COSEWIC assessment and status report on the Atlantic Salmon *Salmo salar* (Nunavik population, Labrador population, Northeast Newfoundland population, South Newfoundland population, Southwest Newfoundland population, Northwest Newfoundland population, Quebec. Retrieved from https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/cosewic/sr_Atlantic_Salmon_2011a_e.pdf
- COSEWIC. (2017). COSEWIC guidelines for recognizing designatable units. Retrieved from https://www.canada.ca/en/environment-climate-change/services/committee-status-endangered-wildlife/guidelines-recognizing-designatable-units.html
- Costello, C., & Ovando, D. (2019). Status, institutions, and prospects for global capture fisheries. *Annual Review of Environment and Resources*, 44, 177-200.
- Cox, M., Arnold, G., & Tomás, S. V. (2010, December 24). A review of design principles for community-based natural resource management. *Ecology and Society*, Vol. 15 (4). doi:https://doi.org/10.5751/ES-03704-150438
- Creswell, J. W. (2013). *Qualitative Inquiry and Research Design Choosing Among Five Approaches* (3rd ed.). Thousand Oak: SAGE Publications, Inc.
- Crown-Indigenous Relations and Northern Affairs Canada. (2010). The Government of Canada's Approach to Implementation of the Inherent Right and the Negotiation of Aboriginal Self-Government. Retrieved from https://www.rcaanc-cirnac.gc.ca/eng/1100100031843/1539869205136
- Cyr, H. (2014). Autonomy, Subsidiarity, Solidarity: Foundations of Cooperative Federalism. *Constitutional Forum*, 23, 20. doi:https://doi.org/10.21991/c9sd4r

- Czempiel, E. O. (1992). Governance and Democratization. In J.M. Roseneau & E.O. Czempiel (Eds.). *Governance Without Government: Order and Change in World Politics*. Cambridge: Cambridge University Press, 250-71.
- Daniels, J., Chaput, G., & Carr, J. (2018). Estimating consumption rate of Atlantic salmon smolts (*Salmo salar*) by striped bass (*Morone saxatilis*) in the Miramichi River estuary using acoustic telemetry. *Canadian Journal of Fisheries and Aquatic Sciences*, 75(11), 1811-1822. doi:https://doi.org/10.1139/cjfas-2017-0373
- Davis, A., & Jentoft, S. (2001). The challenge and the promise of Indigenous peoples' fishing rights—from dependency to agency. *Marine Policy*, 25(3), 223–237. doi:https://doi.org/10.1016/S0308-597X(01)00014-8
- Dehens, L. A., & Fanning, L. M. (2018). What counts in making marine protected areas (MPAs) count? The role of legitimacy in MPA success in Canada. *Ecological Indicators*, 86, 45-57. doi:https://doi.org/10.1016/j.ecolind.2017.12.026
- Delgamuukw v. British Columbia, 1997 CanLII 302 (SCC), [1997] 3 SCR 1010, https://canlii.ca/t/1fqz8>, retrieved on 2021-05-04
- Denny, S., & Fanning, L. (2016a). A Mi'kmaw Perspective on Advancing Salmon Governance in Nova Scotia, Canada: Setting the Stage for Collaborative Co-Existence. *International Indigenous Policy Journal*, 7(3).
- Denny, S., & Fanning, L. (2016b). Balancing community autonomy with collective identity: Mi'kmaq decision-making in Nova Scotia. *The Canadian Journal of Native Studies*, 36(2), 81–106.
- Denzin, N. K., & Lincoln, Y. S. (2008). Denzin, N. K., & Lincoln, Y. S. (2008).
 Introduction: Critical methodologies and indigenous inquiry. In N. Denzin, Y.
 Lincoln, & L. T. Smith (Eds.), *Handbook of Critical and Indigenous Methodologies* (pp. 1–20). Thousand Oaks: Sage Publications.
- Department of Fisheries and Oceans Act (R.S.C., 1985, c. F-15), from https://laws.justice.gc.ca/eng/acts/F-15/index.html

- Department of Justice. (2017). Principles of Restorative Justice. Retrieved March 2, 2021, from https://www.justice.gc.ca/eng/rp-pr/cj-jp/victim/rest.html
- Department of Justice Canada. (2021). United Nations Declaration On the Rights of Indigenous Peoples Act. Retrieved from https://www.justice.gc.ca/eng/declaration/about-apropos.pdf
- DFO. (2001). Recreational Fisheries in Canada: An Operational Policy Framework. Retrieved from https://www.dfo-mpo.gc.ca/reports-rapports/regs/op-pc-eng.htm
- DFO. (2002). Maritimes Region Commercial Fisheries Licensing Policy. Retrieved from [Unavailable due to site updates], https://www.dfo-mpo.gc.ca/reports-rapports/regs/licences-permis/maritimes/com-fish-lic-pol-permis-peche-comeng.htm
- DFO. (2007). *An Integrated Aboriginal Policy Framework*. Retrieved April 21, 2021, from https://www.dfo-mpo.gc.ca/fisheries-peches/aboriginal-autochtones/iapf-cipaeng.html
- DFO. (2009). Sustainable Fisheries Framework. Retrieved April 24, 2021, from https://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/overview-cadre-eng.htm
- DFO. (2010). Recovery Strategy for the Atlantic salmon (*Salmo salar*), inner Bay of Fundy populations [Final]. In *Species at Risk Act Recovery Strategy Series* (p. xiii + 58 pp + Appendices). Ottawa: Fisheries and Oceans Canada.
- DFO. (2011). Inshore Lobster Integrated Fishery Management Plan Lobster Fishing Areas 27 38 Scotia-Fundy Sector Maritimes Region 2011. Retrieved from https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/lobster-crab-homard/2019/index-eng.html
- DFO. (2012). Aboriginal Fisheries Strategy. Retrieved from https://www.dfo-mpo.gc.ca/fisheries-peches/aboriginal-autochtones/afs-srapa-eng.html

- DFO. (2013). Preparing an Integrated Fisheries Management Plan (IFMP). Retrieved from https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/guidance-guide/preparing-ifmp-pgip-elaboration-eng.html#a
- DFO. (2014). Integrated Fisheries Management Plan Lobster in the Southern Gulf of St. Lawrence Lobster Fishing Areas 23, 24, 25, 26A, 26B. Retrieved from http://www.glf.dfo-mpo.gc.ca/Gulf/FAM/IMFP/2014-Lobster-Gulf-Region
- DFO. (2015). Lobster. Retrieved from https://www.dfo-mpo.gc.ca/fisheries-peches/sustainable-durable/fisheries-peches/lobster-homard-eng.html
- DFO. (2016a). Appendix I: Geospatial Map of DFO Administrative Areas. Retrieved from https://dfo-mpo.gc.ca/stats/commercial/cfs/2012/section5-eng.htm
- DFO. (2016b). Update of stock status of Atlantic Salmon (*Salmo salar*) in DFO Gulf Region (Salmon Fishing Areas 15 to 18) for 2015. DFO Can. Sci. Advis. Sec. Sci. Resp. 2016/018.
- DFO. (2016c). Lobster (homarus americanus) off the Atlantic coast of Nova Scotia (Lobster Fishing Areas 27-33): 2016 Stock Status Update. Canadian Science Advisory Secretariat Science Response, 2016/025. Retrieved from https://waves-vagues.dfo-mpo.gc.ca/Library/366052.pdf
- DFO. (2016d). Update of The Stock Status Indicators for the American Lobster (*Homarus americanus*) Stocks in The Southern Gulf Of St. Lawrence. *Canadian Science Advisory Secretariat Science Response*, 2016/051. Retrieved from https://waves-vagues.dfo-mpo.gc.ca/Library/40622666.pdf
- DFO. (2018a). Aboriginal Aquatic Resource and Oceans Management program overview and objectives. Retrieved from https://www.dfo-mpo.gc.ca/fisheries-peches/aboriginal-autochtones/aarom-pagrao/overview-survol-eng.html
- DFO. (2018b). Stock Status Update of Atlantic Salmon in Salmon Fishing Areas (SFAs) 19-21 and 23 Maritimes Region. *Canadian Science Advisory Secretariat Science Response 2018/038*. Retrieved from https://waves-vagues.dfo-mpo.gc.ca/Library/40715838.pdf

- DFO. (2018c). Limit Reference Points for Atlantic Salmon Rivers in DFO Gulf Region. Canadian Science Advisory Secretariat Science Response 2018/015.
- DFO. (2018d). Stock Status Update of American Lobster in Lobster Fishing Area 34. Canadian Science Advisory Secretariat Science Response 2018/044.
- DFO. (2019a). Canada's Wild Atlantic Conservation Policy. Retrieved from https://www.dfo-mpo.gc.ca/reports-rapports/regs/wildsalmon-atl-saumonsauvage-eng.htm
- DFO. (2019b). Update of indicators of Atlantic Salmon (*Salmo salar*) in DFO Gulf Region Salmon Fishing Areas 15 18 for 2018. *Canadian Science Advisory Secretariat Science Response*. 2019/021. Retrieved from https://waves-vagues.dfo-mpo.gc.ca/Library/40819930.pdf
- DFO. (2019c). Stock Status Update of American Lobster (*Homarus Americanus*) in Lobster Fishing Areas 35-38. *Canadian Science Advisory Secretariat Science Response*, 2018/045.
- DFO. (2019d). Notice to Fish Harvesters Lobster Conservation Harvesting Plan New Management Measures for 2019 and Beyond (LFA 23, 24, 26A AND 26B). Retrieved from https://www.dfo-mpo.gc.ca/fisheries-peches/commercial-commerciale/atl-arc/lobster-notice-nb-avis-homard-eng.html
- DFO. (2020a). Seafisheries landed value by region, 2018. Retrieved from http://www.dfo-mpo.gc.ca/stats/commercial/land-debarq/sea-maritimes/s2018aveng.htm
- DFO. (2020b). Offshore Lobster and Jonah Crab Maritimes Region. Retrieved from https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/lobster-crab-homard/2019/index-eng.html
- DFO. (2002). Maritimes Region Commercial Fisheries Licensing Policy. Unavailable due to site updates, from https://www.dfo-mpo.gc.ca/reports-rapports/regs/licences-permis/maritimes/com-fish-lic-pol-permis-peche-com-eng.htm
- DFO. (2021a). Our response to the Marshall decisions. Retrieved from https://www.dfo-mpo.gc.ca/publications/fisheries-peches/marshall-1999-eng.html

- DFO. (2021b). Commercial Fisheries Licensing Policy for the Gulf Region. Retreived from http://www.inter.dfo-mpo.gc.ca/folios/00164/docs/licensing_policy_gulf-eng.pdf
- DFO Gulf & MCPEI. (2018). Restorative justice agreement signed between Fisheries and Oceans, the Public Prosecution Service and the Mi'kmaq Confederacy of P.E.I. Retrieved from http://mcpei.ca/wp-content/uploads/2018/04/Restorative-Justice-PRESS-RELEASE-April-11_2018.pdf
- Doyle-Bedwell, P. (2003). Address-Mi'kmaq Women and Our Political Voice. *Atlantis: Critical Studies in Gender, Culture & Social Justice*, 27(2), 123-127.
- Edelenbos, J., & van Meerkerk, I. (2016). Normative theory. In C Ansell & J. Torfing (Eds.), *Handbook on Theories of Governance* (pp. 402–415). Northhampton: Edward Elgar Publishing.
- Elliott, D. (1991). In the Wake of Sparrow: New Department of Fisheries. *University of New Brunswick Law Journal*, 40, 23–44.
- Elliott, J. M., & Elliott, J. A. (2010). Temperature requirements of Atlantic salmon *Salmo salar*, brown trout *Salmo trutta* and Arctic charr *Salvelinus alpinus*: Predicting the effects of climate change. *Journal of fish biology*, 77(8), 1793-1817. doi:https://doi.org/10.1111/j.1095-8649.2010.02762.x
- Eskasoni First Nation. (n.d.). Welcome to our Eskasoni. Retrieved from http://eskasoni.ca/Home/
- Evans, M., Hole, R., Berg, L. D., Hutchinson, P., & Sookraj, D. (2009). Common Insights, Differing Methodologies: Toward a Fusion of Indigenous Methodologies, Participatory Action Research, and White Studies in an Urban Aboriginal Research Agenda. *Qualitative Inquiry*, 15(5), 893–910. doi:https://doi.org/10.1177/1077800409333392
- Fanning, L. M. (2000). The Co-management paradigm: Examining criteria for meaningful public involvement in sustainable marine resource management. *Ocean Yearbook*, *14*(14), 80–113.

- Fanning, L. M. (2003). Towards an understanding of the role of core values and policy networks to influence decision-making in an evolving ocean governance era: A Maritimes Canada study. Dalhousie University, Halifax. http://hdl.handle.net/10222/55902
- Fanning, L. M., & Denny, S. (2020). Conflict over Mi'kmaw lobster fishery reveals confusion over who makes the rules. Retrieved from https://theconversation.com/conflict-over-mikmaw-lobster-fishery-reveals-confusion-over-who-makes-the-rules-148978
- Fanning, L., Mahon, R., & McConney, P. (2011). *Towards marine ecosystem-based management in the wider Caribbean*. Amsterdam: Amsterdam University Press.
- FAO (Italy). (2009). Information and knowledge sharing. FAO Technical Guidelines for Responsible Fisheries (FAO), (12).
- FAO. (2021). FAO Fish Finder Species Fact Sheet *Homarus Americanus*. http://www.fao.org/fishery/species/3482/en
- Feeny, D., Berkes, F., McCay, B. J., & Acheson, J. M. (1990). The Tragedy of the Commons: Twenty-two years later. *Human ecology*, 18(1), 1-19. doi:https://doi.org/10.1007/BF00889070

Fishery (General) Regulations (SOR/93-53)

- First Nations Gazette. (2019). Listuguj Lobster Law. Retrieved from https://partii-partiii.fng.ca/fng-gpn-II-III/pii/en/item/472315/index.do?q=listuguj
- Fish-WIKS. (2016). Exploring distinct indigenous knowledge systems to inform fisheries governance and management on Canada's coasts (Fish-WIKS). Retrieved from http://fishwiks.ca/wp-content/uploads/2013/04/Summary-Sheet-Plus-Sep-13.pdf

- Fisheries & Oceans Canada. (2021, October 13). Interim understanding reached that will see Bear River and Annapolis Valley First Nations members fishing in pursuit of a moderate livelihood. News Release. Retrieved from https://www.canada.ca/en/fisheries-oceans/news/2021/10/interim-understanding-reached-that-will-see-bear-river-and-annapolis-valley-first-nations-members-fishing-in-pursuit-of-a-moderate-livelihood.html
- Fisheries Act, R.S.C., 1985, c. F-14. Retrieved from https://laws-lois.justice.gc.ca/eng/acts/f-14/page-1.html
- Fisheries and Coastal Resources Act. (1996, c. 25, s. 1). Retrieved from https://nslegislature.ca/sites/default/files/legc/statutes/fisheries%20and%20coastal%20resources.pdf
- Ford, J. S., & Myers, R. A. (2008). A global assessment of salmon aquaculture impacts on wild salmonids. *PLoS Biology*, *6*(2), e33. doi:https://doi.org/10.1371/journal.pbio.0060033
- Fox, G. (2006). Mediating resource management in the Mi'kmaq fisheries Canada. *Society for International Development*, 49(3), 119–124. doi:https://doi.org/10.1057/palgrave.development.1100285
- Gardner Pinfold. (2011). *Economic Value of Wild Atlantic Salmon*. Retrieved from https://www.asf.ca/assets/files/gardner-pinfold-value-wild-salmon.pdf
- Gash, A. (2016). Collaborative governance. In Christopher Ansell & J. Torfing (Eds.), *Handbook on Theories of Governance* (pp. 457–467). Northhampton: Edward Elgar Publishing.
- Gibson, R. J. (2017). Salient Needs for Conservation of Atlantic Salmon. *Fisheries*, 42(3), 163-174. doi:https://doi.org/10.1080/03632415.2016.1276331
- Giles, A., Fanning, L., Denny, S., & Paul, T. (2016). Improving the American Eel Fishery Through the Incorporation of Indigenous Knowledge into Policy Level Decision Making in Canada. *Human Ecology*, 1–17. https://doi.org/10.1007/s10745-016-9814-0

- Googoo, M. (2020, October 28). Membertou latest First Nation to leave Assembly of NS Mi'kmaw Chiefs, KMKNO. *Ku'ku'kwes News*. Retrieved from http://kukukwes.com/2020/10/28/membertou-latest-first-nation-to-leave-assembly-of-ns-mikmaw-chiefs-kmkno/
- Government of Canada. (2020a). Role of Provinces and Territories. Retrieved from https://www.dfo-mpo.gc.ca/aquaculture/management-gestion/roles-proveng.htm
- Government of Canada. (2020b). Fisheries management decision-making. Retrieved from https://www.dfo-mpo.gc.ca/transparency-transparence/mtb-ctm/2019/binder-cahier-1/1F1-management-gestion-eng.htm
- Government of Canada. (2020c). Species at Risk Public Registry. Retrieved from https://species-registry.canada.ca/index-en.html#/species?sortBy=commonNameSort&sortDirection=asc&pageSize=10&ke ywords=atlantic salmon
- Government of Canada. (2021a). Backgrounder: Bill C-15 United Nations Declaration on the Rights of Indigenous Peoples Act. Retrieved from https://www.justice.gc.ca/eng/declaration/about-apropos.html
- Government of Canada. (2021b). Mandate and Role. Retrieved from https://www.dfo-mpo.gc.ca/about-notre-sujet/mandate-mandat-eng.htm
- Government of Canada. (2021c). Integrated fisheries management plans. Retrieved from https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/index-eng.html
- Government of Canada. (2021d). 2021 Moderate livelihood fishing. Retrieved from https://www.dfo-mpo.gc.ca/fisheries-peches/aboriginal-autochtones/moderate-livelihood-subsistance-convenable/2021-approach-approche-eng.html
- Government of Nova Scotia. (2015). Government of Nova Scotia Policy and Guidelines: Consultation with the Mi'kmaq of Nova Scotia (p. 30). Retrieved from https://novascotia.ca/abor/docs/April%202015_GNS%20Mi%27kmaq%20Consultat ion%20Policy%20and%20Guidelines%20FINAL.pdf

- Greckhamer, T., & Koro-Ljungberg, M. (2005). The erosion of a method: Examples from grounded theory. *International Journal of Qualitative Studies in Education*, 18(6), 729–750.
- Greenan, B. J. W., Shackell, N. L., Ferguson, K., Greyson, P., Cogswell, A., Brickman, D., ... Saba, V. S. (2019). Climate Change Vulnerability of American Lobster Fishing Communities in Atlantic Canada. *Frontiers in Marine Science*, *6*, 579. doi:https://doi.org/10.3389/fmars.2019.00579
- Grout, D. E. (2006). Interactions between striped bass (*Morone saxatilis*) rebuilding programmes and the conservation of Atlantic salmon (*Salmo salar*) and other anadromous fish species in the USA. *ICES Journal of Marine Science*, 63(7), 1346-1352. doi:https://doi.org/10.1016/j.icesjms.2006.03.021
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. Field Methods. doi:http://doi.org/10.1177/1525822X05279903
- Guirkinger, L., Rojas-Perea, S., Ender, I., Ramsden, M., Lenton-Lyons, C., & Geldmann, J. (2021). Motivations for compliance in Peruvian manta ray fisheries. *Marine Policy*, 124, 104315. doi:https://doi.org/10.1016/j.marpol.2020.104315
- Hanson, J.M. (2009) Predator-prey interactions of American lobster (*Homarus americanus*) in the southern Gulf of St. Lawrence, Canada. *New Zealand Journal of Marine and Freshwater Research*, 43:1, 69-88. doi:https://doi.org/10.1080/00288330909509983
- Hansen, L. P., & Quinn, T. P. (1998). The marine phase of the Atlantic salmon (*Salmo salar*) life cycle, with comparisons to Pacific salmon. *Canadian Journal of Fisheries and Aquatic Sciences*, 55(S1), 104-118. doi https://doi.org/10.1139/d98-010
- Harris, D., & Millerd, P. (2010). Food fish, commercial fish, and fish to support a moderate livelihood: characterizing Aboriginal and treaty rights to Canadian fisheries. *Arctic Review on Law and Politics*, 1, 82–107.

- Hatcher, A. (2012). Building Cultural Bridges with Aboriginal Learners and Their "Classmates" for Transformative Environmental Education. *Journal of Environmental Studies and Sciences*, 2(4), 346–356. doi:https://doi.org/10.1007/s13412-012-0088-6
- Henderson, J. Y. (1994). Empowering treaty federalism. Sask. L. Rev., 58, 241.
- Henderson, J. (1997). The Mi'kmaw Concordat. Halifax: Fernwood.
- Henderson, J. (2016). Alexander Denny and the Treaty Imperative. In M. Battiste (Ed.), Living Treaties Narrating Mi'kmaw Treaty Relations, (pp. 95-114). Sydney: Cape Breton University Press.
- Henderson, J. N., & Letcher, B. H. (2003). Predation on stocked Atlantic salmon (*Salmo salar*) fry. *Canadian Journal of Fisheries and Aquatic Sciences*, 60(1), 32-42. doi:https://doi.org/10.1139/f03-001
- Hernes, H. K., Broderstad, E. G., & Tennberg, M. (2021). Indigenous rights and governance theory An introduction. In Tennberg, M., Broderstad, E. G., & Hernes, H. K. (Eds.). *Indigenous Peoples, Natural Resources and Governance: Agencies and Interactions* [Abstract]. Routledge. Abstract retrieved from https://www.taylorfrancis.com/chapters/edit/10.4324/9781003131274-1/indigenous-rights-governance-theory-hans-kristian-hernes-else-grete-broderstad-monicatennberg?context=ubx&refId=d02991c0-516e-406d-9312-17d15647fc20
- Holling, C. S. (2001). Understanding the Complexity of Economic, Ecological, and Social Systems. *Ecosystems (New York)*, *4*(5), 390–405. doi:https://doi.org/10.1007/s10021-001-0101-5
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Huber, B. (2009). Negotiating the Political Ecology of Aboriginal Resource
 Management: How Mi'kmaq Manage Their Moose and Lobster Harvest in
 Unama'ki, Nova Scotia, Canada. Victoria University of Wellington, Wellington.
 doi:http://hdl.handle.net/10063/859

- Hurlbert, S. H. (1984). Pseudoreplication and the Design of Ecological Field Experiments. *Ecological Monographs*, 54(2). doi:https://doi.org/10.2307/1942661
- IFLA. (n.d.). Guidelines for the Organizational Structure of Associations. Retrieved from https://archive.ifla.org/VII/s40/pub/ifla-osa.pdf
- Indian Act, R.S.C., 1985, c. I-5. Retreived from https://laws-lois.justice.gc.ca/eng/acts/i-5/
- Indian Band Council Procedure Regulations (C.R.C., c. 950), from https://lawslois.justice.gc.ca/eng/regulations/C.R.C.,_c._950/page-1.html
- Indigenous Affairs Cape Breton University. (2021a). Mi'kmaw Ethics Watch. Retrieved from https://www.cbu.ca/indigenous-affairs/mikmaw-ethics-watch/
- Indigenous Affairs Cape Breton University. (2021b). The Mi'kmaq. Retrieved from https://www.cbu.ca/indigenous-affairs/mikmaq-resource-centre/the-mikmaq/
- Indigenous Services Canada. (2021). Registered Indian Population By Sex and Residence, 2020. Retrieved from https://publications.gc.ca/collections/collection 2021/sac-isc/R31-3-2020-eng.pdf
- Iwama, M. J., Marshall, M., Marshall, A., Mendez, I., & Bartlett, C. (2007). *I got it from an elder:* conversations in healing language. Kentville: Gaspereau Press.
- Jentoft, S. (2000). Legitimacy and disappointment in fisheries management. *Marine Policy*, 24(2), 141–148. doi:https://doi.org/10.1016/S0308-597X(99)00025-1
- Jentoft, S. (2007). Limits of governability: Institutional implications for fisheries and coastal governance. *Marine Policy*, *31*(4), 360–370.
- Jentoft, S. (2011). Legal Pluralism and the Governability of Fisheries and Coastal Systems. *The Journal of Legal Pluralism and Unofficial Law*, 43(64), 149–172. doi:https://doi.org/10.1080/07329113.2011.10756673

- Jentoft, S. (2013). Social justice in the context of fisheries. In M Bavinck, R. Chuenpagdee, S. Jentoft, & J. Kooiman (Eds.), *Governability of Fisheries and Aquaculture: Theory and Applications* (pp. 45–65). doi:https://doi.org/10.1007/978-94-007-6107-0
- Jentoft, S, Bavinck, M., Johnson, D. S., & Thomson, K. T. (2009). Fisheries comanagement and legal pluralism: How an analytical problem becomes an institutional one. *Human Organization*, 68(1), 27–38.
- Jentoft, S, & Chuenpagdee, R. (2013). Concerns and Problems in Fisheries and Aquiculture Exploring Governability. In M Bavinck, R. Chuenpagdee, S. Jentoft, & J. Kooiman (Eds.), *Governability of Fisheries and Aquaculture: Theory and Applications* (pp. 33–44). https://doi.org/10.1007/978-94-007-6107-0
- Jentoft, S, & Chuenpagdee, R. (2015). Assessing Governability of Small Scale Fisheries. In S. Jentoft & R. Chuenpagdee (Eds.), *Interactive Governance for Small Scale Fisheries* (pp. 17–35). Norway: Springer.
- Jentoft, S., & Bavinck, M. (2014). Interactive governance for sustainable fisheries: dealing with legal pluralism. *Current Opinion in Environmental Sustainability*, 11, 71–77. doi:https://doi.org/10.1016/j.cosust.2014.10.005
- Jentoft, S., & Chuenpagdee, R. (2009). Fisheries and coastal governance as a wicked problem. *Marine Policy*, *33*(4), 553–560. doi:https://doi.org/10.1016/j.marpol.2008.12.002
- Jentoft, S., & Chuenpagdee, R. (2015). Enhancing the Governability of Small-Scale Fisheries Through Interactive Governance. In S. Jentoft & R. Chuenpagdee (Eds.), *Interactive Governance for Small Scale Fisheries* (pp. 727–747). doi:https://doi.org/10.1007/978-3-319-17034-3_37
- Jentoft, S., Chuenpagdee, R., Bundy, A., & Mahon, R. (2010). Pyramids and roses: Alternative images for the governance of fisheries systems. Marine Policy, 34(6), 1315-1321.

- Jentoft, S., & Johnsen, J. P. (2015). The dynamics of small-scale fisheries in Norway: From adaptamentality to governability. In S. Jentoft & R. Chuenpagdee (Eds.), *Interactive Governance for Small Scale Fisheries* (pp. 705–723). New York: Springer.
- Johnston, R., McGregor, D., & Restoule, J.-P. (2018). Responsibility, Respect, Relevance, Reciprocity, and Responsibility: Taking up Indigenous Research Approaches. In D. McGregor, J.-P. Restoule, & R. Johnston (Eds.), *Indigenous Research: Theories, Practices, and Relationships* (pp. 1–21). Toronto: Canadian Scholars' Press.
- King, S. J. (2011). Conservation Controversy: Sparrow, Marshall, and the Mi'kmaq of Esgenoôpetitj. *International Indigenous Policy Journal*, *2*(4).
- King, S. J. (2013). Fishing in contested waters: place and community in Burnt Church/Esgenoôpetitj. Toronto: University of Toronto Press.
- Kleinhaus, M. M., & Macdonald, R. A. (1997). What is a critical legal pluralism?. *Canadian Journal of Law and Society*, 12(02), 25-46.
- Kooiman, J. (2008). Exploring the Concept of Governability. *Journal of Comparative Policy Analysis: Research and Practice*, *10*(2), 171–190. doi:https://doi.org/10.1080/13876980802028107
- Kooiman, J. (2013). Improving governability Reflections for future applications. In M Bavinck, R. Chuenpagdee, S. Jentoft, & J. Kooiman (Eds.), *Governability of Fisheries and Aquaculture: Theory and Applications* (pp. 351–372). doi:https://doi.org/10.1007/978-94-007-6107-0
- Kooiman, J., & Bavinck, M. (2005). The governance perspective. In J. Kooiman, M. Bavinck, S, Jentoft & R. Pullin (Eds) Fish for life: Interactive Governance for Fsheries (pp. 11-24). Amersterdam, Amsterdam University Press.
- Kooiman, J, & Bavinck, M. (2013). Theorizing governability The interactive governance perspective. In M. Bavinck, R. Chuenpagdee, S. Jentoft, & J. Kooiman (Eds.), *Governability of Fisheries and Aquaculture: Theory and Applications* (pp. 9–30). doi:https://doi.org/10.1007/978-94-007-6107-0

- Kooiman, J, Bavinck, M., Chuenpagdee, R., Mahon, R., & Pullin, R. (2008). Interactive governance and governability: an introduction. *Journal of Transdisciplinary Environmental Studies*, 7(1), 1–11.
- Kooiman, J, Bavinck, M., Jentoft, S., & Pullin, R. (2005). Fish for life interactive governance for fisheries. Amsterdam: Amsterdam University Press.
- Kooiman, J, & Chuenpagdee, R. (2005). Governance and governability. In J.Kooiman,
 M. Bavinck, S. Jentoft, & R. Pullin (Eds.), Fish for life: Interactive governance for fisheries (pp. 325–349). Amsterdam: Amsterdam University Press.
- Kooiman, Jan, Jentoft, S., Bavinck, M., Chuenpagdee, R., & Sumaila, R. (2005). Metaprinciples. In J. Kooiman, M. Bavinck, S. Jentoft, & R. Pullin (Eds.), *Fish for life Interactive governance for fisheries* (pp. 265–283). Amsterdam: Amsterdam University Press.
- Kovach, M. (2009). *Indigenous methodologies: characteristics, conversations and contexts*. Toronto: University of Toronto Press.
- Kovach, M. (2010). Conversation Method in Indigenous Research. *First Peoples Child & Family Review*, *5*(1), 40–48.
- Kovach, M. (2014). Thinking through theory: Contemplating Indigenous situated research and policy. *Qualitative Research Outside the Academy*, 92-106.
- Kovach, M. (2017). Doing Indigenous Methodologies. *The SAGE Handbook of Qualitative Research*, 214.
- Kraly, P. (2019). *Evolution of Aquaculture in Nova Scotia*. Retrieved from http://seafarmers.ca/history-of-aquaculture-in-nova-scotia/
- Kuhn, T. S. (1996). *The Structure of Scientific Revolutions*. doi:https://doi.org/10.7208/chicago/9780226458106.001.0001

- Lacroix, G. L. (2013). Migratory strategies of Atlantic salmon (*Salmo salar*) postsmolts and implications for marine survival of endangered populations. *Canadian Journal of Fisheries and Aquatic Sciences*. doi:https://doi.org/10.1139/cjfas-2012-0270
- Ladner, K. L. (2005). Up the Creek: Fishing for a New Constitutional Order. *Canadian Journal of Political Science*, *38*(4), 923–953. doi:https://doi.org/10.1017/S0008423905040539
- Latulippe, N. (2015). Situating the Work. *AlterNative: An International Journal of Indigenous Peoples*, 11(2).
- Latulippe, N. (2017). Belonging to Lake Nippising: Knowledge, Governance, and Human-Fish Relations. University of Toronto.
- Leblanc, T. (2012). Mi'kmaq and French/Jesuit Understandings of the Spiritual and Spirituality: Implications for Faith. Asbury Theological Seminary.
- Le Bris, A., Mills, K. E., Wahle, R. A., Chen, Y., Alexander, M. A., Allyn, A. J., ... Pershing, A. J. (2018). Climate vulnerability and resilience in the most valuable North American fishery. *Proceedings of the National Academy of Sciences of the United States of America*. doi:https://doi.org/10.1073/pnas.1711122115
- Lee, L. C., Reid, M., Jones, R., Winbourne, J., Rutherford, M., & Salomon, A. K. (2019). Drawing on indigenous governance and stewardship to build resilient coastal fisheries: People and abalone along Canada's northwest coast. *Marine Policy*, 109, 103701.
- LEGISinfo. (2021). House Government Bill C-15 An Act respecting the United Nations Declaration on the Rights of Indigenous Peoples. Retrieved from https://www.parl.ca/LegisInfo/BillDetails.aspx?Bill=C15&Language=E&Mode=1&Parl=43&Ses=2
- Listuguj First Nation. (1995). Mi'gmaq Ranger Law. Retrieved from https://listuguj.ca/wp-content/uploads/2019/04/Rangers-Law.pdf
- Listuguj First Nation. (2019). Listuguj Lobster Law (2019-01). Retrieved from https://listuguj.ca/wp-content/uploads/2019/07/Listuguj-Lobster-Law.pdf

- Liu, Y., Chuenpagdee, R., & Sumaila, R. (2013). Salmon aquaculture in Canada and Norway Appraising governability. In M Bavinck, R. Chuenpagdee, S. Jentoft, & J. Kooiman (Eds.), Governability of Fisheries and Aquaculture: Theory and Applications (pp. 201–218). doi:https://doi.org/10.1007/978-94-007-6107-0
- MacDiarmid, A. B., & Sainte-Marie, B. (2006). Reproduction. In *Lobsters: Biology, Management, Aquaculture and Fisheries* (pp. 45–77). Ames: Blackwell Publishing Ltd.
- Macklem, P. (2018). Indigenous Peoples and The Ethos of Legal Pluralism in Canada. In From recognition to Reconciliation (pp. 17-34). University of Toronto Press.
- MacMillan, J., & LeBlanc, J. (2002). Biological characteristics of sea-run salmonids from a spring angler creel survey on five Northumberland Strait river systems in Nova Scotia, and management implications. Retrieved from https://novascotia.ca/fish/documents/special-management-areas-reports/Sea_Run_Trout_Fisheries_in_Northumberland_Strait_Rivers_2002.pdf
- Mahon, R., Bavinck, M., & Roy, R. N. (2005). Governance in Action. In J. Kooiman, M. Bavinck, S. Jentoft, & R. Pullin (Eds.), *Fish for life interactive governance for fisheries* (pp. 351–374). Amsterdam: Amsterdam University Press.
- Maritime Provinces Fishery Regulations (SOR/93-55), from https://laws.justice.gc.ca/eng/regulations/SOR-93-55/page-23.html
- Marsh, T. N., Cote-Meek, S., Toulouse, P., Najavits, L. M., & Young, N. L. (2015). The Application of Two- Eyed Seeing Decolonizing Methodology in Qualitative and Quantitative Research for the Treatment of Intergenerational Trauma and Substance Use Disorders. *International Journal of Qualitative Methods*, 14(5). doi:https://doi.org/10.1177/1609406915618046
- Martijn, Charles. 2003. Early Mi'kmaq Presence in Southern Newfoundland: An Ethnohistorical Perspective, C1500-1763. Newfoundland and Labrador Studies 19.1: 44.

- Marushka, L., Kenny, T. A., Batal, M., Cheung, W. W., Fediuk, K., Golden, C. D., ... & Chan, H. M. (2019). Potential impacts of climate-related decline of seafood harvest on nutritional status of coastal First Nations in British Columbia, Canada. PloS one, 14(2), e0211473.
- McCormick, S. D., Hansen, L. P., Quinn, T. P., & Saunders, R. L. (1998). Movement, migration, and smolting of Atlantic salmon (*Salmo salar*). *Canadian Journal of Fisheries and Aquatic Sciences*. doi:https://doi.org/10.1139/d98-011
- McGaw, R. (2003). Aboriginal fisheries policy in Atlantic Canada. *Marine Policy*, 27(5), 417–424. doi:https://doi.org/10.1016/S0308-597X(03)00023-X
- McGinnity, P., Prodöhl, P., Ferguson, A., Hynes, R., Maoiléidigh, N. Ó., Baker, N., ... Cross, T. (2003). Fitness reduction and potential extinction of wild populations of Atlantic salmon, Salmo salar, as a result of interactions with escaped farm salmon. *Proceedings of the Royal Society B: Biological Sciences*. doi:https://doi.org/10.1098/rspb.2003.2520
- McGregor, D. (2004). Coming Full Circle: Indigenous Knowledge, Environment, and Our Future. *The American Indian Quarterly*. doi:https://doi.org/10.1353/aiq.2004.0101
- McKeon, M. (2012). Two- Eyed Seeing into Environmental Education: Revealing Its "Natural" Readiness to Indigenize. *Canadian Journal of Environmental Education*, 17, 131–147.
- McMillan, L.J. (1996). Mi'kmawey Mawio'mi, changing roles of the Mi'kmaq Grand Council from the early seventeenth century to the present. St. Francis Xavier University, Antigonish.
- McMillan, L. (2014). Still seeking justice: The Marshall inquiry narratives. U.B.C. Law Review, 47(3), 927-990.
- McMillan, L. Jane, & Prosper, K. (2016). Remobilizing netukulimk: Indigenous cultural and spiritual connections with resource stewardship and fisheries management in Atlantic Canada. *Reviews in Fish Biology and Fisheries*, *26*(4), 629-647. doi:https://doi.org/10.1007/s11160-016-9433-2

- MCPEI Indigenous Justice Program. (2017). Bringing Balance to the Scales of Justice: Fulfilling Our Responsibility to Indigenous People Involved in the Justice System. Retrieved from http://mcpei.ca/wp-content/uploads/2018/03/Bringing-Balance-to-the-Scales-of-Justice-Resource-Guide.pdf
- Membertou First Nation. (2020). Maupletu Membertou. Retrieved from https://www.membertou.ca
- Mettalic, F. (2016). Treaty and Mi'gmewey. In M. Battiste (Ed.), *Living Treaties Narrating Mi'kmaw Treaty Relations* (pp. 42-51). Sydney: Cape Breton University Press.
- Mi'kmaw Conservation Group. (2020). Mission & Netukulimk. Retrieved from https://mikmawconservation.ca/mission-netukulimk/
- Mi'kmaw Spirit. 2016. Mi'kmaw Spirit. Retrieved from http://www.muiniskw.org/pgCulture1b.htm
- Millbrook First Nation. (n.d.). Millbrook First Nation. Retrieved April 24, 2021, from https://www.millbrookband.com
- Million, D. (2014). There is a river in me theory from life. In A. Simpson & A. Smith (Eds.), *Theorizing Native Studies* (pp. 31–42). London: Duke University Press.
- Milot, E., Perrier, C., Papillon, L., Dodson, J. J., & Bernatchez, L. (2013). Reduced fitness of Atlantic salmon released in the wild after one generation of captive breeding. *Evolutionary applications*, *6*(3), 472-485. doi:https://doi.org/10.1111/eva.12028
- M'sɨt No'kmaq, Marshall A, Beazley KF, Hum J, joudry s, Papadopoulos A, Pictou S, Rabesca J, Young L, and Zurba M. 2021. "Awakening the sleeping giant": re-Indigenization principles for transforming biodiversity conservation in Canada and beyond. FACETS 6: 839–869. doi:10.1139/ facets-2020-0083
- NASCO. (2019a). *State of North Atlantic Salmon*. Retrieved from http://www.nasco.int/pdf/iys/SoS-final-online.pdf

- NASCO. (2019b). Report from the Tromsø Symposium on the Recommendations to Address Future Management Challenges Symposium Report CNL(19)16 Managing the Atlantic salmon in a rapidly changing environment management challenges and possible responses. Retrieved from https://nasco.int/wp-content/uploads/2020/02/CNL1916_Report-from-the-Tromsø-Symposium-on-the-Recommendations-to-Address-Future-Management-Challenges.pdf
- National Indigenous Fisheries Institute. (2019). *Indigenous Program Review PHASE TWO FINAL REPORT Aboriginal Fisheries Strategy Program Aboriginal Fishery Guardian Program*. Retrieved from https://indigenousfisheries.ca/en/wp-content/uploads/reports/Institute_Indigenous Program Review_Phase Two Final Report.pdf
- National Parks of Canada Fishing Regulations (C.R.C., c. 1120), from https://laws.justice.gc.ca/eng/regulations/C.R.C.,_c._1120/
- Naylor, R., Hindar, K., Fleming, I. A., Goldberg, R., Williams, S., Volpe, J., ... Mangel, M. (2005). Fugitive Salmon: Assessing the Risks of Escaped Fish from Net-Pen Aquaculture. *BioScience*. doi:https://doi.org/10.1641/0006-3568(2005)055[0427:fsatro]2.0.co;2
- NCNS. 2016. Netukulimkewe'l Commission. Retrieved from https://www.ncns.ca/program-services/netukulimkewel-commission/
- Nguyen, V. M., Rudd, M. A., Hinch, S. G., & Cooke, S. J. (2013). Recreational anglers' attitudes, beliefs, and behaviors related to catch-and-release practices of Pacific salmon in British Columbia. *Journal of Environmental Management*, 128, 852-865. doi:https://doi.org/10.1016/j.jenvman.2013.06.010
- Nisga'a Nation. (n.d.). Understanding the Treaty. https://www.nisgaanation.ca/understanding-treaty.
- NLCA. (1992). The Nunavut Agreement: An Agreement Between: The Inuit of the Nunavut Settlement Area as represented by the Tungavik Federation of Nunavut AND: Her Majesty The Queen in Right of Canada. Retrieved from https://nlca.tunngavik.com/?page_id=268#ANCHOR467

- Nova Scotia. (2010). Consultation Terms of Referece. Retrieved from https://novascotia.ca/abor/docs/MK_NS_CAN_Consultation_TOR_Sept2010_English.pdf
- Nova Scotia. (2017). Pardon, Apology, for Late Grand Chief Gabriel Sylliboy. News Release Feb. 16, 2017. https://novascotia.ca/news/release/?id=20170216004
- Nova Scotia Fisheries & Aquaculture. (n.d.-a). Industry Overview. Retrieved from https://novascotia.ca/fish/commercial-fisheries/industry-overview/
- Nova Scotia Fisheries & Aquaculture. (n.d.-b). Licence Loan Program. Retrieved from https://novascotia.ca/fish/funding-programs/licence-loan/
- Nova Scotia Fisheries & Aquaculture. (n.d.-c). Licensing & Leasing. Retrieved from https://novascotia.ca/fish/commercial-fisheries/licensing-leasing/
- Nova Scotia Fisheries & Aquaculture. (2017). Fish Processors & Fish Buyers Licence Policy. Retrieved from https://novascotia.ca/fish/programs-and-services/licensing-and-permits/licensing-and-compliance/licence-policy.asp
- Nova Scotia Fisheries & Aquaculture. (2019a). Fisheries and Aquaculture Annual Production and Sales 2018. Retrieved from https://novascotia.ca/fish/documents/aqua-stats/2018Production.pdf
- Nova Scotia Fisheries & Aquaculture. (2019b). *Nova Scotia Anglers' Handbook and 2019 Summary of Regulations*. Retrieved from https://novascotia.ca/fish/documents/Anglers-Handbook-2019.pdf
- Nova Scotia Fisheries & Aquaculture. (2020). 2020 Fish Buyers Licence Conditions. Retrieved from https://novascotia.ca/fish/documents/2020-Buyers-Licence-Conditions.pdf
- Nova Scotia Guides Association. (2018). Nova Scotia Guides Association. Retrieved from https://www.nsguides.ca/index.html

- Nova Scotia Salmon Association. (2019). The Atlantic Salmon. Retrieved from https://www.nssalmon.ca/atlantic-salmon
- Nunatsiavut Government. (2021). Co-Management Working together. Retrieved from https://www.nunatsiavut.com/department/co-management/
- Oceana. (2019). Fishery Audit 2019 Unlocking Canada's Potetial For Abundant Oceans. Retrieved from https://fisheryaudit.ca
- Office of L'nu Affairs. (2013). Office of L'nu Affairs. Retrieved from https://novascotia.ca/abor/office/
- Ohajunwa, C., & Mji, G. (2021). Expressing social justice within Indigenous research: A reflection on process and affirmation. *AlterNative: An International Journal of Indigenous Peoples*, 17(2), 183-190.
- Ostrom, E. (1990). Governing the commons: the evolution of institutions for collective action. Cambridge: Cambridge University Press.
- Ostrom, E., Gardner, R., & Walker, J. (1994). *Rules, Games, & Common-pool resources*. Ann Arbor: The University of Michigan Press.
- Otis, G. (2014). Constitutional recognition of aboriginal and treaty rights: a new framework for managing legal pluralism in Canada?. *The Journal of Legal Pluralism and Unofficial Law*, 46(3), 320-337.
- Oyanedel, R., Gelcich, S., & Milner-Gulland, E. J. (2020). Motivations for (non)compliance with conservation rules by small-scale resource users. *Conservation Letters*, *13*(5), e12725. https://doi.org/https://doi.org/10.1111/conl.12725

Pacific Herring Regulations, SOR/84-324

- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544. doi:http://doi.org/10.1007/s10488-013-0528-y
- Palmater, P. D. (2000). An empty shell of a treaty promise: R. v. Marshall and the rights of non-status Indians. *Dalhousie Law Journal*, 23(1), 102.
- Palmater, P. D. (2009). Beyond Blood: Rethinking Aboriginal Identity and Belonging. (Doctoral dissertation, Dalhousie University). Retrieved from https://www.collectionscanada.gc.ca/obj/thesescanada/vol2/002/NR56294.PDF
- Palmater, P. (2014). Genocide, Indian policy, and legislated elimination of Indians in Canada. *Aboriginal policy studies*, *3*(3).
- Parés, C., Dresdner, J., & Salgado, H. (2015). Who should set the total allowable catch? Social preferences and legitimacy in fisheries management institutions. *Marine Policy*, *54*, 36–43. doi:https://doi.org/10.1016/j.marpol.2014.12.011
- Parks Canada. (2017). Parks Canada Guiding Principles and Operational Policies. Retrieved January 9, 2021, from https://www.pc.gc.ca/en/docs/pc/poli/princip
- Partelow, S., Schlüter, A., Armitage, D., Bavinck, M., Carlisle, K., Gruby, R. L., ... Van Assche, K. (2020). Environmental governance theories: a review and application to coastal systems. *Ecology and Society*, *25*(4). doi:https://doi.org/10.5751/ES-12067-250419
- Paul, D. N. (n.d.). Mi'kmaq First Nation. Retrieved April 1, 2021, from http://www.danielnpaul.com/Mi%27kmaqFirstNation.html
- Paul, D. N. (2006). First Nations history: we were not the savages: collision between European and Native American civilizations (3rd ed.). Halifax: Fernwood.

- Perrier, C., Guyomard, R., Bagliniere, J. L., Nikolic, N., & Evanno, G. (2013). Changes in the genetic structure of Atlantic salmon populations over four decades reveal substantial impacts of stocking and potential resiliency. Ecology and evolution, 3(7), 2334-2349. doi:https://doi.org/10.1002/ece3.629
- Phillipson, J., & Symes, D. (2013). Science for sustainable fisheries management: An interdisciplinary approach. *Fisheries Research*, *139*, 61–64. doi:https://doi.org/10.1016/j.fishres.2012.09.012
- Pictou, S. M. (2015). Small't' treaty relationships without borders: Bear river first nation, clam harvesters, the bay of fundy marine resource centre and the World Forum of Fisher Peoples. *Anthropologica*, 457-467.
- Pictou, S. M. (2017). Decolonizing Mi'kmaw Memory of Treaty: L'sitkuk's Learning With Allies in Struggle for Food and Lifeways. Dalhousie University, Halifax.
- Pinkerton, E. (1994). Local Fisheries Co- management: A Review of International Experiences and Their Implications for Salmon Management in British Columbia. *Canadian Journal of Fisheries and Aquatic Sciences*, *51*(10), 2363–2378. doi:https://doi.org/10.1139/f94-238
- Poelzer, G., & Coates, Kenneth. (2015). From Treaty Peoples to Treaty Nation: A Road Map for all Canadians. Vancouver: UBC Press.
- Poesch, M. S., Chavarie, L., Chu, C., Pandit, S. N., & Tonn, W. (2016). Climate Change Impacts on Freshwater Fishes: A Canadian Perspective. *Fisheries*, 41(7), 385–391. doi:https://doi.org/10.1080/03632415.2016.1180285
- Prosper, K., McMillan, L., Davis, A., & Moffitt, M. (2011). Returning to Netukulimk: Mi'kmaq cultural and spiritual connections with resource stewardship and self-governance. *International Indigenous Policy Journal*, 2(4), 7.
- Quinn, B. K., Rochette, R., & Chassé, J. (2017). Potential connectivity among American lobster fisheries as a result of larval drift across the species' range in eastern North America. *Canadian Journal of Fisheries & Aquatic Sciences*, 74(10), 1549–1563. Retrieved from https://doi-org.ezproxy.library.dal.ca/10.1139/cjfas-2016-0416

- Raakjær Nielsen, J. (2003). An analytical framework for studying: compliance and legitimacy in fisheries management. *Marine Policy*, 27(5), 425–432. doi:https://doi.org/10.1016/S0308-597X(03)00022-8
- Raymond, C. M., Fazey, I., Reed, M. S., Stringer, L. C., Robinson, G. M., & Evely, A. C. (2010). Integrating local and scientific knowledge for environmental management. *Journal of Environmental Management*, 91(8), 1766–1. doi:https://doi.org/10.1016/j.jenvman.2010.03.023

Recreational Fishing Regulations. N.S. Reg. 44/2001

- Reid, A. J., Eckert, L. E., Lane, J., Young, N., Hinch, S. G., Darimont, C. T., ... Marshall, A. (2021). "Two-Eyed Seeing": An Indigenous framework to transform fisheries research and management. *Fish and Fisheries (Oxford, England)*, 22(2), 243–261. doi:https://doi.org/10.1111/faf.12516
- Reid, B. (2020). Positionality and Research: "Two-Eyed Seeing" With a Rural Ktaqmkuk Mi'kmaw Community. International Journal of Qualitative Methods, 19, 1-12. doi:10.1177/1609406920910841.
- Repko, A. F. F. (2008). *Interdisciplinary research: Process and theory*. Thousand Oaks: SAGE Publications, Inc.
- Repko, A. F., Szostak, R., & Buchberger, M. P. (2016). *Introduction to interdisciplinary studies*. Thousand Oaks: SAGE Publications, Inc.
- R. v. Badger, 1996 CanLII 236 (SCC), [1996] 1 SCR 771, https://canlii.ca/t/1frbp, retrieved on 2021-05-04
- R. v. Denny, 1990 CanLII 2412 (NS CA), https://canlii.ca/t/1msnj, retrieved on 2021-12-14
- R v Gladstone, 1996 CanLII 160 (SCC), [1996] 2 SCR 723, <<u>https://canlii.ca/t/1fr8w</u>>, retrieved on 2021-05-03

- R. v. Haida Nation, 2004 SCC 73 (CanLII), [2004] 3 SCR 511, https://canlii.ca/t/1j4tq, retrieved on 2021-04-24
- R. v. Isaac (1975) 13 N.S.R. (2d) 460 (N.S.S.C.A.D.), R. v. Marshall, 1999 CanLII 665 (SCC), [1999] 3 SCR 456, https://canlii.ca/t/1fqkq, retrieved on 2021-04-24
- R. v. Marshall, 1999 CanLII 666 (SCC), [1999] 3 SCR 533, https://canlii.ca/t/1fqkn, retrieved on 2021-04-24
- R. v. Mikisew Cree First Nation, 2005 SCC 69 (CanLII), [2005] 3 SCR 388, https://canlii.ca/t/1m1zn, retrieved on 2021-04-24
- R. v. Simon, S1985 CanLII 11 (SCC), [1985] 2 SCR 387, https://canlii.ca/t/1fv04, retrieved on 2021-04-24
- R. v. N.T.C. Smokehouse Ltd., 1996 CanLII 159 (SCC), [1996] 2 SCR 672, https://canlii.ca/t/1fr8t, retrieved on 2021-09-25
- R. v. Sparrow, 1990 CanLII 104 (SCC), [1990] 1 SCR 1075, https://canlii.ca/t/1fsvj, r etrieved on 2021-04-24
- R. v. Taku River Tlingit First Nation, 2004 SCC 74 (CanLII), [2004] 3 SCR 550, https://canlii.ca/t/1j4tr, retrieved on 2021-04-24
- R. v. Van der Peet, 1996 CanLII 216 (SCC), [1996] 2 SCR 507, https://canlii.ca/t/1fr8r, retrieved on 2021-09-25
- Sable, T., & Francis, B. (2012). *The language of this land, Mi'kma'ki*. Sydney: Cape Breton University Press.
- Scott, W. B., & Scott, M. G. (1988). Atlantic Fishes of Canada. *Canadian Bulletin of Fisheries and Aquatic Sciences*, 219, 731.
- Simpson, L. B. (2014). Land as pedagogy: Nishnaabeg intelligence and rebellious transformation. Decolonization: indigeneity, education & society, 3(3).

- Sipekne'katik. (2016). Sipekne'katik. Retrieved from http://sipeknekatik.ca/community-profile/
- Slattery, B. (2016). 4. The Generative Structure of Aboriginal Rights. In *From Recognition to Reconciliation* (pp. 100-134). University of Toronto Press.
- Smith, L. T. (1999). *Decolonizing Methodologies: Research and Indigenous peoples*. Zed Books Ltd.
- Song, A. M., Chuenpagdee, R., & Jentoft, S. (2013). Values, images, and principles: What they represent and how they may improve fisheries governance. *Marine Policy*, 40, 167–175. doi:https://doi.org/10.1016/j.marpol.2013.01.018
- Species at Risk Act, S.C. 2002, c. 29. Retrieved from https://laws.justice.gc.ca/eng/acts/S-15.3/page-1.html
- Stacey, R. (2018). The dilemma of indigenous self-government in Canada: Indigenous rights and Canadian federalism. Federal Law Review, 46(4), 669-688.
- Stantec. (2009). Road Map for Aquaculture Investment in Nova Scotia. Retrieved from https://novascotia.ca/fish/documents/roadmapforaquaculture-rpt2010.pdf
- Steigman, M., & Pictou, S. (2016). Resource Privatization, Treaty Rights Recognition and Community Resistence in Maritime Canada. In K. Burnett & G. Read (Eds.), *Aboriginal History: A Reader* (pp. 226–242). Oxford: Oxford University Press.
- Steneck, R. S., & Wahle, R. A. (2013). American lobster dynamics in a brave new ocean. *Canadian Journal of Fisheries and Aquatic Sciences*, 70, 1612–1624. doi:https://doi.org/10.1139/cjfas-2013-0094
- Stewart, J. (2007). Grounded Theory and Focus Groups: Reconciling Methodologies in Indigenous Australian Education Research. *Journal of Indigenous Education*, 36, 32.
- Strega, S. (2005). The view from the poststructural margins epistemology and methodology reconsidered. In L. Brown & S. Strega (Eds.), Research as resistance:

- *critical, indigenous and anti-oppressive approaches* (pp. 199–235)Toronto: Canadian Scholars' Press.
- Sustainable Blue. (2019). About. Retrieved from doi:https://sustainableblue.com/?page_id=31
- Swadener, B., & Mutua, K. (2008). Decolonizing Performances: Deconstructing the Global Postcolonial. In N. Denzin, Y. Lincoln, & L. T. Smith (Eds.), *Handbook of Critical and Indigenous Methodologies* (pp. 31–43). Thousand Oaks: Sage Publications.
- Thomlinson, E., & Crouch, G. (2012). Aboriginal peoples, Parks Canada, and protected spaces: a case study in co- management at Gwaii Haanas National Park Reserve. *Annals of Leisure Research*, *15*(1), 69–86. doi:https://doi.org/10.1080/11745398.2012.670965
- Thorstad, E. B., Økland, F., Aarestrup, K., & Heggberget, T. G. (2008). Factors affecting the within-river spawning migration of Atlantic salmon, with emphasis on human impacts. *Reviews in Fish Biology and Fisheries*, *18*(4), 345-371. doi:https://doi.org/10.1007/s11160-007-9076-4
- Tsilhqot'in Nation v. British Columbia, 2014 SCC 44 (CanLII), [2014] 2 SCR 257, https://canlii.ca/t/g7mt9, retrieved on 2021-05-04
- Turnbull, D. (2009). Introduction: futures for Indigenous knowledges. *Futures*, 41, 1-5.
- Turnbull, N. (2016). Narrative and interpretive theory. In Chris Ansell & J. Torfing (Eds.), *Handbook on Theories of Governance* (p. 578). Northhampton: Edward Elgar Publishing.
- United Nations. (2007). *United Nations Declaration on the Rights of Indigenous Peoples*. Retrieved from https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

- United Nations. (n.d.). United Nations Declaration on the Rights of Indigenous Peoples. Retrieved from https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html
- Varghese, J., & Crawford, S. S. (2021). A cultural framework for Indigenous, Local, and Science knowledge systems in ecology and natural resource management. *Ecological Monographs*, 91(1), e01431.10.1002/ecm.1431
- Vigliano Relva, J., & Jung, J. (2021). Through the eyes of another: Using a narrative lens to navigate complex social-ecological systems and to embrace multiple ways of knowing. *Frontiers in Marine Science*, 975.
- von der Porten, S., Corntassel, J., & Mucina, D. (2019). Indigenous nationhood and herring governance: strategies for the reassertion of Indigenous authority and inter-Indigenous solidarity regarding marine resources. *AlterNative: An International Journal of Indigenous Peoples*, 15(1), 62-74.
- von der Porten, S., Ota, Y., Cisneros-Montemayor, A., & Pictou, S. (2019). The role of Indigenous resurgence in marine conservation. *Coastal Management*, 47(6), 527-547.
- Van Zwol, J. A., Neff, B. D., & Wilson, C. C. (2012). The effect of competition among three salmonids on dominance and growth during the juvenile life stage. *Ecology of Freshwater Fish*, 21(4), 533-540. doi:https://doi.org/10.1111/j.1600-0633.2012.00573.x
- Webber, J. (2016). We are Still in the Age of Encounter: Section 35 and a Canada Beyond Sovereignty. In *From Recognition to Reconciliation* (pp. 63-99). University of Toronto Press.
- Weber-Pillwax, C. (2001). What is indigenous research? *Canadian Journal of Native Education*, 25(2), 166–174.
- Whitmarsh, D., & Palmieri, M. G. (2009). Social acceptability of marine aquaculture: The use of survey-based methods for eliciting public and stakeholder preferences. *Marine Policy*, 33(3), 452-457. doi:https://doi.org/10.1016/j.marpol.2008.10.003

- Whyte, K. P. (2013). On the role of traditional ecological knowledge as a collaborative concept: a philosophical study. *Ecological Processes*, *2*(1), 1–12. doi:https://doi.org/10.1186/2192-1709-2-7
- Wiber, M., & Milley, C. (2007). After Marshall: Implementation of Aboriginal Fishing Rights in Atlantic Canada. *The Journal of Legal Pluralism and Unofficial Law*, 39(55), 163–186. doi:https://doi.org/10.1080/07329113.2007.10756611
- Wicken, W. (2018). *Mi'kmaq treaties on trial: history, land and Donald Marshall Junior*. Toronto: University of Toronto Press.
- Wildcat, M., McDonald, M., Irlbacher-Fox, S., & Coulthard, G. (2014). Learning from the land: Indigenous land based pedagogy and decolonization. *Decolonization: Indigeneity, Education & Society*, 3(3).
- Wildlife Act. R.S., c. 504, s. 2., from https://nslegislature.ca/sites/default/files/legc/statutes/wildlife.pdf
- Wildsmith, B. H. (1995). The Mi'kmaq and the fishery: beyond food requirements. *Dalhousie Law Journal*, 18(1), 116–140.
- Wilson, S. (2001). What is indigenous research methodology? *Canadian Journal of Native Education*, 25(2), 175–179.
- Wilson, S. (2008). Research is ceremony: Indigenous research methods. Winnepeg: Fernwood Publications
- Wright A.L, Gabel C., Ballantyne M., Jack S.M., & Wahoush, O. 2019. Using Two-Eyed Seeing in Research With Indigenous People: An Integrative Review. *International Journal of Oualitative Methods*. January 2019. doi:10.1177/1609406919869695
- Yin, R. K. (2018). Case Study Research and Applications: Design and Methods (6th ed.). Thousand Oaks: SAGE Publications, Inc.

Young, O. R., Webster, D. G., Cox, M. E., Raakjær, J., Blaxekjær, L. Ø., Einarsson, N., ... & Wilson, R. S. (2018). Moving beyond panaceas in fisheries governance. Proceedings of the National Academy of Sciences, 115(37), 9065-9073.

APPENDIX A MI'KMAW ETHICS WATCH APPROVAL LETTER



February 13, 2018

Ms. Shelley Denny IDPhD Candidate, Marine Affairs Dalhousie University sdenny@dal.ca

Dear Ms. Denny:

I wish to inform you that the Mi'kmaw Ethics Watch committee has reviewed and approved "Implementing Mi'Kmaq inherent and treaty fisheries: An alternative fisheries governance model for Nova Scotia."

As your project moves forward with the approval of the Mi'kmaw Ethics Watch, I must note that individual communities have their own perspective on research projects and it is your responsibility to consult them to ensure that you meet any further ethical requirements. Governments, universities, granting agencies, and the like also have ethical processes to which you might have to conform.

When your project is completed, the Mi'kmaq Resource Centre at Unama'ki College would be pleased to accept the results in a form that could be made available to students and other researchers (if it is appropriate to disseminate them). Our common goal is to foster a better understanding of the Indigenous knowledges.

If you have any questions concerning the Mi'kmaw Ethics Watch review of your project please do not hesitate to contact me and I will forward them to the committee members.

Sincerely,

Stephen J. Augustine, Associate Vice President Indigenous Affairs & Unama'ki College Cape Breton University

SJA/is

Cc: Lucia Fanning

CAPE BRETON UNIVERSITY | UNAMA'K) COLLEGE

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APPENDIX B DALHOUSIE UNIVERSITY RESEARCH ETHICS BOARD **APPROVAL LETTER**



Social Sciences & Humanities Research Ethics Board **Letter of Approval**

October 25, 2017

Shelley Denny Science\Marine Affairs Program (Science)

Dear Shelley,

REB #: 2017-4243

Project Title: Implementing Mi'kmaq Inherent and Treaty Fisheries: An Alternative

Fisheries Governance Model for Nova Scotia

October 25, 2017 Effective Date: **Expiry Date:** October 25, 2018

The Social Sciences & Humanities Research Ethics Board has reviewed your application for research involving humans and found the proposed research to be in accordance with the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans. This approval will be in effect for 12 months as indicated above. This approval is subject to the conditions listed below which constitute your on-going responsibilities with respect to the ethical conduct of this research.

Sincerely,

Dr. Karen Beazley, Chair

APPENDIX C Interview Guides



INTERVIEW GUIDE 1 Mi'kmaq Grand Council

Research Question

How can Mi'kmaq Aboriginal and treaty rights to fish be implemented in Nova Scotia?

Guiding Research Questions

- From the perspective of the Mi'kmaq nation, what are Mi'kmaq inherent and treaty fisheries?
- Using eel, salmon and lobster as case studies, what are the opportunities and challenges to current governance (federal, provincial, Mi'kmaq) that both facilitate and hinder implementation of Mi'kmaq Aboriginal and treaty rights to fishing Nova Scotia?
- How can we reconcile limits to governance to successfully implement Mi'kmaq Aboriginal and treaty rights to fishing Nova Scotia?

Objectives

- 1. Identify Mi'kmaq and non-Mi'kmaw understanding of Mi'kmaq Aboriginal and treaty rights to fish (historical and present);
- 2. Identify relationship between Mi'kmaq Aboriginal and treaty rights to fish (historical and present);
- 3. Identify sustainability measures for Mi'kmaq fisheries of eel, salmon and lobsters (and others if they arise);
- 4. Identify opportunities and challenges for implementation of each fishery; and
- 5. Identify possible mechanisms for overcoming challenges for inherent and treaty fisheries

Ouestions

- 1.1 What is your role and experiences with Mi'kmaq fisheries?
- 1.2 How did you come to understand Mi'kmaq [inherent and treaty] fisheries?
- 1.3 What do these fisheries mean to the Grand Council?
- 1.4 How were fisheries 'governed' pre-contact?
- 1.5 How did the Mi'kmaq determine what was fished?
- 1.6 How did the Mi'kmaq determine when to stop fishing?
- 1.6 How did the Mi'kmaq determine where fishing took place?
- 2.1 In what ways are inherent fisheries similar to treaty fisheries?
- 2.1 In what ways are inherent fisheries different from treaty fisheries?
- 2.3 In what ways are treaty fisheries different from commercial fisheries?
- 2.4 How does the Mi'kmag nation benefit from the fisheries?
- 3.1 What practices were carried out when fishing for [EEL, SALMON, LOBSTER, OTHERS] to ensure future availability?

- 3.2 How did they determine what they would fish and how much?
- 3.3 How, if any, did these practices vary among the seven districts?
- 3.4 How, if any, are these practices different today?
- 4.1 Are you familiar with the Sparrow (1990) and Marshall (1999) cases?
- 4.2 Before the Sparrow and Marshall decisions, what examples were there of successful or positive relationships between the Mi'kmaq and other organizations such as the federal and/or provincial organizations for [eel, salmon, lobster, others] fishing?
- 4.2.1 How did this relationship arise?
- 4.3 Before the Sparrow and Marshall decisions, what examples were there of poor relationships between the Mi'kmaq and other organizations regarding [[eel, salmon, lobster, others] fishing?
- 4.3.1 How did this relationship arise?
- 4.3.2 How were these challenges overcome?
- 4.4 Since the Sparrow and Marshall decisions, what examples are there of successful relationships between the Mi'kmaq and federal and/or provincial organizations for [eel, salmon, lobster, others] fishing?
- 4.4.1 What makes these successes a success?
- 4.4.2 How did this relationship arise?
- 4.4.3 How is this relationship maintained?
- 4.5 What prevents you from fishing [[eel, salmon, lobster, others] today?
- 5.1 How do you envision [inherent and treaty] fisheries occurring in Mi'kma'ki?
- 5.2 What relationships are needed to achieve this vision?
- 5.3 What processes are needed to achieve this vision?
- 5.4 How can the Mi'kmaq facilitate this vision?
- 5.5 How can the federal and/or provincial governments facilitate this vision?
- 5.6 What challenges do you think may be expected?
- 5.7 How does one acquire Grand Council endorsement?
- 5.8 What challenges can be expected?
- 6.1 Are there any recommendations, stories, or other knowledge that you would like to share?



INTERVIEW GUIDE 2 Mi'kmaw Beneficiaries and Harvesters

Research Question

How can Mi'kmaq Aboriginal and treaty rights to fish be implemented in Nova Scotia?

Guiding Research Questions

- From the perspective of the Mi'kmaq nation, what are Mi'kmaq inherent and treaty fisheries?
- Using eel, salmon and lobster as case studies, what are the opportunities and challenges to current governance (federal, provincial, Mi'kmaq) that both facilitate and hinder implementation of Mi'kmaq Aboriginal and treaty rights to fishing Nova Scotia?
- How can we reconcile limits to governance to successfully implement Mi'kmaq Aboriginal and treaty rights to fishing Nova Scotia?

Objectives

- 1. Identify Mi'kmaq and non-Mi'kmaw understanding of Mi'kmaq Aboriginal and treaty rights to fish(historical and present)
- 2. Identify relationship between Mi'kmaq Aboriginal and treaty rights to fish(historical and present)
- 3. Identify sustainability measures for Mi'kmaq fisheries of eel, salmon and lobsters (and others if they arise)
- 4. Identify opportunities and challenges for implementation of each fishery
- 5. Identify possible mechanisms for overcoming challenges for inherent and treaty fisheries

Questions

- 1.1 How do you describe Mi'kmaq fisheries?
- 1.2 How did you come to understand Mi'kmaq [inherent and treaty] fisheries?
- 1.3 What do these fisheries mean to you?
- 2.1 Tell me about your experiences fishing (inherent or treaty).
- 2.2 In what ways are inherent fisheries are similar to treaty fisheries?
- 2.3 In what ways are inherent fisheries different from treaty fisheries?
- 2.4 In what ways are treaty fisheries are different from commercial fisheries?
- 2.5 How you benefit from the fisheries?
- 2.6 How do you see yourself benefiting from treaty fisheries?
- 3.1 What practices are carried out when fishing for [eel, salmon, lobster, others] to ensure future availability?
- 3.2 How did you determine what you would fish and how much?
- 3.3 How, if any, do these practices vary between fishers?

- 3.4 How, if any, do these practices vary between areas or communities?
- 4.1 Are you familiar with the Sparrow (1990) and Marshall (1999) decisions?
- 4.2 In what way do you feel the court cases (Sparrow, Marshall) affected your fishing?
- 4.3 What drives you to fish for [eel, salmon, lobster, others]?
- 4.4 What do you feel prevents you from participating from fishing for [eel, salmon, lobster, others]?
- 4.5 What is your relationship with federal and provincial fisheries departments?
- 4.6 Can you describe your relationship with Mi'kmaq fisheries organizations such as community fishery departments, AAROM bodies or other organizations?
- 4.7 How are these relationships maintained?
- 4.8 What are some of the challenges you experienced when working with these organizations?
- 4.9 What would you recommend to overcome these challenges?
- 5.1 How do you envision [inherent and treaty] fisheries occurring in Mi'kma'ki?
- 5.2 What relationships are needed to achieve this vision?
- 5.3 What processes are needed to achieve this vision?
- 5.4 How can the Mi'kmaq and Mi'kmaw organizations facilitate this vision?
- 5.5 How can the federal and/or provincial governments facilitate this vision?
- 5.6 What challenges do you think may be expected?
- 5.7 How do you think they can be overcome?
- 6.1 Are there any recommendations, stories, or other knowledge that you would like to share that was not addressed in the interview?



INTERVIEW GUIDE 3

Fisheries Governance, Leaders, Administrators, Non-Mi'kmaw Fisheries Organizations

Research Ouestion

How can Mi'kmaq Aboriginal and treaty rights to fish be implemented in Nova Scotia?

Guiding Research Questions

- From the perspective of the Mi'kmaq nation, what are Mi'kmaq inherent and treaty fisheries?
- Using eel, salmon and lobster as case studies, what are the opportunities and challenges to current governance (federal, provincial, Mi'kmaq) that both facilitate and hinder implementation of Mi'kmaq Aboriginal and treaty rights to fishing Nova Scotia?
- How can we reconcile limits to governance to successfully implement Mi'kmaq Aboriginal and treaty rights to fishing Nova Scotia?

Objectives

- 1. Identify Mi'kmaq and non-Mi'kmaw understanding of Mi'kmaq Aboriginal and treaty rights to fish(historical and present)
- 2. Identify relationship between Mi'kmaq Aboriginal and treaty rights to fish(historical and present)
- 3. Identify sustainability measures for Mi'kmaq fisheries of eel, salmon and lobsters (and others if they arise)
- 4. Identify opportunities and challenges for implementation of each fishery
- 5. Identify possible mechanisms for overcoming challenges for inherent and treaty fisheries

Ouestions

- 1.1 What is your experience with Mi'kmaq fisheries?
- 1.2 What is your understanding of Mi'kmaq fisheries?
- 1.3 How did you come to understand Mi'kmaq [inherent and treaty] fisheries?
- 1.4 What do these fisheries mean to your organization?
- 1.5 What does your organization do to enhance employee understanding of inherent and treaty fisheries?
- 2.1 In what ways are inherent fisheries are similar to treaty fisheries?
- 2.2 In what ways are inherent fisheries are different from treaty fisheries?
- 2.3 In what ways are treaty fisheries are similar to, or different from, commercial fisheries?
- 2.4 How does Canada/NS/Mi'kmaq nation benefit from the exercise of inherent and treaty fisheries?

- 3.1 How do federal departments communicate with Mi'kmaq communities?
- 3.2 How are conservation measures determined in AFS agreements?
- 3.3 How are community fishers accessing conservation measures stipulated in AFS agreements?
- 3.4 How does the community fishery departments communicate with their community inherent fishers?
- 3.5 What processes are there for compliance?
- 3.6 What opportunities are available to challenge current conservation measures?
- 4.1 Are you familiar with the Sparrow (1990) and Marshall (1999) decisions?
- 4.2 Before the Sparrow and Marshall decisions, what examples were there of successful or positive relationships between the Mi'kmaq and other organizations such as the federal and/or provincial organizations for [eel, salmon, lobster, others] fishing?
- 4.1.1 How did this relationship arise?
- 4.2 Before the Sparrow and Marshall decisions, what examples were there of poor relationships between the Mi'kmaq and other organizations regarding [eel, salmon, lobster, others] fishing?
- 4.2.1 How did this relationship arise?
- 4.2.2 How were these challenges overcome?
- 4.3 Since the Sparrow and Marshall decisions, what examples are there of successful relationships between the Mi'kmaq and federal and/or provincial organizations for [eel, salmon, lobster, others] fishing?
- 4.3.1 What makes these successes a success?
- 4.3.2 How did this relationship arise?
- 4.3.3 How is this relationship maintained?
- 5.1 Tell me about how your organization addresses the governance of inherent fisheries in Nova Scotia.
- 5.2 What opportunities are there to facilitate this realization?
- 5.3 What barriers are there that prevents the implementation of inherent fisheries?
- 5.4 What barriers are there that prevents implementation of treaty fisheries?
- 5.5 What can your organization do to enhance the Mi'kmaq experience of inherent fisheries in NS?
- 5.6 What do you feel are your organization's greatest strengths in fisheries governance?
- 5.7 What do you feel are your organization's current challenges in fisheries governance?
- 5.8 How do you envision treaty fisheries governed in Nova Scotia?
- 6.1 Are there any recommendations, stories, or other knowledge that you would like to share that was not addressed in the interview?