Putting People First: Using the Sustainable Livelihoods Approach to Develop a Culturally Relevant Salmon Fishery Management Plan

By

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Abstract

First Nations in Canada interact with the fishery with distinct sets of rights and values. In Atlantic Canada the current management system, administered by Fisheries and Oceans Canada, operates under assumed neo-liberal values and has failed to accommodate the rights and values of First Nations in the management of the resource.

Listuguj Mi'gmaq First Nation would like to develop a Salmon Fishery Management plan which reflects local values and livelihood activities. The Sustainable Livelihood approach is a holistic framework which allows for the inclusion of broad social and cultural goals and is recommended for use in the development of the Salmon Fishery Management Plan.

Keywords: Sustainable Livelihoods Approach; Fisheries Management, Salmon; First Nations; Mi'kmaq/Mi'gmaq; Values.

List of Abbreviations

AFS: Aboriginal Fishing Strategy

CWC: Community Watershed Council

DFID Department for International Development (United Kingdom)

DFO: Fisheries and Oceans Canada

IK: Indigenous Knowledge

ITQ: Individual Transferrable Quota

LMG: Listuguj Mi'gmaq Government

MOU: Memorandum of Understanding

MSY: Maximum Sustainable Yield

RRWMC Restigouche River Watershed Management Council

SFA: Salmon Fishing Area

SLA: Sustainable Livelihoods Approach

TAC: Total Allowable Catch

TEK: Traditional Ecological Knowledge

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Chapter 1 - Introduction

The Mi'gmaq* Nation has inhabited the northeastern section of North America since time immemorial. Their traditional territory, Mi'kma'ki, spans across present day Nova Scotia, Prince Edward Island, eastern and northern New Brunswick, the Gaspé Peninsula in Quebec and parts of Maine and Newfoundland (Figure 1). This territory was divided into seven districts and administered through hereditary local, district and grand chiefs. The Mi'kmaq people have maintained a strong and ancient relationship with the lands and resources within their territories which are believed to have been entrusted with the Mi'kmaq from the creator (Berneshawi, 1997). Fishing activities have always played an important role in the sustenance of the people, who harvest a variety of species throughout different seasons (Barsh, 2002). Ownership of land and resources was held communally and traditional systems of governance and management mediated the interactions between people and the territory (Berneshawi, 1997), with the concept of Netukulimk guiding these systems (Barsh, 2002; Marshall, 2009).

The arrival of Europeans and the colonial period dramatically changed the relationship between the people, their lands and resources. In modern times, Mi'kmaq access to the fishery has been limited by the Federal Government through the *Indian Act, 1876.* This makes First Nations dependent on the Canadian Government, who claim sole control over marine resources in Canadian waters. While the Mi'kmaq and other first nations have continued to fish for a variety of purposes, they have struggled for the right to access and manage the fishery. A series of legal cases have allowed First Nations varying degrees of access to the fishery for food, social and ceremonial purposes (R v. Sparrow, 1990), to sustain a moderate livelihood (R v. Marshall, 1999a) and to pursue commercial fishing (Ciarrocchi, Jarvis, Nyce, & R.P.F., 2009).

**The Mi'kmaq language can be expressed using Smith Francis and Bernard orthographies.*

First Nations however continue to struggle for clarity, legitimacy and respect for these rights (Wiber & Milley, 2007).

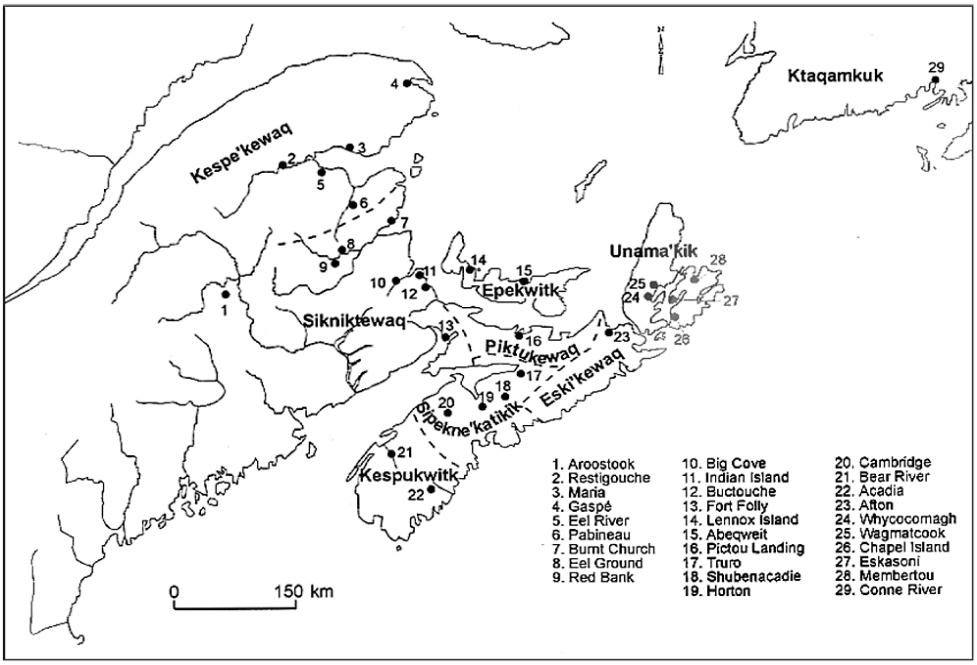

Figure 1 - Mi'kma'ki, the traditional lands of the Mi'kmaq. (from: historycooperative.org)

The current management regime in Canada, represented by Fisheries and Oceans Canada (DFO) is guided by western neo-liberal values of species conservation and profit maximization and has resulted in the progression towards a centralized, hierarchal and industrial fishery (Steigman, 2011). Attempts to incorporate First Nations rights into the existing model have been guided by the assumption of a shared set of values and expectations from the fishery. There is no evidence that this is the case, and such attempts have continued to be a source of tension and conflict (C. Milley, personal communication, March, 2012). First Nations represent distinct nations and cultural groups whose intimate and place-based experience has resulted in unique relationships to their lands and territories. These relationships are based on foundations of unique values, goals and aspirations in the fishery. In order for these groups to be adequately accommodated within a management regime, recognition of the validity of different forms of knowledge and value systems which underlie these relationships must be reflected in the system.

Listuguj First Nation is in the process of updating the community's salmon fishery management plan. This research was conducted in conjunction with a request from the Listuguj Mi'gmaq Government (LMG) to aid in the development of a culturally relevant management plan which reflects the values of the community (Listuguj Mi'gmaq Government, 2012a). Despite the absence of commercial markets, the salmon fishery is highly valued within the community. The salmon represents a source of food, but also offers the foundation for the cultural identity of the people. Current approaches to the management of the fishery have failed to recognize and accommodate the significance of social and cultural values, as well as the Aboriginal rights of the Mi'gmaq people. In order to begin to address these management issues, it is necessary to question the popular and normalized conceptions of the fishery as an industrial sector and source of employment. To do this the concept of livelihood fisheries has been adopted, as it better represents the complex and holistic activities which constitute small scale artisanal fisheries (Le Sann, 1998).

Livelihoods approaches offer an expanded notion of the relationship between people and resources. The Oxford English dictionary defines a livelihood as "a means of securing the necessities of life". To expand on this basic notion, a livelihood can be understood as containing two fundamental elements which constitute a way of life; both a pattern of subsistence and a related lifestyle. While subsistence implies the acquisition of a minimum level of material goods, the concept of livelihoods encompass more than the procurement of food or money. The interrelations between the local environment, cultural values, social norms, political processes and economic pressures require households and individuals to constantly adapt their livelihood strategies to local realities. This relationship between people and their means of subsistence is embedded in a complex and evolving process, one which requires a holistic and adaptive

interpretation.

Recent literature on the subject has recognized the multidimensionality of livelihoods, and has questioned more simplistic economic definitions of livelihoods as income generation or employment (Sunderlin et al, 2004). A broader interpretation of livelihoods involves a shift of focus from substantive outcomes, onto the process of livelihood generation, placing people and relationships at the centre of the investigation. Livelihoods may then include "… the command an individual, family, or other social group has over an income and/or bundles of resources that can be used or exchanged to satisfy its needs. This may involve information, cultural knowledge, social networks, legal rights as well as tools, land, or other physical resources." (Blaikie, Cannon, Davis & Wisner, 2004, p. 9). The use of the term 'command' implies that people not only receive goods and benefits, but are also able to assert their values, goals and aspirations into the processes which structure their lives and livelihoods.

The United Kingdom Department for International Development has developed a widely accepted definition of livelihoods which seeks to understand the concept of livelihoods from the perspective of local people:

> "One could describe a livelihood as a combination of the resources used and the activities undertaken in order to live. The resources might consist of individual skills and abilities (human capital), land, savings and equipment (natural, financial and physical capital, respectively) and formal support groups or informal networks that assist in the activities being undertaken (social capital)." (DFID, 1999, Glossary).

This definition has been adapted from livelihood literature in which individual or household livelihoods are defined as dependent on a set of assets which interact with broader sets of policies, institutions, pressures and rules. Similarly Ellis (2000) defines livelihoods as

comprising

> " … the assets (natural, physical, human, financial and social capital), the activities and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household" (p. 10).

This definition offers a holistic approach to the process by which people mediate their personal circumstances within broader socio-political and institutional pressures to derive a living. The presence of the term 'living' further highlights the dynamic and adaptive nature which is fundamental to understanding modern livelihoods.

Livelihoods approaches to resource management have been evolving since the 1980s, primarily within the realm of international development. The most common of which is the Sustainable Livelihood Approach (SLA), which has been used to tackle the poverty of rural communities by shifting the focus of poverty relief to addressing the needs of the people, rather than the resource base on which they depended. The DFID in the United Kingdom has been at the forefront this development and has created a framework and set of related principles, which addresses livelihoods through the asset based approach described above. This framework accounts for the complex and dynamic interplay between the community's capital assets; the broader social, political and economic vulnerabilities faced within the community; as well as the policies, institutions and processes which provide context for the manner in which the community must structure and address their livelihood goals. In this manner the SLA is ultimately focused on the long term livelihood outcomes of the people, which can be thought of both in terms of what they achieve, but also what they aspire towards (Campbell, 1999).

Throughout their history the Mi'kmaq people were able to maintain their needs through the application of systems of governance and resource management, which were in a large part

dependent on marine resources (Barsh, 2002). These systems were sustainable and allowed the people to derive livelihoods from their traditional territories. While many aspects of Mi'kmaq society have changed since the arrival of Europeans, the people continue to strive towards fisheries based livelihoods in a manner which is consistent with their own sets of laws, customs and morals. The SLA in this case appears to better represent the local realities of communities such as Listuguj than the modern neo-liberal approaches adopted by the DFO. The salmon fishery continues to play an important role in the lives of the people of Listuguj by forming a basis for the cultural identity of the people, as well as an avenue for a diversity of livelihood based activities. The purpose of the current research is to determine the applicability of the DFID SLA model as a culturally relevant management plan for the community of Listuguj. This was done by contextualizing the SLA within the local values surrounding the salmon fishery.

This research is situated within a wider debate on the effectiveness of the management processes within the fishery, which has been characterized as being in a state of crisis due to perpetual conflicts, management failures and an overall trend of overexploitation of marine resources. Despite this grim portrayal, there is reason for optimism due to the increasing recognition that communities can play an integral role in the overall process of effective fisheries management (Beddington, Agnew & Clark, 2007). Within this conversation there has been a call for increased debate regarding the basic values which inform fisheries management. Kooiman and Jentoft (2005) argue that too often decision making processes are assumed to be reducible to objective criteria which can be solved using simple calculation. Within this system normative values remain concealed and as a result decisions are made based on presumed criteria and subjective assumptions about the fundamental nature of the fishery. In order to answer these 'hard decisions' a rational approach to the values which characterize the fishery must be taken in

order to address the basic assumptions which characterize *why* people fish before management structures are built to structure *how* the fishery operates. This work seeks to position itself within this debate by exploring the core values of the Listuguj salmon fishery through a livelihood lens. In order to do so the values surrounding the Listuguj salmon must be communicated and understood within the social, cultural, economic, environmental and political context in which they occur. This process is not intended to seek a concrete conclusion or direct course of action for the management of the salmon fishery, but rather to broaden the existing conversation so that the 'hard choices' within the management of the fishery may be approached in an open, participatory and inclusive manner which respect the distinct rights and values of First Nations. This research was facilitated through a combination of desktop research, ethnographic observation and unstructured interviews which explored the livelihoods, community values and relationships held by the people of Listuguj during the 2012 spring salmon fishing season. In order to understand the role the salmon fishery in livelihoods of the community of Listuguj however, it is first necessary to understand the wider fisheries management context within which Aboriginal Rights and values operate.

Chapter 2 - Fisheries Management in Atlantic Canada: Regional Context

The Canadian Fishery is characterized by parallel rights claims in regards to issues of access, use, management and governance. The Canadian people, represented by the federal government, claim sovereign right to the resources found throughout the entire two hundred nautical mile exclusive economic zone, as outlined in the Law of the Sea (United Nations, 1982). These rights stem from the historic occupation and appropriation of territory. First Nations also claim rights to the fishery through the use and occupation of lands and resources, as distinct nations and cultural groups, which predate European Contact. In Atlantic Canada, these rights were affirmed through the Peace and Friendship treaties signed between the British Crown and the Mi'kmaq, Maliseet and Passamaquoddy Nations in the 1700s (Wildsmith, 2001).

2.1 - Jurisdiction

The authority and responsibility in the Canadian fishery lies with the Minister of Fisheries, in accordance with the *Fisheries Act, 1985* while day to day management is administered by the federal Department of Fisheries and Oceans. In the case of anadromous fish such as salmon,

provincial governments hold some powers with regard to the harvest of the species from inland river systems. This can include licensing systems and conservation measures. The Government of Quebec also has certain powers which apply to administration and management of the fishery, as outlined in the *Quebec Fishery Regulations, 1990*. Municipal governments have no direct jurisdiction over the fishery.

The Mi'kmaq people, as distinct cultural and treaty nations interact with the fishery on a different set of principles and regulations than the broader Canadian society. The Mi'gmaq Grand

Council is the traditional governing body of the Mi'kmaq Nation, and acts as the trustee for future generations of the sacred order and territory that sustains the Mi'kmaq People (Gespe'gewaq Mi'gmaq Resource Council, 2011). The Mi'kmaq governance model differs from the Canadian model in that management is primarily handled at the local level by the band, with regional Tribal Councils and the Grand Council becoming involved, by request from the band, as issues grow to include multiple communities or territories. This model operates from bottom up as opposed to top down.

2.2 – Aboriginal Rights

The Mi'kmaq claim access to land and resources, including the fishery, through rights based on the historical use and occupation of traditional territories. This inheritance spans back to the creation myths of the Mi'kmaq people, in which the Mi'kma'ki territory and its resources were entrusted to them from the creator (Berneshawi, 1997). The relationship between the Mi'gmaq and the fishery continues to be characterized by a unique system of governance and law, including resource stewardship, access and management.

Achieving the legal and moral recognition of inherent Aboriginal Rights has been a process of conflict, resistance and perseverance. Under the *Indian Act, 1876* Aboriginal Peoples in Canada were defined as 'wards of the state' and treated like children, with no recognition of their rights as individuals or nations. First Nations never accepted these notions, maintaining their status as distinct nations. During the 20th century processes of social change occurred in various locations around the globe, with marginalized and oppressed people seeking equality and recognition of their rights. The United Nations Universal Declaration of Human Rights of 1948 represents a landmark in these struggles by recognizing the inherent rights shared by all of

humankind. Within these wider processes a series of significant events have occurred which have shaped the current and ongoing process of recognition of the rights of First Nations within the Atlantic Canadian fishery.

2.2.1 – The Calder Decision, 1973 & the Constitution of 1982

The first major event affecting the recognition of Aboriginal Rights in Canada came in 1973 through the *Calder v. British Columbia (Attorney General)* court case. Frank Calder of the Nisga'a First Nation demanded recognition of the fact that neither he, nor the Nisga'a Nation, had ever ceded or relinquished the legal rights or title to their traditional lands on the west coast of British Columbia. The case went to the Supreme Court of Canada where the decision of the lower courts was overturned, resulting in a legal precedent which recognized Aboriginal and Treaty Rights on behalf of all First Nations in Canada (Slattery, 1987). These rights were later reaffirmed in the Canadian Constitution of 1982, subsection (1) of section 35. In terms of land and resources, the recognition of Aboriginal Rights was based on the historical use and occupation of traditional territories since time immemorial. Treaty rights were also recognized, however these rights are subject to the specific agreements signed between First Nations and the British Crown.

2.2.2 – The Sparrow Decision, 1990

In 1990, Ronald Edward Sparrow, a member of the Musqueam First Nation, was charged with fishing using a drift net longer than permitted by the band's federally issued fishing licence (*R v. Sparrow, 1990)*. Sparrow challenged the case, arguing that he was exercising his inherent and constitutionally protected right to fish. The charges laid against him through federal fisheries

legislation were therefore infringing upon this right. Sparrow won the case, gaining recognition and affirmation for the 'existing' Aboriginal Right to fish for food, social and ceremonial purposes, which have precedence over non-aboriginal commercial or recreational fisheries (Issac, 1993). The word 'existing' was important, as the court ruled that it implied the rights must be interpreted in a manner which allowed for evolution over time.

2.2.3 – The Marshall Decision, 1999

Recognition of the right to a commercial fishery by First Nations in Atlantic Canada came through the famous *R v. Marshall* (1999) Supreme Court decision. The case was brought foreword by Donald Marshall Junior of Membertou First Nation, who was charged for catching and selling 463 pounds of eel without a licence, fishing in a closed season and using illegal traps. He held that the Canadian regulations he was being charged under infringed upon his rights, which were established between the Mi'kmaq, Maliseet and Passamaquoddy Nations and the British Crown through the *Peace and Friendship Treaties* of 1760-1761 (Wildsmith, 2001). The Supreme Court ruled in Marshall's favour, recognizing the right to fish commercially in order to sustain a 'moderate livelihood'. Although a clear definition of a 'moderate livelihood' was not provided, the court stated that the right was limited from extending to an 'open accumulation of wealth'.

While the Marshall Decision was heralded as a major victory within First Nations communities, it caused a sense of concern and fear among many non-native fishermen who worried about additional pressures on an already fragile resources sector. A clarification by the Supreme Court (*R v. Marshall*, 1999b), referred to as *Marshall II*, which was issued in the same year, stated that the federal government had the power to limit or infringe upon the treaty rights,

when warranted, for conservation measures. In the aftermath of these decisions, a series of confrontations and violent conflicts erupted between DFO officers, non-native and native fishermen, mostly notably at Burnt Church, New Brunswick (Obeidi, Hipel and Kilgour, 2006).

2.2.4 - The Nuu-chah-nulth Decision, 2009

Recognition of the Aboriginal Right to fish has been an ongoing process in which First Nations have slowly re-asserted their inherent rights, including the right to a commercial fishery. Recent court decisions, such as the *Ahousaht Indian Band and Nation v. Canada (Attorney General)* in British Columbia, demonstrate the growing recognition of the right to manage the fishery.

In 2009 five Naa-chul-nuuth First Nations on the West Coast of Canada succeeded in achieving recognition of the right to harvest and sell any species (with the exception of the Modern Geoduck fishery) within their traditional territories (Ciarrocchi, Jarvis, Nyce, & R.P.F., 2009).The decision was based on the constitutional protection of Aboriginal Rights, which were deemed to be unjustly restricted by the Canadian Fishery Regime due to the failure to accommodate their participation in the fishery. While the Naa-chul-nuuth were successful in gaining access to the commercial fishery, the decision is also important in the court's interpretation and handling of the case. The judge declined to rule on Canada's justification defence, instead granting a two year period for the parties to consult and negotiate a regulatory regime which will support and respect both interests in the fishery (Ciarrocchi, Jarvis, Nyce, & R.P.F., 2009). This move recognizes the inherent right of First Nations to self governance and management of the fishery, as well as the responsibility of both First Nations and the Canadian Government to collaboratively manage the resource.

2.2.5 – The United Nations Declaration on the Rights of Indigenous Peoples, 2007

On September 13th 2007, the General Assembly of the United Nations officially adopted the Declaration on the Rights of Indigenous Peoples (United Nations, 2007). The document is a landmark in the struggle for recognition of the inherent rights held by the world's indigenous peoples. It represents a legal mechanism which allows indigenous peoples to re-assert control over their lives, land, resources and governance systems. Provisions are made for self determination (Article 3), political autonomy and self governance (Article 4), as well as an emphasis on the principle of *Free, Prior and Informed Consent* (MacKay, 2004); highlighting the right of Indigenous Peoples to be fully and actively involved in the decision making processes that affect their lives.

On November 12, 2010, Canada officially signed and adopted the declaration, a move which should positively impact the relationship between the State and First Nations within the realm of fisheries management. The declaration provides a basis for the recognition of territory and resources (Article 26), as well as for the establishment of a free, fair and transparent process, to be initiated by the State (Article 27). In the case of Canada's colonial legacy, there are also provisions for the fair and equitable redress and compensation for the historical loss of land, territory and resources (Article 28). While the document is not legally binding, it offers a new framework with which First Nations and the Canadian Government may approach issues related to the use, access and, arguably most importantly, management and governance of the fishery.

2.3 –Value Systems in Fisheries Management

The fishery is a complex, dynamic and highly valued resource sector. The act of harvesting resources from the sea not only provides people with a source of food or income, but

it also sustains cultures, identities and livelihoods. In fishing communities, relationships are created and maintained between people and the marine resources on which they depend. These relationships are built on culturally specific value systems, resulting in the development of differing sets of goals and objectives. This makes the management of the fishery, which seeks to balance these interests, an inherently value laden process. In Canada, the fishery is characterized by the parallel rights of native and non-native users. In order to move towards a system which is able to accommodate different sets of rights and interests, it is necessary to understand the role of values within the management process.

2.3.1 – Defining Values

Values can be understood at the individual and collective level. Individual values are internalized social or moral beliefs which are used to justify or rationalize personal choice and action. At the group level, values represent cultural ideals which are held in common, agreements about what is good or right (Oyserman, 2002). Value systems do not dictate behavior; instead they represent codes or sets of general principles which guide action.

> Rokeach (1973, p.5), states that "A value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence. A value system is an enduring organization of beliefs concerning preferable modes of conduct or end states of existence along a continuum of relative importance."

Beliefs in turn can be organized into three categories: descriptive beliefs (verifiable as true or false), evaluative beliefs (judgements of good or bad) and prescriptive or proscriptive beliefs (which portray how things ought to be). Rokeach understands values as forms of prescriptive or

proscriptive beliefs. These are also known as normative beliefs, and are fundamentally different from the other two categories in that they cannot be proven right or wrong. The interpretation of 'how things ought to be' contains inherent assumptions about the world around us. While these beliefs are legitimate, they cannot be empirically proven true or false. In this sense, values are perceptions about reality and our place in the world. They act as standards which guide basic notions of fairness or what is good and bad.

Values can also be interpreted as patterns of normalized belief. In this sense they are a form of shared expectations which guide intent, goals and strategies without being formally recognized. Value systems also do not exist in isolation, multiple systems or subsystems may interact with a given group or organization (Weiner, 1988). Schwartz (1994) takes a relational approach to these values, viewing them as integrated clusters of belief. This organization of values into systems provides people with a framework with which they can mediate daily experiences and the relationships they hold with the world around them. The behavioral outcomes of values are then interpreted as multiple criteria decisions which rank according to importance.

Values systems are a set of societal standards, judgements and assumptions about what is desirable and what is not. They are based on normative perceptions of the world. In the realm of fisheries management values, form the collective beliefs which shape the goals and aspirations of a group of people. In this way, values are understood not in a static or objective sense, but rather as culturally constructed and maintained relationships. From this cross cultural perspective, value systems are rooted in cumulative bodies of knowledge and experience that are passed down from generation to generation, the expression of a particular worldview.

2.3.2 - Importance of Values to Fisheries Management

Fisheries management can be thought of as a process of achieving predetermined goals and objectives through the application of control mechanisms. Goals are ideal or preferable ends or states of achievement, while objectives act as measurable tasks used to support and identify progress towards goals (Barber and Taylor, 1990). Both goals and objectives are built on a foundation of values which offer a broad image of the desired characteristics in the fishery. Within the day-to-day operation of a management system, the question of *how* to reach or obtain goals is considered. Value systems inform the collective image of the fishery and answer questions related to *why* the fishery should take a given form or aspire to certain goals as opposed to other alternatives. In this sense the broad goals and objectives of a management system reflect the values of the participants (Slocombe, 1998; Barber and Taylor, 1990). The importance of values can be seen in decision making and the allocation of goods or benefit. The judgements of who gets what, or how much, are based on predetermined goals and objectives (Higgs, 1986). These values are based on perception and an assumed rationale which determines the preferable or acceptable outcomes.

The subjective nature of values creates a dilemma for managers who must balance and accommodate multiple influences in order to maintain legitimacy and viability in the management of the system. While the optimal method of achieving a given goal may be found through objective reasoning or facts, the development of the goals and objectives is subjective, a matter of opinion. There is no ‘right answer’, only a range or continuum of acceptability based on the values held by the people affected. In cross cultural contexts, the values held by different cultural groups can lead to very different interpretations of the relationship to a given resource. From an anthropological perspective, the beliefs that constitute a value system are less important

than the manner in which the system acts as a framework for the interactions between the group and resource:

> "In the high Andes, people believe that a mountain is an Apu, a sacred being that has the power to direct the destiny of all those living within the shadow of its slopes. A young child coming of age in such a place will have a profoundly different relationship to that mountain than a kid from Montana raised to believe that a mountain is a pile of inert rock ready to be mined. Is a mountain a god or a pile of ore? Ultimately, who is to say? The important point is how the belief itself mediates and defines the relationship between the human and the natural landmark" (Davis, 2004, p.225).

As Davis suggests, despite their cultural subjectivity, the beliefs and values held by any given collective are equally as meaningful, rational and legitimate as any other. Values have a profound effect on resource management, as these interactions and relationships in turn create and maintain the legitimate boundaries of the system. They act as limiting factors, narrowing the scope of acceptable pathways for future action. Value systems have recently been recognized as critical factors in defining the social limits of climate change adaptation within a given community (Adger et al, 2009; O'Brien, 2009; Wolf, 2011). This suggests that the resiliency of the social ecological system is fundamentally linked to the level of cultural relevance and acceptability of potential actions. In order for a management regime to maintain legitimacy and increase the overall viability of the system, the values of the people affected must be reflected within the goals and management of that system. In the context of the modern Canadian fishery, with its plurality of rights and legal systems, it is essential to also understand the different value systems at play in order to develop a management regime which is able to balance and accommodate these multiple interests.

2.3.3 –DFO Management Values

In order to understand the value systems at play in the current fisheries management regime it is also necessary to understand the nature of their historical relativity. Although the Atlantic Canadian fishery is generally thought of in economic terms, this has not always been the case. People are constantly in the process of defining and redefining their relationship to and within the natural environment (Ingold, 1993; Cronon 1995). This process is both necessary and natural, part of the constant negotiation in which people maintain the meaningful boundaries of their place in the world. Bavington (2009) describes the evolution of cod fishing in Newfoundland from its mercantile roots in the mid 1800s in which cod fishermen on the island derived their livelihoods from a variety of activities, including fishing, farming and forestry. The cod fishery was a seasonal endeavour which helped support the livelihood of the household. The fish caught were used primarily as food in the home, with excesses being sold to merchant markets. The sale of cod was only one element within a diversified fishery, which itself was part of a broader livelihood strategy. Changes to this system occurred rapidly as the world went through the growing pains of industrialization, and the two World Wars. This period also brought about new technologies which increased efficiency and altered the way people viewed themselves in relation to the resource. The development of capitalist markets played a key role in the transformation of the fishery, largely due to an increasing demand for a steady and predictable flow of fish. These pressures led to the fishery becoming defined in new economic terms, with the fish viewed as an abstract commodity.

Within the management realm, new concepts were also rising to prominence, such as Hardin's (1968) famous 'Tragedy of the Commons'. The threat of over-exploitation proposed in this thesis played a significant role in how the fishery was valued and managed. Although the

flaws of Hardin's thesis have since been recognized (Ostrom, 2007), at the time it offered a powerful and compelling argument for intensive human intervention and control over the resource. The fishery became further rationalized through the concept of the Maximum Sustainable Yield (MSY), which promised standardization through the prediction of future stocks and the subsequent justification of surplus extraction. This theoretically provided the stability needed to satisfy the markets and ensure the long term continuation of the fishery. Problems with the concept of MSY have been acknowledged elsewhere (Punt & Anthony, 2001); of current interest are the value judgements and assumptions present in this approach. Inherent in the concept is the importance of conservation, which may seem obvious; without healthy fish stocks there could be no fishery. More interestingly is the fundamental assumption of the fish as an extractable economic unit and the fishery as the avenue for its exploitation. The connection between conservation and fishery is framed in relation to the values of acceptable use of the resource within the system: the extraction of biomass surpluses, and their economic valuation within the capital marketplace.

This transition and valuation of the fishery is consistent with the broader growth of neo-liberal values which arose in the 1970s and aspire towards maximum growth and efficiency. The ideals of profit maximization and limited government intervention have become a hegemonic force associated with globalization and have become prevalent through the management regimes of many western countries, including Canada (Stiegman, 2011). While these values may not be held across all sectors of Canadian society, their prevalence is widespread within governance and management structures, resulting in a Canadian fisheries regime which is centralized, hierarchical and based on western scientific knowledge. This regime, represented by the DFO, has tended towards the privatization and industrialization of the fishery, favoring a corporately

owned fleet of large scale industrial harvesters, capable of processing for international markets (Stiegman, 2009). While MSY management measures such as Total Allowable Catch (TAC) and Individual Transferrable Quotas (ITQ) can be argued to have improved efficiency and competition, the paradigm has failed to increase the viability of fishery. The collapse of the northern cod stocks in the 1990s is an example of this failure.

Modern dilemmas in the fishery have resulted in further changes in the way the fishery is conceptualized and managed. The complexity and uncertainty of climate change (IPCC, 2007) is compounded by a rapidly growing population (Roberts, 2011) and decreasing levels of marine biodiversity (Worm et al, 2006). There is also a growing call for transparency and the stakeholder participation in management of marine resources (Pomeroy & Berkes, 1997). Contemporary solutions to these problems include the integration of management sectors, ecosystems based approaches and participatory co-management (Weinstein et al.,2007; Kearney et al, 2007). While the DFO has included many of these aspects into current management measures (DFO, 2008a), the underlying values which form the foundations of the DFO approach remain largely the same. The recently published Modernization Document (DFO, 2012) describes the department's new approach to the fishery, one in which MSY continues to be the guiding logic towards the overall goal of creating a globally competitive, industrial fishery.

> "Fisheries and Oceans Canada envisions a competitive and prosperous Canadian fishing *industry* that is able to *maximize value* from fisheries resources and generate *economic growth*, while ensuring stocks remain healthy and abundant for future generations."
> (DFO, 2012, p.4) - Emphasis added.

This directional document from the DFO offers some changes in the overall management strategy, as well as the utilization of new tools and concepts to address the modern management

issues outlined above. The DFO however continues to describe a fishery characterized by neo-liberal values and assumptions in which the fisherman and the fish are dualistic elements within a closed economic system.

Bavington (2010) critiques the DFO approach to the management of the post-moratorium fishery, claiming it has simply shifted concentration from the rationalization and control of the resource, onto the rationalization and control of the users. Instead of designing the fishery around ordered and predicable stocks, this new approach forces the user to adapt to the uncertainty and complexity inherent in natural systems. These problems have largely been downloaded from public to private sector; however the management solutions are still being sought through the logic that an increased exertion of effort and control will result in better management. In this system, the economically motivated individual or corporate entity assumes the risk and accountability in a process which: "Fishermen have been encouraged to act more like corporate ranchers and farmers than hunters." (p.89). The approach is structured in a manner which effectively redefines fisherman as the professional and licensed harvesters of fish.

The continued assumption of neo-liberal values within DFO policy and decision making processes has a profound effect on the direction of the fishery, especially in relation to the recognition of the Aboriginal Right to manage the fishery. First Nations possess culturally distinct knowledge and value systems which offer a different vision of the fishery than is currently present within the federal fisheries regime.

2.3.4 - First Nations Values

The knowledge and value systems employed by First Nations in Canada are culturally distinct interpretations of the human experience. They represent alternative worldviews based on

the cumulative experience of people who have been living in the region for thousands of years. This cultural legacy is represented in part by the relationship that the people hold with their surrounding environment. Measuring or defining values is a complex and difficult proposition. While models exist which attempt to do just this (Kamakura & Mazzon, 1991, Feather, 1986), the inherent differences between First Nation and western world views create conflict due to cross cultural constraints such as language translation (Pepper & White, 1996). While there has been significant study focused on the role of Indigenous Knowledge (IK) or Traditional Ecological Knowledge (TEK) in management processes, (Agrawal, 1995; Berkes, Colding and Folke, 2000; Huntington, 2000), attempts to operationalize or incorporate this knowledge within the framework of western language and knowledge systems has proven contentious and even counterproductive (Nadasdy, 1999). First Nations values have also been subjected to popularized stereotypes such as the myth of the 'Noble Savage', which persist today (Ellingson, 2001). The measurement and definition of these systems is beyond the scope of the present work, however it is important to note the broad epistemological differences between Western and Indigenous knowledge and values as they relate to the management of the fishery. From a broad perspective it is possible to characterize the general differences between native and non-native values (Pepper & White, 1996) while recognizing that values are not fixed in a concrete manner (Yellowbird, 2001).

First Nations tend to emphasize the relationship between people and the environment through an embodied connection and sense of awareness; seeing the human as part of an interdependent web of connections which sustains the entire system upon which life is built. Within the Mi'kmaq Nations of Atlantic Canada the concept of Netukulimk is often used to describe or characterize the relationship that people hold with the land and resources.

> "Netukulimk is a complex cultural concept that encompasses Mi'kmaq sovereign law ways and guides individual and collective beliefs and behaviours in resource protection, procurement, and management to ensure and honour sustainability and prosperity for the ancestor, present and future generations." (Prosper et al, 2011, p.1).

The presentation of the concept of Netukulimk here is not meant to encompass Mi'kmaq values; it is only one part of a broader set of principles which can be used in order to attempt to describe the Mi'kmaq values within resource management (Gespe'gewaq Mi'gmaq Resource Council, 2011). Nonetheless Netukulimk offers a reference point in which the epistemological differences between the manner in which western and indigenous values are framed (Berneshawi, 1998; Barsh, 2002; Wiber and Milley, 2007; Marshall, 2009). Netukulimk is a holistic system which is designed around communal interactions with the resource, as opposed to individual regulation. It is a framework for procurement of goods, but also a set of moral values which mediates social and cultural relationships. These values are tightly connected with Indigenous notions of identity, spirituality, sharing, generosity and language (Yellowbird, 2001).

The value systems of the Mi'gmaq people describe a unique relationship to the fishery, as well as an alternative vision to the neo liberal values adhered to by the DFO management regime. The holistic and inclusive characteristics of the Mi'kmaq worldview are fundamentally different from the compartmentalized and reductionist approach adhered to in the western worldview. Within Mi'kmaq communities the fishery represents an important source of social, cultural and economic relationships. The current fisheries management regime is dominated by the neo-liberal values of DFO which defines the fishery in narrow economic terms. This system does not accommodate the social and cultural values of First Nations and has resulted in an imbalance in power relations between the two groups.

2.3.5 - Power Relations

The epistemological divide between the value systems of First Nations and the DFO management regime has resulted in a continued imbalance of power within the fishery. In the wake of the Marshall decision, the DFO developed and implemented the Aboriginal Fisheries Strategy (AFS) which sought to incorporate aboriginal rights in the fishery within the existing management structure (DFO, 2008b). This process consists of an Allocation Transfer Program and the signing of Aboriginal Fisheries Agreements between the DFO and individual First Nation Bands. These documents outline a collaborative management agreement which generally include monetary compensation, training and the licensing of First Nations activities within the fishery by DFO. The logic behind this strategy is to internalize and incorporate the recognized Aboriginal Rights within the existing DFO regime in order to ensure the conservation of the resource. At its core, the strategy makes basic value based assumptions about the First Nations goals and aspirations within the fishery which limit and control the scope of both access and management of First Nation participation. Although the majority of the bands in Atlantic Canada have signed AFA's, others have refused to do so, citing the issue of the institutional assimilation of their rights, and the inability of the system to accommodate their cultural aspirations and goals in the fishery (Davis and Jentoft, 2001; Stiegman, 2011). The inclusion of Aboriginal rights through the AFS lacks the mechanisms for empowerment required for First Nations communities to participate as full, independent equal partners within the management system (Jentoft, 2005). The DFO on its part continues to claim sole authority over the fishery and is reluctant to relinquish control to First Nations (McGaw, 2003).

2.4 – Management Issues:

In Atlantic Canada, the fishery is characterized by parallel rights to the use, access, management and governance of the resource. First Nations have distinct Aboriginal Rights which dictate their full participation in all realms of the fishery. They also possess culturally distinct value systems which must be reflected within the management regime in order for the system to legitimately accommodate their goals and aspirations, as well as allow for the continuation of an internally defined relationship with the resource. Recent legal decisions at the national (BCSC, 2009) and international level (United Nations, 2007) have made it clear that the mechanisms which facilitate this participation must come from negotiated agreement between the State and First Nations governments in a transparent process which respects the interests and involvement of both parties. In Atlantic Canada, the continued assumption of neo-liberal values and economic objectives has resulted in an imbalance of power relations and a situation in which First Nations continue to struggle for the clarity, legitimacy and respect of their right to manage the fishery. In order for these power imbalances to be reconciled, there must be an acknowledgement of the epistemological gaps as well as a fundamental shift in the relationship between the DFO and First Nations governments, recognizing the validity of alternative value systems. Once recognized, these differences can open up a more inclusive conversation about the role of the fishery in people lives, creating the space for the inclusion of livelihood based activities. In order to understand how these broader processes affect the community of Listuguj, it is necessary to investigate the context of the local fishery.

Chapter 3 – The Listuguj Salmon Fishery

3.1 – Community Profile: Listuguj

Listuguj First Nation is located in the Gespe'gewa'gig (Kespe'kewaq) district of Mi'kma'ki (See Figure 1), the traditional lands of the Mi'kmaq People. Today, the area is also known as the Gaspé Peninsula, and is part of the province of Quebec. The reserve covers 4016 hectares of land, beginning along the shores of the Restigouche River and extending inland to the Northwest (AANDC, 2010). There is also an interprovincial bridge linking the community to Campbellton, New Brunswick, the region's largest commercial and service centre. There are approximately 2000 community members living on reserve, with an additional 1500 members living elsewhere (AANDC, 2010). The community is politically represented by the Listuguj Mi'gmaq Government (LMG) which comprises a chief and twelve councillors. Listuguj First Nation has long relied on the surrounding land, water and resources to sustain their culture and way of life. Today the community engages in a variety fishing related activities. These include the commercial harvest of snow crab, shrimp, lobster, rock crab, halibut, turbot and cod (Listuguj Mi'gmaq Government, 2012b). The community also operates a small mussel aquaculture project. Although there is currently no commercial salmon fishery in Atlantic Canada, the community continues to fish the species for food, social and ceremonial purposes. Despite the lack of revenue generation from the fishery, the salmon continue hold a valuable an important role in the life of the community.

3.2 – History of Fishing in Listuguj

The community of Listuguj has been fishing since time immemorial, depending on a wide variety of species to supplement their diet and sustain a way of life (Barsh, 2002). Despite the wide range of fishing and hunting activities which are practiced, the salmon hold a unique and important place in the fabric of the community. Known as the 'People of the Salmon' the Mi'gmaq of Gespe'gewa'gig have maintained and celebrated a close relationship with the salmon that run the rivers of their territory each year. These fish represent an important food source, but also a significant element in the social and cultural identity of the community. The people of Listuguj sustain a relationship with the fish, which is honored through ceremony, ritual and daily practice. The ties between the people and the salmon extend far beyond the act of fishing, facilitating a network of social relations, a source of knowledge, a symbol of a way of life. This central importance has arguably increased since the arrival of European settlers. The salmon fishery, above other activities, has become the main site of resistance in the community's ongoing struggle for the recognition of Aboriginal rights.

3.2.1 – Fishery Closure

One of the enticing myths which compelled European settlers across the Atlantic Ocean to the 'new world' was the alluring tale of inexhaustible stocks of fish. Along with these settlers came new ideas, knowledge and sets of values relating to the salmon. This included the development of a capitalist model of commercial fishing, which extended across continents via international trading networks. For several hundred years the salmon represented the second largest commercial fishery (in terms of economic value) on the east coast of Canada, second only to the cod fishery (Chase, 2003). As the world began to sweep through a process of rapid development

and industrialization, the rivers of the Atlantic Canada became subject to increasing levels of damming, pollution and habitat alteration in order to facilitate the booming resource extraction industries occurring throughout the region. These challenges, along with poaching, lack of food supply and disease likely compounded the pressures of overfishing, and ultimately led to rapid stock declines in the eighteenth and nineteenth centuries (Chase, 2003). As early as the 1860s, reports of stock depletion began to raise concern in the region. Not until the 1960s however, did the federal government outline new regulations, such as license and gear restrictions, in an attempt to curb the trend. Despite these efforts, a moratorium was eventually laid on the commercial salmon fishery in 1992, resulting in an approximate 72 billion dollar licence buyout and the official closure of the fishery in 1998 (Chase, 2003). The commercial salmon fishery remains closed today.

3.2.2 - The Raid

At the beginning of the 1981 salmon fishing season, then chief Alphonse Metallic received a message from Quebec's Minister of Recreation, Fish and Game, Lucien Lessard, stating that the community had thirty six hours to cease all fishing activities and remove all nets from the river. The chief and council adamantly refused (Notzke, 1994). On June 11th, 1981 Listuguj was unexpectedly raided by approximately five hundred Quebec Provincial Police fisheries officers and game wardens. They arrived by land, water and air, quickly swarming the community, seizing and destroying boats and fishing gear. The officers also arrested several people, as well as verbally and physically abusing residents (Obomsawin, 1984). The event quickly made national and international news, drawing condemnation from indigenous communities across Canada and the United States. Although a second raid was attempted on June 20th, the community was prepared

and were able to successfully blockade the reserve and prevent officers from entering. In total approximately $75 000 worth of fishing gear was seized or destroyed and several people were criminally charged for illegal fishing activity (Notzke, 1994). On June 23rd Lucien Lessard visited the reserve in an attempt to come to an agreement over the fishery. The band council stated that they would continue to fish in accordance with their aboriginal rights, which existed prior to the rights of Quebec or Canada. They also stated that Quebec had no jurisdiction to regulate the Listuguj fishery, and that the band would come to agreements on jurisdictional issues with the federal government (NNI and NCFNG, 2010). While the salmon fishery is usually regulated at the federal level by DFO, Quebec had been given regulatory power over its fishery by a 1922/23 federal-provincial agreement, leading to the belief that it was within their jurisdiction to limit the aboriginal fishery (Notzke, 1994).

The raid was a formative moment in the history of the community of Listuguj, one which solidified and centralized a culture of resistance towards the oppressive intrusions of non-aboriginal society onto their traditional lands, resources and livelihoods. The events sparked a wave of community organization and the development of common goals. It was the beginning of a process of 'nation-rebuilding' and the turning point which led to the development of a Mi'gmaq law on fishing, which would eventually see the band reinstate its control over the management of the fishery and the river (NNI and NCFNG, 2010).

3.2.3 – The Mi'gmaq Law on Fish and Fishing

The events of 1981 acted as a rallying point for the community; the raid not only threatened access to an important source of food, but also directly attacked Mi'kmaq rights, values and culture. Due to the severity of these multiple threats, the community quickly unified

and began a process of nation re-building, one which would solidify and organize a new approach to the external relationships held with non-native society. Throughout the 1980s the community entered into fishing agreements with the province of Quebec, who were willing to negotiate in order to avoid further conflict. These agreements included financial compensation and a set quota for the community, along with some training and development of community members as fishery officers (NNI and NCFNG, 2010). Very quickly, pressure from the province, sport fishermen and other stakeholders caused a significant drop in the community's quota, from over 30 000 pounds in 1982, to nearly half that amount in 1985 (NNI and NCFNG, 2010). It was clear to the community that these agreements were not working, the allocated quota was not sufficient to meet community needs, and fishermen were continually being brought up on charges for infringing the agreements. Recognizing the importance of the fishery to the community's livelihood, efforts began to retake control of the fishery.

The *Sparrow* decision of 1990 was a major landmark for aboriginal rights in Canada, representing a legal precedent which affirmed the right of First Nations to fish, a right which was outside the jurisdiction of the Government of Canada. Two years later, when DFO launched the Aboriginal Fishing Strategy, in an effort to provide a framework for the management and access of First Nations Fisheries, the LMG declined participation in the program. Instead they opted to formulate their own set of rules, guidelines and programs which represented Mi'kmaq values, knowledge and culture.

In 1993 the LMG, with the input and support of the community, adopted the Listuguj Mi'gmaq First Nation Law on Fisheries and Fishing. It was later ratified by chief and council in 1995. The law outlined the goals of the fishery, the extent of the territory, a management plan and community consultation measures. The plan allows for co-management agreements;

however it clearly places the responsibility for compliance and enforcement within the control of the band council, through the Listuguj Mi'gmaq Ranger program. The law stipulates measures for fishing limits in terms of input and output regulations, but dismisses the notion of a community quota unless it can be proven that the community is exclusively responsible for endangering the stocks (NNI and NCFNG, 2010). Importantly, these efforts were done outside the jurisdiction of the Government of Canada; the law is not a by-law of the Indian Act. It instead draws on the inherent rights of Mi'kmaq people to self governance and the management of the fishery, moving the community's relationship with the salmon outside the auspices of the Canadian state. While the provincial government and other stakeholders initially reacted negatively, it quickly became apparent that the move was beyond their control. In the years since the law has been hailed as a success; the Restigouche is widely recognized as one of the best managed rivers in the region.

3.2.4 - Contemporary Context

Despite the absence of a commercial harvest of Atlantic Salmon, the fishery remains a highly valued and passionate arena for native and non-native people alike. The salmon is a highly recognizable cultural icon in the region; there are annual festivals, licence plates, road signs, statues and a host of other insignia which honour the fish. When visiting the area it is difficult to go a day without seeing some sort of reference to the salmon, which clearly holds a special place in the collective consciousness and identity of all people residing in the region. Today the fishery is accessed by First Nations, for food social and ceremonial purposes, as well by a large recreational sports fishing industry which operates primarily on a 'catch and release' basis. Other stakeholders in the fishery include the federal and provincial governments (Quebec

and New Brunswick), non-governmental organizations and academic researchers.

Listuguj accesses the fishery for food, social and ceremonial purposes as outlined in the *Marshall* decision, which affirmed their rights through the Peace and Friendship treaties signed with the British Crown in the 1700s. Due to the conservation clause of *Marshall II*, which allows the federal government to limit the aboriginal fishery for conservation measures, First Nations are currently unable to pursue the 'moderate livelihoods' provision outlined in *Marshall I,* at least in terms of selling the caught fish. Although it is locally believed the salmon stocks may be improving, the levels have not rebounded sufficiently to reopen the commercial fishery.

The recreational sports fishery is considered one of the best in North America, and supports a large and profitable industry. Currently there are twenty five commercial sports fishing camps (lodges) located within the Restigouche River watershed system. The camps purchase a pool lease from the province which includes angling and riparian rights for a designated pool or area of the river, giving them sole fishing rights in that section of the river and the shore directly adjacent to it. These rights are auctioned to the leasee, who gains access for a designated period. The leases are usually several years in length, however details vary. In all cases anglers must buy a licence (salmon tag) from the province in which they intend to fish. The number of available licences varies from year to year and between river systems. Although there are a limited number of licences available which allow the angler to keep salmon, the majority of licences are for catch and release activities.

It has been estimated in a recent report that the economic value of the Atlantic Salmon Fishery is 255 million dollars annually, making it a significant contributor to the regional economy and comparable to the salmon farming industry (Gardener Pinfold, 2011). While the aboriginal food fishery accounts for just $400 000, the recreational sports fishery represents over

half the economic value, at approximately $128 000 000 annually. The report recognizes non-economic value as an important element in the fishery, especially in First Nations communities; however non-economic value was beyond the scope of the report. While there is no commercial harvest of salmon, the DFO values associated to conservation and economic extraction have been maintained. The dollar value of the fish is simply redefined in terms of the revenues associated to the sports fishing industry as opposed to the sale of the meat for food.

3.3 – Management Structure

3.3.1 - Atlantic Salmon Integrated Management Plan

The DFO manages the Atlantic Salmon Fishery through multi-year integrated management plans. The most recent plan was developed in 2008 and concludes in 2012. For management purposes Atlantic Canada is divided into regions which are then subdivided into Salmon Fishing Areas (SFA). Listuguj falls in the Gulf Region and is part of SFA 15 A (Figure 2). The stated goal of the plan is to " … restore and maintain healthy and diverse salmon populations and their habitat for the benefit and enjoyment of the people of Canada in perpetuity." (DFO, 2008a, p. 14). The objectives involve the conservation of the salmon stocks and habitat, to allow for sustainable use by aboriginal harvesters and recreational anglers.
The use of integrated ecosystem based management; the Precautionary Approach and improved stakeholder contribution which constitute this approach fall in line with current trends in marine management which have highlighted the value of these elements (Stojanovic, Ballinger & Lalwani, 2004; Rosenberg & McLeod, 2005; Kearney, Berkes, Charles, Pinkerton & Wiber, 2007).

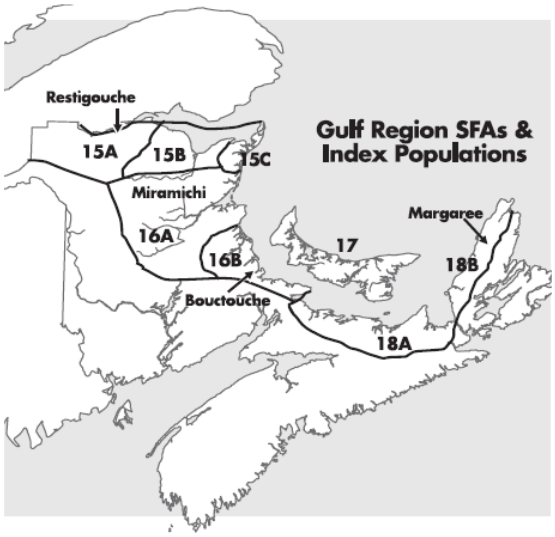

Figure 2 – Gulf Region Salmon Fishing Areas. (from DFO, 2008a)

3.3.2 - Restigouche River Watershed Management Council

In an attempt to increase stakeholder participation and an ecosystem based approach to the management of the resource, DFO has pioneered the creation and use of Community Watershed Councils (CWC). These councils involve partnerships with provincial governments, community organizations, industry and non-profit groups. Although decision making power is largely withheld by the DFO, certain responsibilities are delegated, such as licensing, enforcement, stock assessments and enhancement, habitat improvement and infrastructure (DFO, 2010). This approach is in theory consistent with the objectives of both integrated ecosystems based approaches and increased stakeholder involvement. The CWC's are created through a Memorandum of Understanding (MOU) which is signed between partner organizations.

In 2006, the federal government, represented by DFO, the provinces of New Brunswick and Quebec, Eel River Bar and Listuguj First Nations signed an MOU with the Restigouche River Watershed Management Council (RRWMC), creating a partnership agreement for management of the Atlantic Salmon and other freshwater dependent species.

3.4 – Management Issues

The DFO Atlantic Salmon Integrated Management plan describes the authority of the federal and provincial governments in the management of the fishery, as well as the use and access rights of First Nations (DFO, 2008a, p.11). Critically, the rights to self governance and management of First Nations are not mentioned, and as result legislative, jurisdictional and decision making powers are defined as outside the realm of aboriginal involvement within the system. The mechanism for participation of First Nations still falls solely under the Aboriginal Fishing Strategy (p. 27) which was developed by DFO as a response to the Marshall decision.

Similarly, within the RRWMC MOU the legislative and jurisdictional authority within the council is recognized only within federal and provincial governments. While the access rights of First Nations are recognised, there is no acknowledgement of the right to governance, management or decision making within aboriginal communities. While the RRWMC was designed to improve stakeholder contribution to the management process, in its current form it also circumvents the right to decision making and jurisdiction of Listuguj and Eel River Bar First Nations into a management structure under which DFO maintains ultimate authority.

The RRWMC model represents a valid approach to the management of the salmon fishery. This system is deemed legitimate within the prevalent value systems of the DFO. The structure however attempts to interact with the distinct rights and values of First Nations in the same manner as other stakeholders. This assumption marginalizes the community of Listuguj as it does not accommodate the current livelihoods goals or community values of the Listuguj fishery. This has been a source of continued frustration within the community. In order for an appropriate management system to be agreed upon, the distinct, values and goals of the community must be recognized and addressed.

Chapter 4 - Research

4.1 – Research Overview

The recommendations for the development of a culturally relevant Salmon Fishery Management Plan were guided by four primary research questions. Research was based on the Action Research Model and was conducted through desktop research, ethnographic observation and unstructured interviews. Community values and relationships to the Salmon fishery were themed and results were applied to the Sustainable Livelihoods Approach to determine its applicability as a cultural relevant management framework for the Listuguj Salmon Fishery.

4.1.1 – Goals

The goal of this research is to aid in a request from the Listuguj Mi'gmaq Government to develop a culturally appropriate Salmon Fishery Management Plan which reflects the distinct cultural values of Listuguj First Nation (Listuguj Mi'gmaq Government, 2012a). The development of this plan should result in more effective governance and management, and an increased viability within the fishery through increased benefits to, and compliance from, the community.

4.1.2 - Questions:

Four main research questions were posed in order to address the overall research goal:

1) *What are the culturally valued aspects of the salmon fishery from the perspective of Listuguj First Nation?*
2) *How do community members characterize their relationship with the salmon fishery?*

3) *What are local perceptions of 'sustainability' and 'livelihoods'?*

4) *Does the SLA approach offer a culturally relevant framework for the facilitation of the values aspired to by the community of Listuguj?*

4.1.3 - Strategy:

The research methodology is based on the Action Research Model in which participatory and consensual research attempts to address problems identified by the stakeholders. This form of research follows two main goals; to produce knowledge that is directly applicable to participants, and to empower that group. Action research has four main stages: 1) the collaborative identification of a research question; 2) the gathering of information; 3) analyzing and interpreting the information; 4) and sharing the results with the participants (Berg, 2004). While the limited scope and duration of the research did not allow for the full participation (Wiber, Berkes, Charles & Kearney, 2004) of community members during each phase, the collaborative generation of research questions and the overall goal of creating applicable knowledge and empowerment within the community were consistent throughout the research.

Primary Data collection was done through a combination of ethnographic observation and unstructured interviews. Ethnography was deemed to be the most suitable method due to the rich qualitative knowledge which is obtained through shared experience and personal relationships (Whitehead, 2005). Due to the focus on cultural systems and social processes, this type of detailed and site specific information was desired. An ethnographic approach was also presented as the desired form of research by the community of Listuguj due to an uneasiness which exists within the community with regards to formal research efforts. The holistic approach of learning through participation and shared experience was preferred due to its similarity to the manner in

which local knowledge has traditionally been produced and maintained. While this approach differed from the initial semi-structured interviews which had been intended for use, the content of the analysis remained the same. The original questions (Appendix C) were explored and integrated into daily interactions, as opposed to being individually composed with a compartmentalized structure. The collected information was assessed using a thematic analysis, which identifies patterns and meanings from within complex social and cultural processes being studied (Aronson, 1994). This allowed for meaningful insight into the community values that characterize the salmon fishery without the need for definition or measurement of the system.

Secondary data sources were obtained from desktop research. These focused on assessing the effects of the inclusion of cultural values under current and historical fisheries management regimes and their role in the increase of the overall viability of the fishery. Desktop research was also used to assess the applicability of the Sustainable Livelihoods Approach as a management framework.

4.1.4 - Process:

The research took place over the course of a six week period in May and June of 2012, which coincided with the spring salmon fishing season in Listuguj. Ethics approval for the research was granted by the Dalhousie University Social Science and Humanities Research Ethics Board (Appendix A), while written consent and ethical approval was received from the chief of the Listuguj Mi'gmaq Government (Appendix B).

Information was gathered during an internship with the Listuguj Mi'gmaq Government Natural Resources Directorate and a home stay with a local family, in which three generations

currently participate in the salmon fishery. Activities included participation in daily fishing routines, as well as attending various meetings, events and ceremonies in the community. This allowed for a wide variety of contact across a several community sectors including fishermen, elders, women, decision makers and youth. While this provided small amounts of input from a large number of individuals, daily contact was maintained with a primary informant base facilitated through the home stay and work placement. This facilitated a large amount of information to be obtained through close contact and continued conversation. This embedded approach was conceptualized as a continuous six week interview process in which the research questions were addressed through participation in the everyday activities of the community. The advantage of the approach is found through the trust building process which occurs between the researcher and participants, as well as the contextualization of the responses within the lived experience of the fishery which is lost or diminished in structured interview processes.

The information gathered was qualitatively assessed and themed in order to gain a broad scoped perspective of the overall community values of the fishery. This was **not** an attempt to measure or define the value system, but rather to gauge the breadth and scope of issues, beliefs, challenges, goals and aspiration that characterize community involvement in the fishery in order to assist in identification of a culturally suitable management model. This iterative analysis was an ongoing process, allowing for verification of concepts through continued discussion about livelihoods within the local fishery.

4.1.5 – Limitations

This research methodology has some limitations. The short duration of the research is a limiting factor when using an ethnographic research model, as this method generally involves

extended periods of fieldwork in order to ensure that a broad variety of community life is taken into account. Due to the time constraints associated with the research, this type of prolonged exposure was not possible.

The issue of potential bias is also present, due to the principal use of a small number of peoples as chief informants. This limitation was recognized and balanced through participation in community events, engaging other fishers at the shore and through an internship placement at the LMG. Although a certain level of bias may be present, the sustained relationship also allowed for an increased integration into community life, which was essential given the short duration of the research.

The use of thematic analysis also presents inherent problems due to issues of reification of complex and dynamic social processes which tend to cross multiple social and cultural boundaries. While the creation of theme categories was essential for interpretative purposes, this weakness was recognized as the elements placed within one category may be applicable to another. The characterizations made were based on prioritization of importance and relevance to the management process. The concepts are recognized to be applicable to multiple uses and interpretations, and efforts were made to describe the values in a manner which leaves their definition and interpretation to the people to which they belong.

4.2 – Findings

"Sure we'll still be fishing. You can't stop the water from flowing, eh? Well, neither can you stop the Indians from fishing. That's our God-given right. - former Chief Alphonse Metallic & Listuguj Mi'gmaq Government Natural Resource Directorate Motto.

The salmon fishery in Listuguj is defined within the current management regime as a 'food, social and ceremonial' fishery. This definition is a legal mechanism and invention of the Canadian Government which derives from the historical struggle to recognize Aboriginal Rights in Canada. The underlying purpose of the distinction is to separate commercial and non-commercial uses of the resource. Within the context of the management of the non-native fishery this is a reasonable and helpful way to differentiate between legitimate uses of the resource. It is a fundamental assumption based on western values and represents a valid approach to the management of the resource. The distinction however does not reflect the past or present relationship between First Nations and marine resources (Schrieber, 2003) and its use is problematic in the context of the recognition of the First Nation right to manage the fishery.

Harris and Millerd (2010) discuss the managerial implications of the legal separation of aboriginal use within the fishery. While a balancing act is necessary in order to facilitate a just system of management which can accommodate both native and non-native participation, the authors argue for the recognition of a broad Aboriginal Right to fish without qualifications for the use of that fish. Recognizing the right to access the resource for a broad spectrum of purposes and then allowing internal mechanisms to allocate and distribute use would provide a much less cumbersome management system, as well as avoiding the repetition of colonial power relations. It would also recognize and enhance the role of traditional governing systems which best represent Aboriginal users.

Within this research a more fluid interpretation of 'uses' within the fishery was taken in order to recognize the complex and dynamic relationships that exist within the livelihood strategies and values of First Nations peoples. As described in Section 2.3.1, values can be generally characterized as either individual or collective beliefs. This division has been adapted

and expanded upon for use in contextualizing the values of the Listuguj salmon fishery into three themes: Community, Household and Individual. The separation of collective values into household units versus the entire community falls in line with the structure of the Sustainable Livelihoods Approach (Carney, 2003) and is more helpful in distinguishing the effects of values on livelihoods at the level which they are felt in daily life. Although this division also contains an element of cultural assumption about the nature of kinship boundaries, the distinction is justifiable as these elements are unlikely to significantly alter the broad spectrum of values associated with the management of the fishery. It is also recognized that many of these values interact at different levels and should not be considered to be exclusive to the themed group.

4.2.1 - Thematic Analysis

Throughout the research, the communal nature of the salmon fishery was reiterated by the people of Listuguj. The community described a fishery in which the people, the river and the salmon are co-existing participants within a holistic and intimate relationship. While participation of, and benefits to individuals vary, the broad goals at all levels of the fishery are defined in a manner which aspires towards the common theme of an increased quality of life for the people as a whole. This response was constant across community sectors, and was generally the first response received once provoked on the topic of the salmon. The fishery was stressed as being about more than food or economic benefit; it was instead viewed as a process in which collective benefits are found for the people as a whole. Individual action was framed and rationalized against these broad values of inclusion and sharing. The salmon are viewed as social creatures, the fishery the means of interacting with and mediating the relationship between the people and the fish. These interactions are understood as part of a constant process of negotiation

and compromise; the fundamental aspects of any relationship. The fishery in this sense can be thought of as a living entity which requires active participation from the community, who not only derive benefit from the salmon, but also honour and celebrate its place within the collective identity and culture of the people. Exploration through the lens of the Community, Household and Individual themes allows for a more detailed image of the diversity of these values.

4.2.2 - Community Values

Communal Identity

The collective identity of the people of Listuguj is tightly related to the relationship held with the salmon. This identity stems from the broader system of values which defines the role of the people in relation to the territory, the salmon and each other. While only a minority of community members participate in the harvesting of fish each year, the entire community takes part in the fishery through various activities. Ceremony offers one space in which the people of Listuguj collectively honor and celebrate the salmon's role in the community. Within the course of the fishing season a variety of ceremonies are held which directly or indirectly involve the salmon. On summer solstice, a sunrise ceremony marks the transition between seasons and the passage of the community through one phase into another. The arrival of the salmon is an indicator of this process and a special salmon ceremony is also held to mark the occasion. A community feast is held in which salmon is offered as the main dish. This ceremony honors and celebrates the salmon for its spiritual and cultural significance; however it also offers a space for the reflection and discussion of the role of the fishery in the community. During these events goals, objectives and responsibilities are revisited, created and maintained. The ceremony engages people and helps remind and teach them about their role on the river and within the

community, reaffirming the epistemological grounding which structures their interactions with the salmon. While non-native conceptualizations of the fishery are assumed to be static and regulatory, the Listuguj salmon fishery is recognized as a dynamic and evolving relationship which requires constant attention and mediation. Ceremony offers one way in which the community facilitates these social, cultural, political and spiritual needs, and grounds the collective identity of the people of Listuguj.

Knowledge

The fishery is also an important site for the creation and transmission of traditional and cultural knowledge. Multiple generations of fishermen may work together on the same boat, creating a strong relationship between the people and the river through the intimate experience of being out on the water and hunting the salmon. Fishing activities often occur multiple times a day due the tidal movements in the estuary. Mi'gmaq law allows fishermen to fish a certain spot until they are finished with it. Sometimes fishermen visit the same location their entire lives. This creates a detailed level of knowledge about the changing nature of the river, which has been growing shallower and warmer in recent years. Islands and sand bars are beginning to form, changing the dynamics of the river bed. The shallower water has also changed the water temperature, which affects plant life that gets entangled in nets. It also alters the movement of the salmon, who travel different parts of the river under different conditions. The depth and complexity of the knowledge held by the fishermen is remarkable, and the shared undertaking of fishing facilitates both the production and transmission of this knowledge through the sensual experience of fishing.

The shared experience of fishing also helps to maintain moral standards and rules associated with the fishery, in which participants live and act out the traditions and customs of

their people. The placement of one's nets in the river, for example, is a highly political act. The physical and social boundaries of the river are constantly being tested and maintained through the daily interactions between the fishermen. Younger fishermen simultaneous learn about the river and salmon, but also the values which are espoused to by the community as a whole. Experienced fishers commented on the steep learning curve some of the younger generations must go though in order to 'find their place' on the river. This was interpreted in both the literal and figurative sense; the newer fishermen seek not only a physical space to occupy in the river, but also their place within the social and cultural framework which governs and defines the community as whole.

The transmission of different forms of knowledge from generation to generation is fundamentally linked to the actual process of fishing the salmon. The river provides a platform which allows people to learn about the salmon, the territory and themselves. As one individual put it, schools are not the only classroom for the people of Listuguj; the river is an equally important educational space for the transmission of traditional knowledge, morals and wisdom. This is a fluid process in which 'learning through doing' is a fundamental aspect. This logic applies to the rules and responsibilities of fishermen while on the river. While the fishing law passed in 1993 outlines many formal aspects of the fishery, however much of the traditional legal system is still mediated through oral transmission and the lived experience associated with participation in daily fishing activities.

Reciprocity

Within the Canadian fisheries regime harvesting activities are described as a system of equilibrium. Positive benefits (defined in dollars) are extracted from the natural system, while the associated efforts (defined as costs) are reflected negatively in the overall balance of the

interaction. The community of Listuguj in contrast described a cyclical model in which giving is as prevalent and important as taking or receiving. This is evident in a variety of different activities and customs undertaken in the community. While fishing on the river offerings of tobacco are made by fishermen in order to give thanks for the catch. The act was described as an important spiritual element in the ritual of hunting; the hunter must give in order to receive. The gesture gives insight to wider practices in the community in which reciprocal relationships are maintained and balanced.

The salmon also offers a mechanism which facilitates social networks within the community of Listuguj. Salmon is gifted to elders, friends and family members. It is an offering of food, but also a symbolic practice which sustains community ties and relationships. Not all members of the community fish, nor are they in direct contact with the fishermen. The circulation of salmon creates, maintains and strengthens social connections. It is also an indicator of community well-being. Recently, a shortage of salmon for communal functions has been noted by the elders in the community. The catches over the past few years have been good, signalling a need to increase the flow of salmon around the community. This year a community fishery has been organized, in which fishermen will donate their catch during a specific time period in order to better accommodate the need for salmon at communal events. The gifting of salmon also facilitates the circulation of other traditional foods and goods within the community, such as maple syrup or berries, which may be harvested during other seasons. Although the food may not be officially bartered or traded, its circulation has positive social, economic and health impacts. The value of reciprocity is present in many aspects of the fishery, and implies that in order to take one must also give, an act which is understood to have positive influence. This contrasts starkly with the extractive conceptualization of commercial fisheries.

Rights and Resistance

As previously mentioned in Section 3.2.2, the salmon fishery is also the central site of resistance and social cohesion within the community. The raid of 1981 had a profound effect on the people of Listuguj. It centralized a spirit of cooperation and unity, as well as the necessity to re-assert Mi'gmaq values and self governance within the fishery, but also the community. The importance of the fishery as a site of resistance was evident in the joking manner in which fishermen referred to their 'graduation' from poachers to fishermen. Although the topic is serious and evokes many emotions, the highly political nature of the fishery is mediated in the local humor, which acts as a constant reminder, helping to maintain and affirm a sense of collective identity. The salmon fishery has become a space which acts as a framework for the external relationships between the community and the broader Canadian society. For example, in many ways the fishery is still characterized by a 'use it or lose it' mentality, due to a fear of external intervention. The significance of this can be seen each year on the anniversary of the event. While the fishing laws developed by the community in 1993 limit access to certain days of the week, and specific times of day, on the anniversary of the raid Listuguj fishermen take to the river in a symbolic act of resistance and fish for a full 24 hour period. This activity is not officially sanctioned within the Mi'kmaq law; however it is an important and accepted form of resistance, which reinforces and affirms both community rights and identity. The right to fish has a special significance to the people of Listuguj, and the salmon fishery has become the arena in which broader conservation and struggles associated with exercising Aboriginal Rights are held.

4.2.3 - Household Values

Economics

The harvesting of salmon offers a mechanism for families to sustain themselves with a traditional food source that comes from outside the modern food supply chain. This introduces an economic element to the fishery, despite the absence of a commercial market. The inherent value of salmon as food relieves financial pressure within the household. While there is significant effort and cost involved with the fishery, every pound of salmon caught represents an equivalent dollar amount which would otherwise need to be spent at a local grocery store. The importance of this economic input was expressed by many fishermen who joke about eating hamburgers for supper if their catch is low. The jokes were playful references to the fact that although traditional foods are highly valued, a large portion of their diet is satisfied through the large grocery store chains which service the region. Despite these economic benefits it is not possible to find employment through the salmon fishery; it instead provides an avenue for people to supplement incomes and employ mixed livelihood strategies.

Family Connections

The fishing season has other positive social impacts for families as well. Listuguj has a history and reputation as a source of highly skilled iron workers. A significant proportion of the community have taken to this profession over the years, working across the Eastern United States and Canada, a trend which continues today. Due to the high social value associated with salmon not only as a food source, but also the cultural practice of fishing, band members return home in order to participate in the fishery. The contract based nature of construction work allows people to build careers which remove them from the community for extended periods of time, but also allow them to return home in order to participate in the fishery. This sustains social

connections between the urban and rural community and the cultural practices which go along with the fishery. One individual described with pride the number of years in which he had been able to gain employment external to the community, but still return each year in order to participate in the salmon fishery. The benefit of salmon as food was cited as an important aspect, however the practice of fishing and the time spent on the river and with family members was also clearly a motivating factor.

4.2.4 - Individual Values

Health and Nutrition

At its most basic level the salmon fishery is about food procurement and sustenance. The salmon is a traditional source of food which is highly valued in the community. Atlantic Salmon are nutritionally rich and a well known source of omega-3 fatty acids. The Canada Food Guide recommends two portions of fatty or oily fish per week. Salmon fall in this category; the fish store oils within the flesh as opposed to whitefish which store oils in the liver. The diet of First Nations in Canada has changed dramatically since the establishment of the reserve system and forced settlement. This change in lifestyle has been followed by a variety of health problems which have developed in communities across the country (Wilson and Rosenberg, 2002). The inclusion of traditional food sources, such as the salmon, offers a healthy and desirable option in the diet of First Nations peoples (First Nations Health Council, 2009).

While wild Salmon have historically been used as food across the region, the closure of the commercial fishery has meant that access has been predominately limited to First Nations. Within provincial sports fishing regulations, there are a small number of licences which allow for catches to be kept, however the vast majority are on a ‘catch and release’ basis. While concern

over the health of the stocks is a shared value across the region, the health or quality of the individual fish is a concern for the people of Listuguj who consume a significant quantity in their diet. This creates a divide between the community and non-native stakeholders who many not be concerned with food quality due to their inability to access the fishery as a significant food source. Concern over the quality of the salmon was expressed in relation to the regional pollutants as well as external pollution the fish may encounter while migrating throughout the North Atlantic. A number of people also commented on the possibility of contamination from the growing salmon farming industry in Southern New Brunswick and Nova Scotia.

Passion and Personal Identity

The individual values and benefits which are found in the fishery are generally linked to one or more of the above concepts. Individuals benefit from the spiritual and cultural elements of the fishery as well as sources of identity building which are found through participation or involvement in the fishery. The knowledge, tradition and skills passed down from generation to generation are realized through the interaction of individuals, and while the benefits are apparent communally, individuals interact with the fishery in a variety of different manners.

This results in a number of different livelihood based activities. Some people harvest the fish directly, while others help prepare and distribute it. The management of the fishery offers multiple pathways for interaction; the Mi'gmaq Laws passed by Listuguj Mi'gmaq Government provides employment for managers and administrators, as well as monitoring and enforcement officers. Ceremonies such as the annual Pow Wow create more livelihood activities for organizers and administrators. Despite the diversity of interaction between people and the fishery, there is a common passion and excitement which is conveyed about the role of the salmon in an individual's life. Although some individuals may never step foot on a boat, they still

describe themselves as fishermen or fisherwomen due to their role in the overall process and the strong connection they feel to it. The fishery creates opportunity for people, but also helps frame their interactions within the community and to the broader society. When individuals speak of their motivations and values within the fishery, the responses evoked are passionate. They describe feelings of belonging, pride, ownership and identity; all of which are related to the very intimate experiences and relationships which are realized through the salmon.

4.2.5 - Summary of Findings

The research described here demonstrates a wide diversity of values held by the people of Listuguj in relation to the salmon fishery. The short duration of the research surely has limited understanding of the depth and complexity of these values held within the community. For example, the act of fishing is a predominately male activity, while the processing and distribution of fish is done mainly by women. The emphasis on the act of fishing is attributable to the use of the river as the main research setting. Exposure to the parallel land based realm of the fishery was limited, suggesting that a level of bias may be present and some values may have been overlooked. These shortcomings are inevitable given the structure of the research; the goal was not to define or measure the value system of the community, but rather to gain an understanding of the broad parameters and themes which characterize the salmon fishery. From this, two main conclusions can be made.

Firstly, the salmon fishery in Listuguj is part of a holistic web of social, cultural, economic and environmental values which help to create and maintain the collective identity of the people of Listuguj. Clearly this relationship crosses multiple boundaries and includes a diverse array of livelihood strategies.

Secondly, from a broad managerial perspective, the diversity of values differs significantly with the values espoused under current DFO policy. One of the most interesting findings in the research was the lack of shared terminology and conceptualization of the fishery. While ‘species conservation’ and ‘economic revenue’ may be shared ideals in a general sense, critically the elements were not described as exclusive elements by any of the participants. Instead the focal point of the fishery was on the relationships held between the community and the fishery, rather than on singular elements within the system. This creates a very different approach to the management of the fishery, as a broad array of social and cultural elements must be taken into consideration in order for the system to gain legitimacy within the community and accommodate their distinct values and goals. While both value systems and related approaches to the fishery may be equally valid, the system will continue to lack legitimacy until it is able to accommodate multiple interests. This requires both recognition and respect for the distinct rights and values of the community within the management regime. The SLA offers a framework with which to fame these issues and allow for the inclusion of the community’s distinct values. In order to determine its applicability the approach has to be considered in depth.

Chapter 5 - The Sustainable Livelihoods Approach

The Sustainable Livelihoods Approach is a set of principles and a related framework. The approach however offers more than just a set of management tools. It also represents a unique way of thinking about the objectives, scope and priorities of a management system, offering an alternative vision about the fundamental relationship between people resources and the management process. At the core of the SLA is a shift in focus away from the actual resource base and onto the people who interact with it and are affected by management decisions. It is a participatory approach in which communities define the goals and the livelihood strategies towards which they aspire. The idea of 'putting people first' has been recognized as an effective way of increasing the viability of a management system by reflecting the values, goals and aspirations of those affected by decisions (DFID, 1999). This core focus on community well-being allows for the inclusion of a broad array of culturally or socially specific values and priorities.

The SLA was developed as a way of rethinking the objectives and priorities of international development initiatives aimed at poverty reduction (Ashley and Carney, 1999). This approach involves a switch of focus in development projects from an assessment of the problems with the resource base, to identifying the current strengths and opportunities present in communities which could be built upon to improve lives. This style of positively focused development was deemed to better reflect the 'on the ground' reality of the people who would be affected by the decision and therefore be more likely to succeed. These fundamental aspects of the SLA approach have since been recognized to have application outside the realm of international development and have been used in a variety of other contexts, such as confronting urban poverty (MacKeigan, 2004) and fisheries management (Allison and Ellis, 2001; Gauthier,

2011).

The United Kingdom Department for International Development (DFID) has played an influential role in the development of the SLA and represents the most commonly used and accessible framework. For these reasons the DFID framework was chosen as a comparison model for the Listuguj Salmon Fishery. The application of the SLA is recognized to be a fluid process which allows for localized adaptation and manipulation in order to reflect local goals and values. Although the DFID approach represents a comprehensive example, it should be considered with reference to a diversity of possible applications (Carney, 2003).

5.1 - Principles

The following principles have been adapted from DFID (1999) for application to fisheries management. The SLA should be:

- *People-centred*: Increased viability in the management system will be achieved if support focuses on what matters to people, understanding local values, goals, aspirations and relationships held with the fishery. These aspects must be congruent with the current livelihood strategies as well as the local social and cultural realities.
- *Responsive and participatory*: The people affected by the management system must participate in identifying and addressing livelihood priorities. Decision makers should have mechanisms which allow them to adapt and respond to the needs of these people as they develop.
- *Multi-level*: A holistic approach to the fishery should be taken that involves all macro and micro level processes and policies which affect and inform the development and activity

in the fishery. This should result in an enabling environment which supports current strengths in the fishery.

- *Conducted in partnership*: The management system should be conducted in broad partnership between native and non-native governments, as well as public and private sectors. This inclusive approach should respect the rights and responsibilities of the different users.
- *Sustainable*: A broad and inclusive definition should be taken; as a minimum the SLA includes economic, institutional, social and environmental aspects.
- *Dynamic*: The dynamic nature of livelihood strategies must be recognized within the management system in order to adequately respond to the changes in people's situations.

In addition to these original principles other concepts have gained recognition as important aspects in the SLA, often tending towards more normative statements than rules.

- *Empowering:* The application of the SLA should empower local people, increasing livelihood opportunities and the well being of the community. In the context of the Listuguj Salmon Fishery, this would also apply to the ability to exercise Aboriginal right to access, use and management of the fishery (Carney, 2003).
- *Disaggregated:* The management process should understand how livelihood assets and vulnerabilities vary across community sectors and stakeholder groups. For example: the different roles, responsibilities and benefits which are found between men and women (Carney, 2003).
- *Resilient***:** The use of concept of sustainability has been compared to resiliency theory, in which vulnerabilities are assessed through the ability of the system to absorb shocks and adapt to changes during and after stress events (Allison and Horemans, 2006).

These principles offer a foundation for the management system which is inclusive of the needs and desires of the community within the fishery. Using a *people-centered* approach is the key element in the SLA, which shifts the focus of the system onto the needs and concerns of the affected people and livelihoods. This ensures that management decisions recognize the interdependence between the resource and community well being. In Listuguj this simple shift broadens the scope of the fishery substantially to include the various social and cultural values. These values require an in-depth recognition of the holistic and inclusive nature of the fishery within the daily lives of the people; recognition is currently lacking from the DFO management approach.

Further, a system which is *responsive and participatory* would ensure that the needs of the people are not only addressed, but in a manner which is locally suitable and involves direct input from the community. It is not sufficient to act with the community's best interest in mind, but rather to act in coordination with the community itself. Within the community of Listuguj there still exist attitudes of mistrust with respect to external managerial authorities. In order to build trust and respect the system must be able to address and respond to the daily needs of the people. The broad scope of current DFO management plans does not contain the necessary mechanisms to mediate these relationships.

Multi-level linkages are required due to the interconnected nature of governance systems in which a wide array of local, regional and national structures which affect the fishery. Ensuring cross scale linkages are in place will help facilitate the interaction of these various aspects. Similarly, these linkages should be *conducted in partnerships* which respect the rights and responsibilities of the various partners. This is especially important for the recognition and application of Aboriginal Rights. While the current management structure does include some

forms of partnership, the institutional design and lack of shared jurisdiction do not meet the needs and expectations of the community.

A broad definition of *sustainability* is also required in order to ensure that the longevity of the fishery is considered in a holistic and inclusive manner. Within the current management system, sustainability is defined in solely economic and environmental terms (DFO, 2012). This ignores the socio-cultural aspects of the fishery, which weakens the institutional ability of First Nations, or DFO to effectively manage fisheries based livelihoods. In addition to environmental and economic aspects, the SLA also considers the social and institutional elements. While this definition can be adapted or expanded, the addition of these elements broadens the conversation and provides space for alternative conceptions of the fishery.

The concept of *empowerment* is used to gauge the involvement of the community within the management structure, particularly within the decision making structure. Does the system enable or restrict people from pursing livelihood activities? At what levels are local people able to exert influence or have substantive input? Issues of empowerment within First Nations communities are also fundamentally linked to the application of Aboriginal rights. While these concepts are not synonymous, the similarities offer a platform with which to tackle the issues.

The principle of *disaggregation* requires the system to recognize the different ways in which people and community sectors interact with the fishery. While the fishermen are the most obvious actors in the fishery, there are a variety of other manners in which people interact with and benefit from the salmon. Understanding more about the scale and scope of these interactions (for example processing and distribution) helps to ensure that the whole community is considered within the management plan. Linkages between the salmon fishery and other fishing or resource related activities should also be considered.

Finally the concept of *resiliency* refers to the ability of the community to absorb external stocks or stress events. The management framework must recognize the vulnerability of livelihoods to the broader social, political and economic aspects which may impact the fishery. For example the tightening of employment insurance rules could affect the ability of community members to participate in the fishery due to the requirements and stipulations based on their employment status.

5.2 - Framework

The SLA framework has three main components which influence livelihoods, the asset pentagon, vulnerability context and transforming structures and processes (See Figure 3). The asset pentagon is a mechanism designed to understand the Capital Assets controlled or claimed by a community or group. This includes Human, Social, Natural, Financial and Physical Capital. These elements are open to interpretation based on the specific needs of the group (MacKeigan, 2004), however they are designed to identify and build upon the current strengths and capabilities already present in the community. The asset pentagon is used to 'take stock' of the fishery from a holistic viewpoint. The vulnerability context meanwhile attempts to characterize the shocks, trends, systems, cycles and patterns which may affect or disrupt livelihood patterns. These vulnerabilities are used to determine possible impacts of external factors which may influence fisheries based livelihoods. Together the assets and vulnerabilities interact with the broader Policies, Institutions and Processes which provide the structure and context in which livelihood strategies and ultimately livelihood outcomes are produced. The livelihood outcomes should reflect the broad values, goals and priorities of the community.

The SLA framework provides the basis with which local livelihoods, the fishery and

management system can be conceptualized. The asset pentagon builds on the strengths of the community and draws on local knowledge. This helps define priorities from a local perspective, as opposed to maintaining the presumed values of external parties. Within the context of the Listuguj salmon fishery, the maintenance and strengthening of social networks through the distribution of salmon provide an example of how local knowledge and priorities can positively affect the livelihoods of the community. The importance of this system however, is not considered within the traditional management structure. The SLA framework also helps to recognize the policy, legal and institutional gaps and challenges that affect local livelihoods. While altering or eliminating the limiting effects of the *Indian Act* on local governance initiatives may not be feasible within the context of the management plan, the recognition of the effects of broader structures allows the issues to be confronted and addressed.

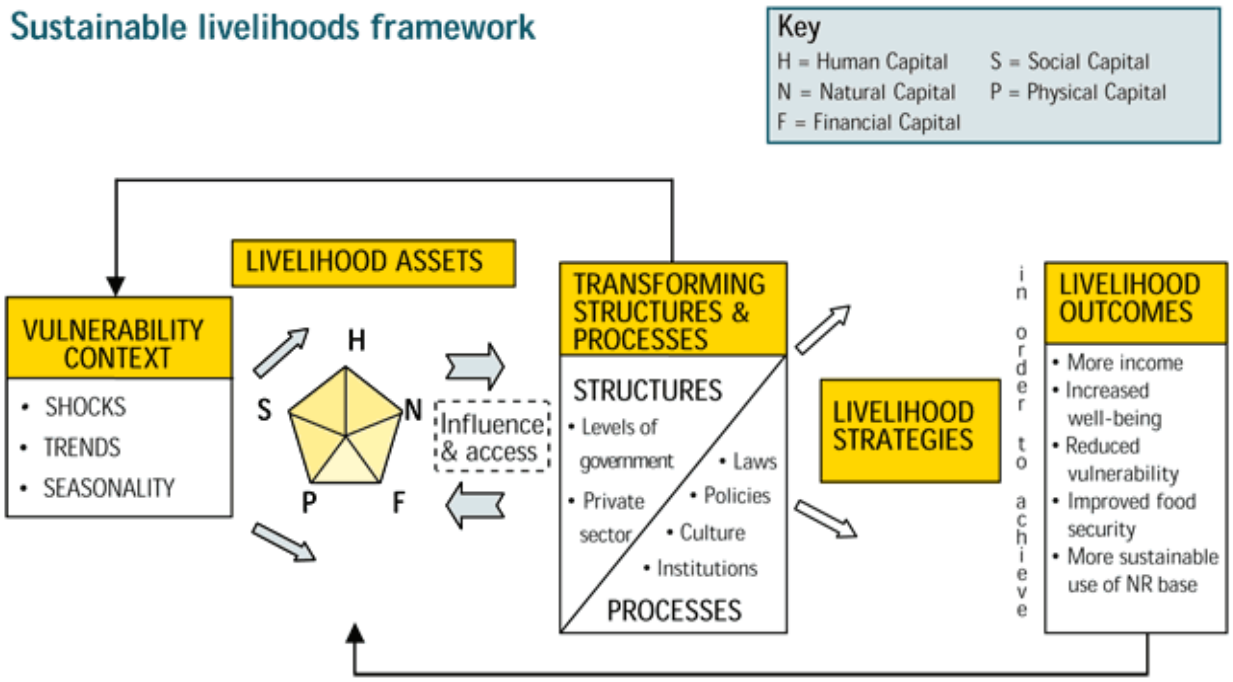

Figure 3 – The Sustainable Livelihoods Framework (Source: practicalaction.org)

5.2.1 – Assets Pentagon

The following assets were formulated in the context of the Listuguj Salmon Fishery:

1. *Human (Cultural) Capital*:
    a. Fishing Skills
    b. Traditional Knowledge
    c. Ceremonies and Spiritual practices
    d. Distribution and kinship networks
2. *Social (Institutional) Capital:*
    a. LMG Public Security and National Resources Directorates
    b. Listuguj Mi'kmaq First Nation Law on Fisheries and Fishing
    c. Listuguj Rangers Program
    d. Similar Management Plans (ex. Lobster)
3. *Natural Capital:*
    a. The Restigouche River Watershed
    b. The Salmon
4. *Financial Capital:*
    a. Ability to access funding through federal government
    b. Funding from AFS agreements
    c. Possible revenue from fishing related activities
5. *Physical Capital:*
    a. Wharves and other access points to the river
    b. Rangers Equipment (ex. Safety gear, boats, trucks, etc.)
    c. Fishermen's boats, nets, other fishing gear
    d. LMG office buildings, community meeting spaces

The assets approach to fisheries management focuses on the current strengths of the community, as opposed to the weaknesses. The list above represents a non-exhaustive account of the different assets which were seen in the community during the course of the research. It is clear that Listuguj has a strong basis of Human and Social capital from which to draw upon. The

importance of the salmon to the community manifests in a variety of cultural forms which help maintain the collective identity of the people. The community is also well organized, and despite gaps which may be present in capacity or resources there is a strong institutional basis with which to move forwards towards the development of a Salmon Management plan. Less emphasis was paid in this research to the Natural, Financial and Physical capital of the community due to access issues and the limited time frame, however there is clearly a variety of assets which the community possesses that enables and facilitates the salmon fishery. A more thorough investigation of these other assets is required.

5.2.2 - Vulnerabilities

The following vulnerabilities were formulated in the context of the Listuguj Salmon Fishery:

- Lack of clarity, legitimacy and respect for Aboriginal Rights
- Climate change, other adverse environmental factors (ex. warming of river)
- Pressure from the RRWMC (ex .lack of jurisdiction)
- Internal community pressures (ex. political or social divides)
- Fear of change or encroachment on rights
- Lack of engagement from fishers or other community sector
- Decline of stocks due to external factors
- Seasonal variation in catches
- Lack of funding for management measures
- Gaps in management capacity
- Rising food and energy prices
- Access to Unemployment insurance

This list of vulnerabilities demonstrates some of the challenges which are faced by the community of Listuguj. The lack of clarity, legitimacy and respect of Aboriginal Rights is an issue of upmost importance which the community. The continual struggle that must be undertaken in order to have their rights recognized severely hampers management efforts by steering conversations towards the relationship between the parties. This not only weakens the overall management process, but maintains or increases the lack of trust and respect. A sincere process of education, recognition and trust building with external partners will be essential in order for any management plan to gain legitimacy within the community. This fundamental aspect also feeds into other vulnerabilities, such as pressure within the RRWMC or possible internal community divides.

Environmental vulnerabilities such as the effects of climate change or seasonal variation in catches also affect the fishery and all its related activities. Addressing these vulnerabilities may come through efforts to ensure the health of the stocks. While the community has rejected the notion of 'negative' conservation measures, (such as the reduction of fishing effort), there are a number of 'positive' measures which could be undertaken to help increase the stocks: for example by improving the health of the river. There are also a host of socio-economic factors which influence fishery livelihoods such as increased food and fuel prices or the ability to access unemployment insurance. Recognizing these challenges and helps to ensure that mechanisms are in place to help the community adjust and adapt to the changing conditions which affect community livelihoods.

5.2.3 - Policies Institutions and Processes

Access to assets and activities are controlled through Policies, Institutions and Processes which either hinder or enable the livelihood strategies of users. Within the context of the Listuguj Salmon Fishery, the following elements were identified as factors which influence the management process (Table 1).

These policies, institutions and processes provide the context within which the livelihood strategies related to the salmon fishery are held. The key to ensuring the sustainability of livelihood strategies at the local level is found through the links made between the levels, especially in concern to the realms of governance and decision making power. Currently, decision making power is withheld at the federal level through the *Fisheries Act, 1985*. While Aboriginal rights are recognized within the Canadian Constitution, the *Indian Act, 1876* limits

Table 1 - Policies, Institutions and Processes

	National	Regional	Local
Policies	• Indian Act • Canadian Constitution • Fisheries Act	• AFS • Integrated Salmon Management Plan	• Listuguj Mi'gmaq First Nation Law on Fisheries and Fishing
Institutions	• DFO • Mi'kmaq Grand Council	• RRWMC • Mi'gmaq Tribal Council • Provinces of NB, QC • Gespe'gewa'gi Mi'gmaq Resource Council	• LMG
Processes	• Downturn in economy • Power Relations	• Relationship between First Nations and Stakeholders • Public Education	• Changes in demographics • Increasing management capacity

the ability of First Nations to self governance. The SLA recognizes these challenges and allows for the community to draw upon a range of resources in order to address the issues. The application of Aboriginal Rights via the Listuguj Mi'gmaq First Nation Law on Fisheries and Fishing; as well as the increasing management capacities of the community provide enabling mechanisms which the community may utilize to forward their agenda. The broad recognition of diversity of these elements assists in addressing the impacts they have on local livelihoods.

Chapter 6 - Conclusions

6.1- Discussion

The SLA is not a 'silver bullet' or a 'quick fix' management solution. The approach helps to structure and focus the management process in order to ensure it reflects the goals and values of the people affected by management decisions. This emphasis on local conceptions and valuations of livelihoods is consistent with the recognized need to take into account the local history, knowledge and practices of First Nations communities when approaching fisheries management (Fox, 2006). The dynamic and adaptive nature of the SLA also places an emphasis on the process of management, which better suits the community of Listuguj than the rigid boundaries and outcome based criteria of DFO management approaches.

The diversity of values and interests presented in this research, particularity social and cultural elements, fall outside the boundaries of the current DFO management approach which is defined in dualistic terms of conservation and economic gain. Although the Salmon fishery is non-commercial, the sports fishing industry fits into this economic framework by generating revenue from tourism and leisure fishing, as opposed to biomass extraction. While there is recognition of the alternate relationship held by aboriginal users within the current approach, there is no existing strategy describing how this relationship will be supported, nor any recognition of the diverse and complex manner in which it manifests itself. The philosophical shift of focus from the resource base onto the community allows for a more holistic and inclusive management process which increases local command and ensures the distinct rights and values of the community are addressed and respected within the context of their desired livelihood strategies. This shift of focus can also be thought of as a process of recognition for the diversity and subjectivity of the relationships that people hold with the fishery. This is critically important

in the contemporary management of marine resources due to the inappropriateness of sectoral policies to deal with the complexity of artisanal livelihood fisheries. Livelihoods approaches offer to grow and strengthen both communities and management processes by increasing recognition of alternative fisheries and strengthening regional and local decision making capacity in order to increase the viability of the system (Allison, 2006).

Livelihoods based approaches also help to question the exclusivity of livelihood generation and specific fishing activities. Within the community Listuguj it is not possible to sustain employment through the salmon fishery. While many positive impacts and benefits are found through the salmon, fishermen must participate in a diversity of activities in order to generate livelihoods and sustain their households and families. While the salmon fishery is currently defined by the Canadian government as separate from other species specific and commercial fisheries; many people within the community depend on a variety of these seasonal occupations. This may also include participation in, for example, snow crab harvests, or activities within other resource sectors such as forestry. As noted in Chapter 4, many people in Listuguj also seek contractual employment outside the community as iron workers, while returning annually to participate in the salmon fishing season. While these activities may be externally viewed as mutually exclusive endeavours, from the perspective of the community they are fundamentally linked, together constituting viable livelihoods. In order address the management of the salmon fishery, it is also necessary to recognize and contextualize the activities within the diversity of enterprises that people engage in to sustain their livelihoods.

6.2 - Recommendations

The SLA framework offers an attractive and culturally relevant basis with which to develop the salmon management plan and is recommended for adoption by the LMG. The holistic and people centered approach, as well as the broad principles, align well with the values presented by the community. This offers a set of boundaries within which the management plan may be developed while providing multiple avenues for a diversity of livelihood activities, beliefs and relationships to be pursued.

While the framework is recommend for use, there are aspects which should be considered for modification or alternation. For example, in order to ensure that these SLA principles are compatible with local conceptions of similar concepts, some in depth consideration may be required. For example; the concepts of sustainability and empowerment could be problematic.

The concept of sustainability has been developed mainly from a western perspective and does not necessarily represent similar indigenous notions (Thaman, 2002). Many indigenous perspectives are not easily translated and may focus on giving more, rather than taking less (McGregor, 2004). Within Mi'kmaq tradition the concept of Netukulimk has be used as a loose approximation for sustainability (Marshall, 2009), although it is not an equivalent concept. Despite complications of language and translation, the broad value of ensuring the well being of future generations is certainly present in Mi'kmaq tradition, which considers future impacts on a time scale of seven generations (Berneshawi, 1997).While defining sustainability may be a challenge, the broad use of the term within the SLA should facilitate a general conversation which allows for greater input for community values to suit local needs. The definition of sustainability presented in the SLA nonetheless offers a more holistic starting point to develop this conversation than the definition used in the DFO policies which are limited to environmental

and economic aspects (DFO, 2012). The additional inclusion of social (cultural) and institutional aspects present in the SLA offers a much broader space for the inclusion of local conceptions.

The concept of empowerment is clearly prevalent in the overall focus on community perspectives and values in the SLA framework. Community empowerment often refers to the decentralization of power within governments (Pomeroy and Berkes, 1997; Jentoft, 2005). The use of this principle as presented in the DFID SLA may not be sufficient in dealing with the complex issue of Aboriginal Rights and the management of the fishery. While the SLA may contain a level of synergy with rights based approaches it is not designed to analyze or address power relations directly (Allison and Horemans, 2006). The application of Aboriginal Rights within the management process has a unique history and should be considered extensively in order to ensure that it is adequately addressed within the SLA framework. Given the importance of this issue to the community of Listuguj it warrants special consideration.

The development of a livelihoods based salmon fishery management plan will require a sustained level of focus and commitment from the community, as well as local institutions such as the Listuguj Mi'gmaq Government. Currently the salmon fishery is not directly managed through the LMG Natural Resources Directorate Fisheries Division, which is focused mainly on commercial species. It is recommended that the Salmon Fishery Advisory Committee and other related groups be formally incorporated into this division in order to facilitate a consistent level of supervision and develop the structures and mechanisms which are required to effectively respond to issues within the salmon fishery.

Overall the SLA offers an attractive framework with which the community of Listuguj can develop a culturally relevant salmon fishery management plan. The broad emphasis on people and process demonstrates an ability to connect the values of the community and their

diverse livelihood strategies to the management of the fishery. This asset based-approach also suggests opportunity for growth of First Nation involvement into other areas, such as eco-tourism, academic research, non-profit activity or potential involvement with the sports fishing industry. The acceptability of these potential livelihood opportunities will depend on the ability of the people to continue to strengthen their relationship with the salmon in a manner which respects both the rights and values of the people of Listuguj. This can be accomplished through a continual process of responsive and participatory community engagement which is transparent and continues to explore the relationship between the people and the fishery.

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Appendix A – Dalhousie Ethics Approval

DALHOUSIE UNIVERSITY
Inspiring Minds

Social Sciences and Humanities Research Ethics Board
Letter of Approval

Date: May 29, 2012.

To: Brennan Daly, Marine Affairs Program
Lucia Fanning, Marine Affairs Program

The Social Sciences Research Ethics Board has examined the following application for research involving humans:

Project # 2012-2679 (v2) (R# 1011074)

Title: Putting People First: Using the Sustainable Livelihoods Approach to Develop a Culturally Relevant Salmon Fishery Management Plan

and found the proposed research involving human participants to be in accordance with Dalhousie Guidelines and the Tri-council Policy Statement on *Ethical Conduct in Research Using Humans*. This approval will be in effect for 12 months from the date indicated below and is subject to the following conditions:

1. Prior to the expiry date of this approval an annual report must be submitted and approved.
2. Any significant changes to either the research methodology, or the consent form used, must be submitted for ethics review and approval *prior to their implementation.*
3. You must also notify Research Ethics when the project is completed or terminated, at which time a final report should be completed.
4. Any adverse events involving study participants are reported immediately to the REB

Effective Date: May 29,2012.
Expiry Date: May 29,2013.

Signed: _____
Dr. Lori Turnbull (Chair SSHREB)

IMPORTANT FUNDING INFORMATION - *Do not ignore*

To ensure that funding for this project is available for use, you must provide the following information and FAX this page to RESEARCH SERVICES at 494-1595

Name of grant /contract holder _____ Dept. _____
Signature of grant / contract holder _____
Funding agency _____
Award Number _____ Dal Account # (if known) _____

Dalhousie Research Services • Research Ethics • 6299 South Street 2nd Floor, Suite 23 , PO Box 15000 • Halifax, NS, Canada • B3H 4R2 Tel. 902-494-3423 • Fax: 902-494-1595 • E-mail: ethics@dal.ca • www.dal.ca/researchethics

Appendix B – Listuguj Ethics Approval

Listuguj Mi'gmaq Government
17 Riverside West
Listuguj, Qc. GOC 2R0
Tel: (418) 788-2136
Fax: (418) 788-2056

DALHOUSIE UNIVERSITY
Inspiring Minds
Faculty of Management

June 19th, 2012

Letter of Permission

Putting People First: Using the Sustainable Livelihoods Approach to Develop a Culturally Relevant Salmon Fishery Management Plan

Dear Chief Dean Vicaire,

Listuguj First Nation is invited to participate to take part in research study being conducted by Brennan Daly, a graduate student at Dalhousie University, as part of his Master of Marine Management degree.

The purpose of the study is to engage Listuguj community members and gain an understanding of local perspectives on the ideas of sustainable livelihoods and the salmon fishery. The study consists of one-on-one interviews between the participant and the researcher. The research is being undertaken in coordination with a request from the Listuguj Mi'kmaq Government to aid in the development of a culturally appropriate Salmon Fishery Management Plan.

Academic supervision is being provided by Mr. Chris Milley, an Adjunct Professor in the Marine Affairs Program at Dalhousie University. Local guidance and internship supervision is being facilitated by Dr. Fred Metallic, project lead of the Plamu Project. Participation in the study is entirely voluntary and participants may withdrawal themselves from the study at any time.

With your permission, the research will take place during my internship with the Listuguj Mi'gmaq Government, which spans from May 28th to July 20th, 2012. If you have any questions please do not hesitate to contact me.

If you have any additional questions or concerns regarding this request for your approval for this study, you may contact Dr. Lucia Fanning, Director, Marine Affairs Program at lucia.fanning@dal.ca; or 902-494-8390 Catherine Connors, Director of Dalhousie University's Office of Research Ethics Administration, for assistance call (902) 494-1462.

Sincerely,

Brennan Daly

Brennan Daly
Candidate, Master of Marine Management
Marine Affairs Program
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DALHOUSIE UNIVERSITY
Inspiring Minds
Faculty of Management

June 19th, 2012

I, Chief Dean Vicaire, have reviewed the study outline provided and give my permission for the proposed research entitled:

Putting People First: Using the Sustainable Livelihoods Approach to Develop a Culturally Relevant Salmon Fishery Management Plan

Signature

June 19, 2012.
Date

Brennan Daly
Candidate, Master of Marine Management
Marine Affairs Program
Tel: 11 902 412 2136
Email: brennan@dal.ca

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Appendix C –Interview Questions

Interview Questions

Putting People First: Using the Sustainable Livelihoods Approach to Develop a Culturally Relevant Salmon Fishery Management Plan

The Salmon Fishery

1.1. Do you fish?

1.2. Are salmon important to you?

1.2.1. If yes, how are salmon important to you?

1.3. Are salmon important to your community?

1.3.1. If yes, how are salmon important to your community?

1.4. What is the most important cultural aspect of the salmon fishery to you?

1.4.1. How is this important?

1.5. What is the most important cultural aspect of the salmon fishery to your community?

1.5.1. How is this important?

1.6. What is the most important economic aspect of the salmon fishery to you?

1.6.1. How is this important?

1.7. What is the most important economic aspect of the salmon fishery to your community?

1.7.1. How is this important?

1.8. What is the most important ecological aspect of the salmon fishery to you?

1.8.1. How is this important?

1.9. What is the most important ecological aspect of the salmon fishery to your community?

1.9.1. How is this important?

1.10. What concerns you the most about the salmon fishery?

1.10.1. Why is this a concern?

1.11. What concerns your community the most about the salmon fishery?

1.12. Why is this a concern?

1.13. What direction would you like to see the fishery move in the future?

1.14. What direction would your community like to see the fishery move in the future?

This set of questions will give insight into the culturally valued aspects of the salmon fishery from the perspective of Listuguj First Nation and characterize the relationship between the community and the salmon fishery.

2. Sustainable Livelihoods

2.1. What does 'livelihood' mean to you?

2.2. What is the most important part of a livelihood?

2.3. How can the salmon fishery provide livelihoods?

2.4. What does "sustainable" mean to you?

2.5. How does "sustainability" relate to the fishery?

2.6. How does "sustainability" relate to your community?

2.7. How do you think "sustainable" relates to "livelihood"?

2.8. Do you think you can have a sustainable livelihood in the fishery?

2.8.1. If so How? If not why not?

2.8.2. What would it take to create a sustainable livelihood in the fishery (all fisheries)?

This set of questions will determine local perceptions of 'sustainable' and 'livelihoods' as well as characterize their relationship to the salmon fishery.