Perspectives for First Nations' Strategies Towards Local Marine Management in the Broughton Archipelago, British Columbia

by

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Abstract

With the affirmation of Indigenous rights and title the jurisdiction over the management of natural resources within First Nations' territories has come into question. This thesis draws on the experience of two coastal Indigenous communities and the non-Indigenous community of Alert Bay to examine current marine management regimes and work towards establishing new ones. Local community experts are interviewed to determine their views on how marine resources within the Broughton Archipelago should be managed. Five major themes are identified by community experts as pivotal to the establishment of a new community-based marine management regime including: (1) trust building, (2) capacity, (3) power, (4) politics and (5) funding. To address these themes the extensive literature on collaborative management regimes is consulted and local and international examples of collaborative management are scrutinized. A place-specific Community-based Adaptive Co-management planning framework, designed to address key themes raised by community members while incorporating traditional and contemporary principles and practice, is presented.

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List of Acronyms

AAROM	Aboriginal Aquatic Resource and Oceans Management
AFS	Aboriginal Fisheries Strategy
ATT	Area Technical Team
CBACM	Community-based Adaptive Co-management
CBM	Community-based Management
DFO	Department of Fisheries and Oceans
FNFC	First Nations Fisheries Council
MPC	Marine Planning Committee
MTTC	Musgamagw Tsawataineuk Tribal Council
PICFI	Pacific Integrated Commercial Fisheries Initiative
WCVIAMB	West Coast Vancouver Island Aquatic Management Board

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Chapter 1

Introduction

Significant declines in fisheries resources and the recognition of Indigenous rights have led to demands for reform of Canada's policy on the management of marine resources. The management of natural resources is complex. Resource management requires localized institutions whose members possess the knowledge and flexibility to appropriately address the human use of natural resources in a changing environment. The social and economic needs of small coastal First Nations' communities within the Broughton Archipelago (Broughton) are closely tied to the health and availability of marine resources. These are fisheries-dependent communities that rely on marine resources for their social and economic well-being. Through thousands of years, these communities have become linked to their environment, as described by one community member:

> [W]e have a responsibility to steward the land, we are its caretakers, its protectors...that is something that has been lost to us...this is our job. It's our way of saying thank you to the creator; it is how we give back. We eat these foods, we literally are this environment - we are a part of it. Inside I can feel it and I feel a great sense of sorrow and regret for letting things get this bad. (Anonymous 15, September 12, 2009)

To all communities within the Broughton, marine resources are of vital importance; they are part of the very fabric of each community's cultural, social and economic well-being.

An ever-increasing decline in marine resources has fostered a strong desire for members of these communities to act and has brought the concept of community-based management to the forefront of discussions between government officials, scientists, academics and residents of small fishing communities (Vodden 1999). As marine

resources decline and community needs go un-met, coastal communities and governments are looking for ways to better manage marine resources. One of the most promising approaches to address this issue has been to involve the communities themselves in the management of marine resources, through the development of collaborative working relationships with stakeholder groups and government agencies (Pomeroy and Rivera-Guieb 2006). Within coastal British Columbia (BC), fisheries managers have begun to recognize that coastal resources cannot be properly managed without the cooperation and participation of fishers (Pomeroy and Berkes 1997). This recognition has resulted in the development of a number of First Nation co-management initiatives throughout the coast. Within the Broughton, efforts to institute community-based stewardship (most notably through the Kwakiutl Territorial Fisheries Commission) have been met with funding constraints and a lack of community buy-in. As a result, a clear need and desire to develop a functional natural resource collaborative management regime continues to exist within the region. This thesis draws on the experience of the international community-based management community, BC coastal communities and the expert advice of two Broughton First Nations to develop a collaborative marine management framework that is designed to address First Nations' political, social and economic needs as they relate to the management of marine resources within the Broughton.

Research Context

First Nations within the Broughton openly acknowledge that government agencies do not have the ability to solve the crisis in marine resources that has been developing as early as the 1980s (Anonymous[1] 3, October 28, 2009; Anonymous 1,

1 Interview participants were given the option of remaining anonymous or having their comments credited to them as source (Appendix D).

May 4, 2009; Arthur Dick, September 22, 2009). Recently, the federal government's proprietary claim to exclusive regulatory authority over the management of marine resources has been challenged by First Nations throughout Canada (Davis and Jentoft 2003). First Nations have been seeking legal and political recognition of their right to involvement in marine fisheries management through the formal acknowledgement of their Indigenous[2] rights. This has resulted in a significant number of legal challenges to federal jurisdiction by First Nations throughout Canada.

In 1990, the priority of First Nations' rights which are protected by s. 35(1) of the *Constitution Act*, 1982, was affirmed by the Supreme Court of Canada in *Sparrow v. The Queen* (*R. v. Sparrow* 1990). At issue was the Indigenous right to fish salmon for food, social and ceremonial purposes. Mr. Sparrow, a member of the Musqueam First Nation, was charged with exceeding the gillnet length restriction imposed on the band's food fishing license pursuant to the federal Fisheries Act (*R. v. Sparrow* 1990). The Court ruled that Mr. Sparrow had been exercising a protected Indigenous right to fish for food in the traditional fishing waters of his Nation and that members of the Musqueam Band of BC had an Indigenous right to fish, particularly for food, social and ceremonial purposes (*R. v. Sparrow* 1990). Further, the Supreme Court ruled that, when a legislative measure limits the exercise of an existing Indigenous right, there is *prima facie* infringement of Section 35 of the *Constitution Act*, 1982 (*R. v. Sparrow* 1990). The *Sparrow* ruling was significant as it clearly identified the Indigenous right to fish and provided for the preservation of that privilege. The federal government was no longer able to limit an Indigenous group's right to fish without providing valid justification for the infringement. This right was not determined

2 The term "Aboriginal" is currently used by government agencies to describe First Nations, Metis and Inuit in Canada. Over the course of this research project First Nations members identified the term "Indigenous" and "First Nation" as the most appropriate term to describe their people. Therefore the term "Indigenous" and "First Nation" will be used interchangeably throughout this thesis to specifically describe First Nations people in place of the term "Aboriginal" except when quoting other authors/organizations.

to be absolute; rather the Indigenous right to fish had to be reconciled with additional government responsibilities, including the "the proper management and conservation of a natural resource" (*R. v. Sparrow* 1990, 95).

The rights to manage marine resources and the right to commercial use of marine resources were not examined in *Sparrow*. As a result, a number of other significant court cases arose throughout Canada. The Supreme Court of Canada decision known as the *Marshall Decision* concerned the treaty right to sell and trade marine resources (*R. v. Marshall* 1999). Donald Marshall Jr., a member of the Mi'kmaq First Nation, was charged on three counts related to federal fishing regulations: selling eels without a license, fishing out of season, and using illegal nets (*R. v. Marshall* 1999). The Supreme Court of Canada ruled that the Mi'kmaq First Nation held a treaty right to engage in commercial fishing (Davis and Jentoft 2003; *R. v. Marshall* 1999). In BC, a ruling similar to the *Marshall Decision* was established under the *Gladstone Case*, (*R. v. Gladstone* 1996) acknowledging that the Heiltsuk First Nation had an Indigenous right to earn a "moderate" income from trade in herring spawn-on-kelp[3]. Recently, the BC Supreme Court confirmed that five Nuu-chah-nulth Nations had an Indigenous right to fish and to sell fish within their territory (*Ahousaht Indian Band and Nation v. Canada Attorney General* 2009). This prompted the First Nations Fisheries Council[4] (FNFC) to urge Canada and BC to implement a new management regime collaboratively with the Nuu-chah-nulth Nations (Dolha 2009).

3 Within Canada the majority of First Nations have existing treaties: however, in BC very few treaties were signed. The Gladstone case is significant in that it recognized the sale of marine resources as an Indigenous right as opposed to a treaty right.

4 The First Nations Fisheries Council formed as the result of the BC First Nations Action plan which was written and endorsed by the Union of BC Indian Chiefs. The councils role is to engage with First Nations fisheries organizations to develop long term work plans and to respond to issues identified by First Nations on the coast of BC. For more information visit: www.fnfisheriescouncil.ca.

The federal government has recognized that significant changes in fisheries policy are necessary in order to provide for the protection of Indigenous rights and to conserve BC's dwindling fisheries resource. In response to the *Sparrow* ruling, the Federal government developed a number of new fisheries management strategies which focused on the recognition and protection of Indigenous rights. Of note is the Aboriginal Fisheries Strategy (AFS) in which Canada's Department of Fisheries and Oceans (DFO) authorizes fishing for food, social and ceremonial purposes through the use of communal licenses. The AFS also provides funding to First Nations which, as stated by the DFO, "are used in specifically-approved activities that may include negotiation of AFS agreements, management of Indigenous fisheries, habitat restoration, fish enhancement, community-based research, economic development or stakeholder consultation" (Canada Fisheries and Oceans AFS 1992).

The recognition of Indigenous rights has also led to the development of additional federally mandated fisheries strategies including the Pacific Integrated Commercial Fisheries Initiative (PICFI) which provides commercial fishing licenses to First Nations through a license buy-back system (Canada Fisheries and Oceans PICFI 2010), and the Aboriginal Aquatic Resource and Oceans Management initiative (AAROM) which is designed to complement the AFS strategy by providing funding to "form aquatic resource and oceans management organizations capable of hiring or contracting skilled personnel to allow them to effectively participate in the decision-making and advisory processes" (Canada Fisheries and Oceans AAROM 2004). AAROM funding has allowed First Nations in BC to develop co-management strategies and enter into collaborative relationships with various communities and regulatory agencies.

The aforementioned court rulings and others have led First Nations within the Broughton to engage the DFO in an attempt to collaboratively manage resources on a local scale. Several promising initiatives were acted upon, most notably the development of the Kwakiutl Territorial Fisheries Commission (KTFC) which consisted of a consortium of local Broughton First Nations with a mandate (specified by the DFO) for the scientific study and monitoring of local fisheries. Despite early success, this processes was terminated in 2004 (primarily due to a lack of funding resulting from First Nations disengagement and changes to the AFS which will be discussed in Chapter 2) and did not lead to an effective form of local marine resource management.

It is clear that as provincial and federal governments move forward with new and innovative approaches to marine management; their successful implementation requires that First Nations be closely involved in all stages of program development and execution. Further, BC coastal First Nations, including those in the Broughton, submit that there should be an equal and reciprocal power sharing relationship between governments to ensure that Indigenous rights are not infringed upon, including their right and responsibility to steward marine resources within their traditional territories (Weinstein 2007).

Study Goal and Objectives

The overarching goal of this thesis is to provide place-specific community informed recommendations on how First Nations within the Broughton Archipelago can achieve community-based collaborative management of marine resources.

The objectives of this research are:

1. To interview local experts from the 'Namgis First Nation and the Gwawaenuk Tribe to identify structural components, impediments, objectives, goals and principles as they relate to First Nation-led marine planning and management within the Broughton.
2. To interview local non-Indigenous community members to determine marine management objectives, goals and principles as they relate to First Nation-led marine planning and management within the Broughton.
3. To provide recommendations based on a review of the literature, existing management plans and community input, including that gathered from interviews, on the development of a place-specific planning framework that will allow Broughton communities to work towards the formal development of a community-based planning structure that is both adaptive and collaborative.

Thesis Outline

In Chapter 2, I will describe the setting in which this research was conducted and provide background on the history of marine management and First Nations within the Broughton. I will also introduce the village of Alert Bay, 'Namgis First Nation and the Gwawaenuk Tribe, highlighting their unique perspectives on marine management. In Chapter 3, I will provide a review of the existing literature as it pertains to marine management within the Broughton. The terms community-based management, co-management and adaptive management will be defined and marine management theory and practice will be discussed. Chapter 3 also identifies structural components of the

collaborative marine management process which have proven both successful and detrimental in a variety of collaborative approaches initiated by community groups throughout BC and internationally. Chapter 4 describes the methods employed over the course of the project, with a specific focus on the Indigenous approach to research including concepts of design and ethical considerations when working with First Nations. My positionality and relationship to each of the Indigenous groups as well as the local communities of the Broughton will also be discussed. In Chapter 5, I present the opinions, concepts and desires of community members as they relate to the local management of marine resources. I summarize and discuss five specific themes which emerged from an analysis of the interview data. Drawing on the literature review and interview themes identified by community, I use Chapter 6 to present a place-specific community-based collaborative planning framework which is designed to address community member concerns, include community recommendations and incorporate contemporary co-management design and theory. This Chapter addresses issues raised by community members and builds upon the successes of other collaborative management models. I conclude the findings of this research in Chapter 7, with a discussion of both the research process and the potential future of marine management within the Broughton.

Chapter 2

Setting and Background

The Broughton Archipelago is a collection of islands located off the north-eastern tip of Vancouver Island, British Columbia, Canada (Figure 1). The Region has a rich and

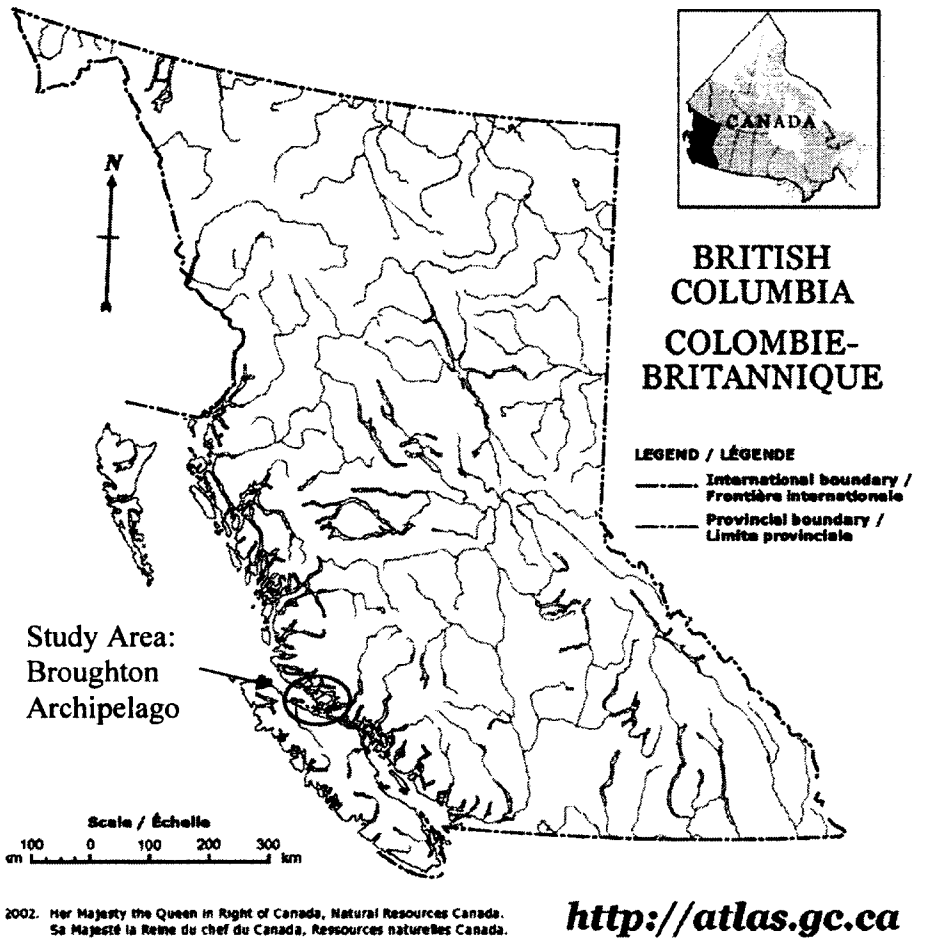


Figure 1. Broughton Archipelago research study area.

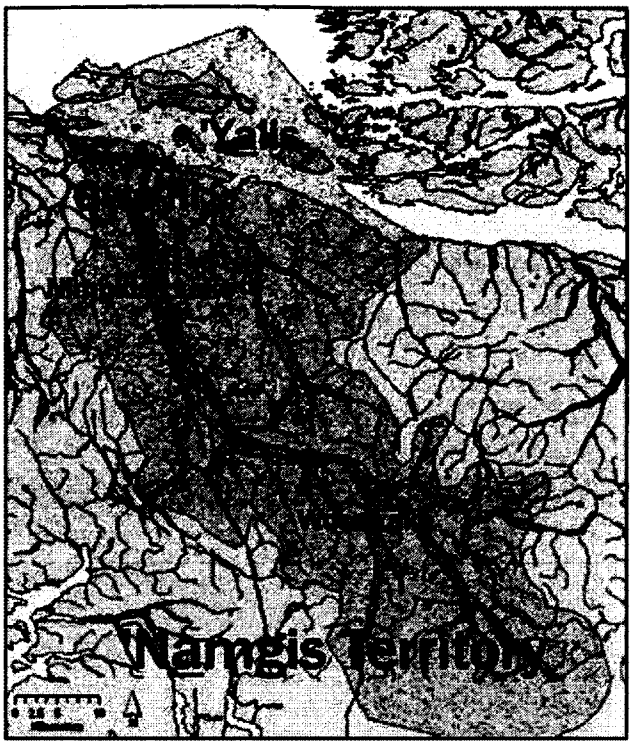
diverse Indigenous history as evidenced by extensive cultural landscape modification, including old village sites, clam terraces, burial sites, and shell middens. The Broughton

continues to be inhabited primarily by First Nations, the language and cultural group known as the Kwakwaka'wakw , many of whom are direct descendents of family groups who have lived in the area for thousands of years. Three distinct groups inhabiting the Broughton were the focus of this study: the 'Namgis First Nation, the Gwawaenuk Tribe and the non-Indigenous community of Alert Bay (the village of Alert Bay),.

The 'Namgis First Nation

For centuries the 'Namgis First Nation has been connected to the Broughton Archipelago and the Nimpkish River estuary. The 'Namgis are the people of the *Gwa'ni* (Nimpkish River) who have lived in the ancient village known as *Xwalkw* located on the Nimpkish estuary (Boas 1966; Duff 1965). After contact with European settlers, the 'Namgis people moved from their *Xwalkw* village site to what was then a smaller seasonal village known as *'Yalis* on Cormorant Island to work in the newly established salmon canneries and thus become part of the developing European-style wage economy (U'mista Cultural Society 2009). The 'Namgis First Nation is the largest of the four Indigenous communities that comprise the Musgamagw Tsawataineuk Tribal Council[4] (MTTC), with a registered population of 1,628, approximately 900 of whom currently live within the Broughton (Canada, Indian and Northern Affairs 2009). The Indigenous territory of the 'Namgis First Nation spans the *Gwa'ni* watershed and includes a number of island and marine areas within the Broughton (Figure 2). The 'Namgis First Nation is the only MTTC Nation who has entered into the BC Treaty Process and is currently in Stage 4 (see www.bctreaty.net for more information).

5 The MTTC was established in the early 1980's. It consists of four member Nations within the Broughton Archipelago, including the Kwicksutaineuk-ah-kwaw-ah-mish First Nation, the Tsawataineuk First Nation, the 'Namgis First Nation and the Gwawaenuk Tribe. As a tribal council the MTTC has a mandate to advise local communities on community planning, technical, financial and band governance. Please see www.mttc.ca for more information.



*map courtesy of the 'Namgis First Nation

Figure 2. 'Namgis First Nation traditional territory, northern Vancouver Island, British Columbia. The village of 'Yalis is located on northern Cormorant Island.

Gwawaenuk Tribe

The Gwawaenuk Tribe[6] (meaning "Downstream People" or "Northerly People" in the local dialect *Kwak'wala*) originate from what is now called Mount Stephens (Duff 1965, 12). Gwawaenuk Tribe member Fred Speck describes the original name for Mount Stephens as *Kwe' Kwe'* which, in the *Kwak'wala* language, means, "the sound of crying", describing the sound the mountain makes during windy days (Fred Speck, September 15, 2009). The people of the Gwawaenuk speak of surviving the great flood by the mountain of *Kwe' Kwe'*. Mr. Speck goes on to explain that, after the great flood, the Gwawaenuk people chose *Heghums* (Hopetown) as their central place for life and survival. *Heghums* in the *Kwak'wala*

6 The Gwawaenuk have named themselves a Tribe rather than a First Nation. This is a decision made by the Tribe members. As stated by Fred Speck (pers. comm. September 15, 2011) "it has to do with our position, to be more clear and distinct with the mainstream Western political world for stronger identity purposes etc".

language means "Giant Wolf Facing Westward" (Fred Speck, September 15, 2009). It is here that the Tribe has lived for much of their recent history (Galois 1994).

The Gwawaenuk have a history of working closely with other First Nations within the Broughton Archipelago. During the mid 1800's (1850-1860) the Gwawaenuk endured a number of attacks by the Nuxalk (Bella Coola) and Heiltsuk (Bella Bella) tribes from the mid-coast of BC The survivors of these attacks sheltered with the Haxwa̲'mis and Dza̲wa̲da'enu̲x̲ tribes at *Gwayasdums* on Gilford Island (currently home to MTTC member Nation known as the Kwicksutaineuk-ah-kwaw-ah-mish) (Galois 1994; Duff 1965). In the early 1900s the Gwawaenuk returned to their home at the village of *Heghums*. A clear bond between the Gwawaenuk and the Kwicksutaineuk-ah-kwaw-ah-mish of *Gwayasdums* has persisted throughout the generations and each of these Indigenous groups continues to collaborate on matters of governance and marine management.

The territory of the Gwawaenuk includes Drury Inlet, Grappler Sound, Mackenzie Sound and much of the Broughton Archipelago (Galois 1994). The specific territorial boundaries of Gwawaenuk territory have not been documented on a map (Chief Charlie Williams Gwawaenuk Tribe, pers. comm. 2009); as such, a territorial map is not presented. Hopetown village is located on a 2.4 ha Indian Reserve (IR#10A, Canada Indian and Northern Affairs 2009) on Watson Island (Figure 3) in the north-eastern portion of the Broughton. Until recently, Hopetown was a small bustling community consisting of up to six families who relied extensively on the marine environment for food and resources. Within the last ten years, however, the population of Hopetown village has dwindled to less than five individuals. Currently the village is not occupied except for a few months in the summer to house working crews and conduct family gatherings. With a registered population of 39, (Canada Indian and Northern Affairs 2009) the Gwawaenuk Tribe is the smallest of the four

Indigenous groups belonging to the MTTC. Despite its small registered population, the Tribe is known in the region for its strong political views pertaining to the Indigenous rights of its people. For many years now the Gwawaenuk Tribe has implemented an ad hoc form of community-based management by closely monitoring and addressing fishing activities within their traditional territory.

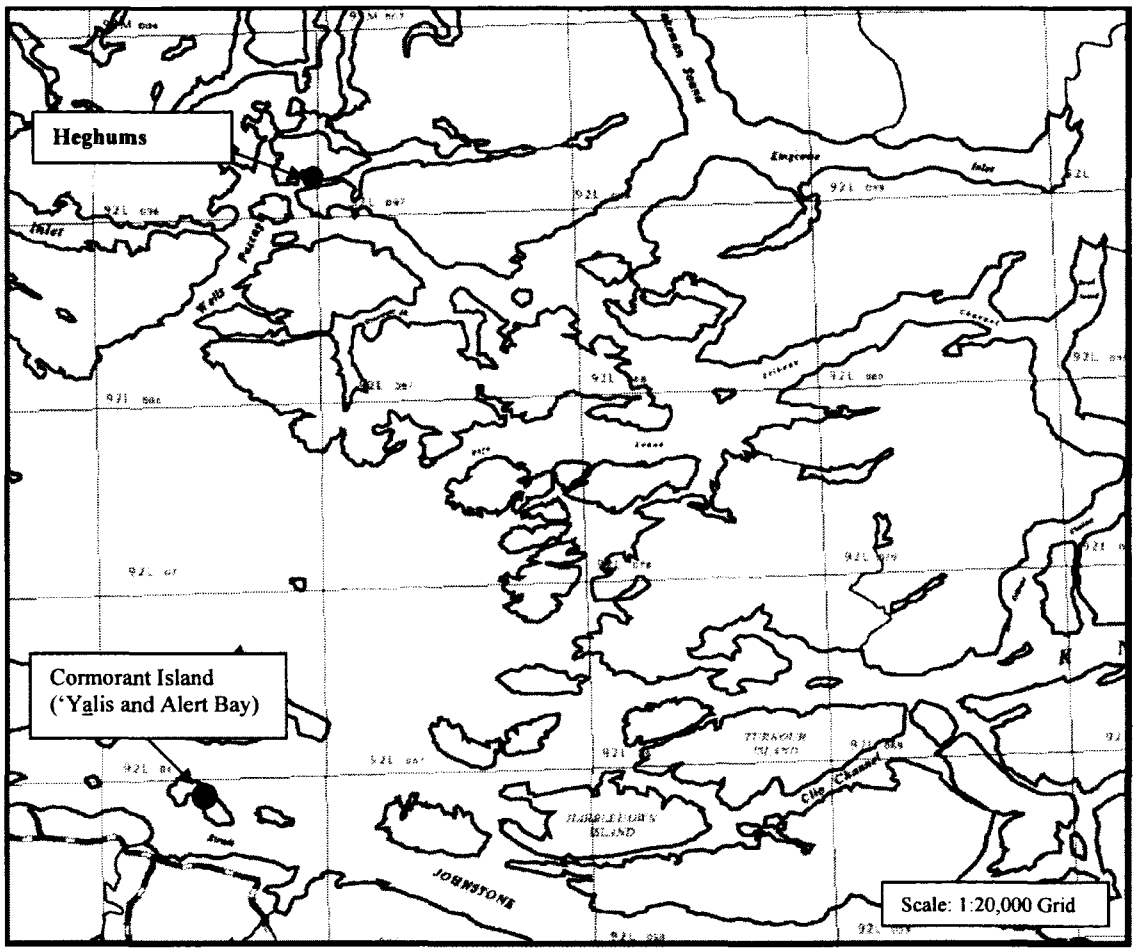


Figure 3. Study Area: The Broughton Archipelago including Alert Bay, home of the 'Namgis First Nation and Hopetown, home of the Gwawaenuk Tribe.

The Non-Indigenous Community of Alert Bay, Cormorant Island

With a population of approximately 1,400 people (including both Indigenous and non-Indigenous people), Alert Bay on Cormorant Island is the hub of the Broughton Archipelago (Figure 3). Alert Bay was established in the late 1800s to support the harvest of salmon stocks which were once plentiful on BC's coast. Cormorant Island consists of approximately 15 square kilometers of land base, of which much is uninhabited. The community of Alert Bay is comprised of a municipality of 303 people (the village of Alert Bay), an unincorporated area occupied by approximately eight individuals (Sandyville), an area of federal land reserve set aside for approximately 190 First Nations residents (Whe-La-La-U which is inhabited by members of local Kwakwaka'wakw bands other than the 'Namgis First Nation), and two 'Namgis First Nation reserves on which an additional 920 people reside (Canada Indian and Northern Affairs 2009; Statistics Canada 2006). Politically, the island is roughly divided into two halves. The northern portion of the island is comprised primarily of reserve lands including the village of 'Yalis and the southern portion of the island is a corporation known as the village of Alert Bay. Despite this political division the community is not segregated, as Mayor Michael Berry describes:

> Although Cormorant Island is divided into two major political regions, that of the 'Namgis First Nation and that of the corporation that is known as the village of Alert Bay, we have a unique and healthy relationship that allows us to work together within this common geographic setting. The 'Namgis and the village have established a historical Alert Bay Accord (the first of its kind in Canada) which has led to the development of cooperative strategies in economic development, public health development and infrastructure development that is of mutual benefit to both jurisdictions (pers .comm. January 2010).

In reference to the above quotation and in my experience the residents of Cormorant Island are a sharing, generous people who, in many ways, cohabitate the small island as a single

community. Community and cultural events are attended by both Indigenous and non-Indigenous members. Stores, sewage treatment, moorage, postal service, fire departments and hospitals are all pooled in a healthy and productive manner. Despite different historical backgrounds, the islands residents have a collective history. Many of the islands residents have worked together side by side within the fishing industry and collectively the community has felt the impacts of the reduction in fisheries resources. For some, however, there are very important distinctions between Indigenous and non-Indigenous members. This is particularly true in terms of the recognition of Indigenous rights and the role that recognition will play in shaping future changes in land ownership and jurisdiction (e.g. the treaty process) as well as fisheries management.

Kwakwaka'wakw People and Marine Management

Kwakwaka'wakw Traditional Marine Management

First Nations have lived and thrived within the Broughton for thousands of years (Arthur Dick, September 22, 2009; Boas 1966). The Broughton's abundant natural resources, particularly marine, led to the evolution of a distinctive First Nation cultural group with a common language within the Broughton: the Kwakwaka'wakw [7]. The Kwakwaka'wakw reliance on marine resources has been extensively documented (e.g. Boas 1966; Codere 1956; Galois 1994; McFeat 1966; Goldman 1975; McMillan 1988; U'mista Cultural Society 2007). Kwakwaka'wakw First Nations developed extensive marine management and harvesting techniques which were employed to maximize harvest efficiency for trade, sustenance, and ceremonial purposes (U'mista Cultural Society 2009).

7 Kwakwaka'wakw means "Those who speak Kwak'wala" and represents a collection of Nations including those who inhabit the Broughton Archipelago

Of note is the widespread development of "clam gardens" or terraces designed to build clam populations and allow for increased consistency of access to the clam resource (Harper et al. 1995). The Kwakwaka'wakw First Nations also focused extensively on the harvest of pacific salmon through advanced fishing techniques and the construction of elaborate in-river salmon traps (Harper et al. 1995). An intimate knowledge of marine resources and sustainable harvest rates led to the development of a rich and complex culture supporting a population in the region estimated at 10,000 people in 1835 (Galois 1994). Approximately twenty-five distinct tribes have been identified within the Kwakwaka'wakw cultural area. According to the U'mista Cultural Society[8] some of the tribes no longer exist, including "the Awa'etlala of Knight Inlet, the Nakamgalisala of Hope Island, [and] the Yutlinux of Cox and Lanz Islands. A few of the groups died out, while others amalgamated with other groups. Some of the villages have been abandoned for years" (U'mista Cultural Society 2009).

A complex resource management system existed among the Broughton tribes that was inextricably linked to social status and cultural beliefs. A system of social ranking was present where tribes within a cultural group speaking the same language was ranked based on individual wealth and power. This ranking was determined during a complex cultural ceremony known as the *potlatch* in which social status was validated through the giving of gifts. Within this structure, higher ranking tribes were granted priority access to lucrative natural resources (e.g. Nimpkish River sockeye salmon) (Brian Wadhams, June 2, 2009). Each tribe consisted of various numbers of kinship groups known as *namima* (Galois 1994; Pinkerton and Weinstein 1995). Each *namima* claimed the right to manage a particular resource or group of resources within a defined area in the tribe's territory (Brian Wadhams,

8 The U'mista Cultural Society was established in Alert Bay in 1974. It has a mandate to "ensure the survival of all aspects of cultural heritage of the Kwakwaka'wakw people" (U'mista Cultural Society 2009). It also serves to inform and educate the public as the history and culture of the local Kwakwaka'wakw communities.

June 2, 2009; Galois 1994). The tribe's wealth and subsequent ranking were dependent almost entirely upon the availability of marine resources. It was therefore of critical importance for each tribe to manage resources within their territory in a sustainable manner, not only to provide sustenance but to also maintain and build upon their social status (Brian Wadhams, June 2, 2009; Suttles 1990). Marriages among tribes developed important linkages between different tribal groups that are still prevalent today (Anonymous 5, July 17, 2009). Intertribal marriage allowed inherited family privileges to be shared and family bonds to be broadened and strengthened. Wealth which was gained from productive fishing areas would be distributed among different family members and among different communities based on kinship relationships derived from inter-tribal marriages. This method of distribution helped to ensure that resources were distributed equitably (Galois 1994).

The concept of community-based marine management was and continues to be a distinct part of the Kwakwaka'wakw culture. Marine resources were managed in a holistic manner based on respect, appreciation, conservation and social constructs. Within the Broughton, this community-based form of marine management was an evolutionary adaptive process where techniques and approaches to management evolved in tandem with changes in the marine environment while firmly entrenched within the cultural practices and protocols of Indigenous people.

A Turning Point in Indigenous Marine Management Practices

It is believed that Captain George Vancouver encountered the Kwakwaka'wakw people in 1792 (Wilson 1873-1880). European settlers also recognized the Broughton's potential to provide food and resources to an ever increasing settler population. As a result, the first European settlement and the subsequent establishment of a non-Indigenous economy

occurred shortly thereafter in the early 1800s (Salverda 2005). Unfortunately, European contact also introduced new diseases (including influenza, measles and smallpox) to the Indigenous people. These diseases devastated communities. It is estimated that almost one third of Indigenous people on the coast of BC died as a direct result of diseases introduced by European settlers (McMillan 1988). Due largely to a drastic decline in the Indigenous population and a growing non-Indigenous economy and presence, European marine management techniques gradually superseded traditional practices. As a result, the Kwakwaka'wakw people of the Broughton were increasingly challenged to manage marine resources based on their traditional principles.

As time progressed, this restriction was further increased through the development of the *Indian Act*. The *Indian Act* (R.S., 1951, c.1-5) was established in 1876 through provisions within the *Constitutions Act* (1867), which allowed Canada's federal government specific and exclusive regulatory authority to legislate in relation to "Indians or Lands Reserved for Indians". With the establishment of the *Indian Act*, the autonomy of "Indians" (who as of this writing identify themselves as First Nations or Indigenous peoples see footnote 2) was further eroded. In terms of the Indigenous ability to maintain and practice traditional management within the marine environment the *Indian Act* had a number of effects. First, the *Indian Act* defined the "status Indian" based on a series of criteria that sought to separate those who were entitled to live on federally designated "Indian" lands and use federally designated "Indian" resources. The criteria used to establish status were based on what are now recognized as flawed principles, as evidenced by numerous amendments to the *Act*. The identification of "Indian status" had many other implications as well. Within the original *Act*, status Indians could not vote (unless they disenfranchised themselves), they could not sit on juries and they were exempt from conscription in a time of war (Lawrence 2003). A

"person" as defined by the *Indian Act* prior to 1951 was "an individual other than an Indian" (Mossand Gardner-O'Toole, 1991). Potlatch ceremonies, a vital component in the community-based traditional marine management process, were outlawed under the *Act*. The *Act* sought to separate family groups and disconnect "Indians" from involvement in societal processes both within their own societies and those which were evolving within Canada. The *Act* removed children from their homes and placed them in residential schools, profoundly impacting the process of Indigenous education and effectively served to mostly remove a generation from their land and practices. As described above, the inherent paternalistic concept adopted by the federal government that they were a better judge of Indigenous interests than the Indigenous people themselves served to completely undermine the ability of First Nation peoples to maintain traditional management practices within the Broughton.

Politically, First Nations within the Broughton are still largely separated from one another as a result of past (e.g. the *Indian Act*) and current (e.g. treaty) governmental processes. That said efforts have been made to work together. Many of the Broughton First Nations, including the 'Namgis First Nation and the Gwawaenuk Tribe, have amalgamated into four larger groups which constitute the Musgamagw Tsawataineuk Tribal Council (MTTC) (see footnote 5 above). It is important to note, that although each Indigenous groups' right to manage their land was compromised through the implementation of European management structures, Indigenous communities within the region still continue to affirm that the responsibility for the maintenance, stewardship and ownership of each traditional territory is held by the chiefs, as it would have been prior to European contact some 200 years ago (Arthur Dick, September 22, 2009; Brian Wadhams, June 2, 2009;

Anonymous 19, August 15, 2009; Fred Speck, September 15, 2009). The struggle to maintain this responsibility is at the forefront of marine management discussions within the Broughton.

Contemporary Marine Management and the Kwakwaka'wakw People

Contemporary marine management policy and decision-making are a federal responsibility implemented by the Department of Fisheries and Oceans (DFO) whose primary role is to "deliver programs and services that support the sustainable use and development of Canada's waterways and aquatic resources" (Canada Fisheries and Oceans 2010). Contemporary Canadian policies for the management of marine resources are premised on a centralized top-down approach. Centralized government-based approaches to marine management are generally concerned with broad scale issues that do not necessarily address the needs of small coastal communities. Pinkerton and Weinstein (1995) state that "one of the biggest problems in fisheries management stems from the fact that our management agencies have been trained to manage fish populations but not people" (1). At one time, small coastal communities were deeply involved in the management of local resources, using a bottom-up approach that encouraged community involvement, linkages between communities and user participation. The current centralized top-down approach to resource management is poorly designed to include user participation in marine management at a local scale. In addition, current management practices rely on western science-based knowledge to set conservation and management goals and often fail to recognize the human, social, and cultural capital[9] that is available in small communities throughout the coast.

Within the last thirty years, fisheries resources (salmon stocks in particular) in the Broughton have swiftly and drastically declined. At one time there were over 100

9 Social and cultural capital, as described by Pinkerton (1995), is "what individuals and communities build up over time in the way of knowledge, skills, experience, attitudes and values about how to solve problems" (2). This includes traditional ecological knowledge (TEK).

commercially viable salmon streams within the Broughton; today none of them are commercially fishable (Anonymous 1, May 4, 2009; Canada, Fisheries and Oceans FISS 2010). The DFO's reaction to the significant reduction in salmon returns in the 1980s was to implement the "Pacific Salmon Revitalization Strategy" locally known as the "Mifflin Plan", named after the then minister, Fred Mifflin. In an attempt to conserve stocks, the plan set out to reduce the size of the coastal fishing fleet. Fishing licenses owned by local fishermen were purchased by the federal government and BC's coast was divided into sections in an attempt to control and limit fishing in specific areas. First Nations fishers within the Broughton were faced with a difficult decision during this time as described in an interview with Dr. Martin Weinstein, a long time resident of the Broughton and noted author on marine management and policy:

> One of the consequences of the latter stage, the Mifflin plan for example, was providing a buyback of fisherman's licenses. This had a convergence in that a significant portion of the people that held those licenses were skippers and boat owners who were aging; they were ready to retire and lots of them didn't have a retirement nest egg. At the same time there were declining fish stocks and many people saw a questionable future for the next generation to stay in the fishery. There were a lot of people that looked at their state/their financial condition. The debate asked: should I hold onto my license and my boat and provide for my kids as a fisherman? This is our culture and this is our history but is this really a time to not tell my kid to become a fisherman because it's not a good time for the fishery? And at the same time, if I bail out of the fishery I can obtain the nest egg that I need for my retirement. A lot of people chose the latter. (Martin Weinstein, May 23, 2009)

To communities in the Broughton, the Mifflin Plan had a significant impact in that it essentially removed many local First Nations (as well as non-First Nation) fishers from the fishing industry. Government purchased licenses were amalgamated and the license buyback system created an unnatural market place which caused the value of fishing licenses to drastically increase. Many locally owned licenses were sold due to the retirement of aging

skippers and financial hardship related to low cycles in the fishing economy. Younger local fisherman interested in pursuing fishing as a means to support their families and communities were no longer able to afford to purchase a fishing license and consequently lost their ability to fish commercially (McGaw 2003). Thus, not only were local communities no longer a part of the marine management and decision-making process but many community members within the Broughton had been essentially removed from utilizing one of the few sources of income available - commercial fishing. To combat this trend, the DFO sought to provide licenses to the communities themselves through the development of an Allocation Transfer Program. Through this program, the intent was to provide small Indigenous communities (not individuals) with a license which would allow them back into the fishery. One of the issues with this approach to fisheries management is that despite a number of court rulings that affirmed the Indigenous right to fish; Indigenous communities were again required to commit themselves to a government-based top-down marine management strategy for the management of marine resources within their territorial waters rather than develop strategies for themselves. McGaw (2003) describes this clearly "[the] DFO has attempted to regain, through substantial cash and license transfers, its right to manage the fisheries" (418).

Despite the DFO's attempts to amend fisheries policy to recognize Indigenous rights (see chapter 1) community members interviewed during this research project felt that the monetary and cultural benefits of commercial fishing in local waters was attained primarily by individuals who lived in other parts of the coast, rather than locally. Several in-depth studies have clearly indicated that the ability to fish in local waters (i.e. license ownership) is heavily concentrated in the urban south of the province (Ecotrust Canada 2010). While the fishery resource within the Broughton continues to decline at drastic rates local peoples find

themselves with little or no say in how local fisheries are managed; they have been removed from marine management and mostly removed from the fishery itself. As the fishery has declined, so too has the presence of the DFO; fewer fishing vessels and fewer fish were seen to require fewer fisheries managers. As stated in an interview with Eric Hunter, a DFO charter patrolman[10] for over 20 years:

> in 2003 there was one [charter patrolman] in an area that had previously been covered by seven or eight or even 12 to 15 charter patrolman in the 60s and 70s... in terms of fisheries officers, the Alert Bay operation had closed down at least 10 years before 2003 so there was zero presence in Alert Bay" (Eric Hunter, July 29, 2009).

Although top-down management strategies are consistently blamed for resource depletion and the increased vulnerability of small coastal resource-dependent communities (Armitage et al. 2007); the Canadian federal government's approach to marine management persists and is facing increasingly difficult challenges including: funding cuts, significant declines in marine species, inter-governmental conflict (provincial and federal) and, more recently, the ever present and growing opposition from First Nations groups where marine management policy has affected Indigenous rights (Dearden, 2002).

Recent Kwakwa̲ka̲'wakw Management

The MTTC First Nations of the Broughton have worked with government agencies in the past in an effort to become more involved in the DFO's marine management strategies. These collaborations have included working with governments through the AFS, AAROM and PICFI processes implemented by the DFO. One of the most significant ventures was the development of the Kwakiutl Territorial Fisheries Commission (KTFC) which included the 'Na̲migs First Nation and the Gwawaenuk Tribe.

10 Charter Patrolmen are DFO government contractors who live within local communities. Their mandate is to monitor commercial fisheries and collect scientific data. Many interview participants identified the DFO charter patrolman program as one of the most effective and locally useful DFO management policies.

The KTFC was an active and motivated organization which was originally comprised of eight member Nations (Vodden 1999). The KTFC was devoted entirely to fisheries management activities within the Broughton. Their projects included: monitoring and enforcement, enhancement, habitat restoration, research and stock assessment, land use referrals, facilitation and coordination, stakeholder consultation, shellfish aquaculture, education and training, marketing, policy management and input, and license leasing (Vodden 1999). The KTFC developed a variety of initiatives within the Broughton and played an influential role in lobbying for the inclusion of local communities in the management of local fisheries. The KTFC was established in 1990 with funding provided primarily by the AFS program (Kwakiutl Territorial Fisheries Commission 1998). For many years the organization promoted co-management activities within the region, collected valuable habitat information and introduced a number of initiatives designed to benefit local communities (e.g. locally operated oyster aquaculture). Unfortunately, in the late 1990s the organization began to break down. Member Nations began to disengage from the process and establish their own fisheries agreements under the Aboriginal Fisheries Strategy (AFS), which led to a decrease in funding from the DFO. As more and more member Nations withdrew from the process DFO funding swiftly diminished, causing the KTFC to lose its ability to function. As a result, the KTFC was disbanded in 2003.

One of the most significant reasons for the downfall of the KTFC was a lack of institutional development both laterally between member Nation communities and vertically between member Nations and the federal government (DFO). In the past, Indigenous groups of the Broughton lived within a complex social and cultural structure based on deeply rooted traditional beliefs. Today, these Nations have been forced into a colonial-based structure that, by both process and design, has divided the Nations of the Broughton through non-

holistic per-capita funding initiatives and a European based institutional structure which has failed to recognize the social constructs of local First Nations (Arthur Dick, September 22, 2009).

One of the primary goals of this thesis research is to assist with the development of a planning strategy that will work on both horizontal and vertical scales and that is place specific to the Broughton Archipelago. As will be described later, successful co-management in the Broughton requires not only that the component parts of the plan are in place (policy development, funding, partners, mandates, etc.) but also that the community-based institution itself is developed locally in a manner that is acceptable and applicable to those who are involved.

Chapter 3

Literature Review: An Introduction to Community-Based Adaptive Co-Management

There is a tremendous amount of literature pertaining to the concept of collaborative co-management mechanisms. For the purposes of this research I selected literature sources with a specific focus on collaborative management models within the marine environment. Literature resources were selected based on recommendations by community members, who suggested local and regional sources and my thesis advisory committee who suggested resources pertaining to co-management theory and practice. Additional resources were gathered throughout the research process.

The terms "community-based management", "co-management" and "adaptive management" each have their own specific narratives, history and definitions. These terms are used independently or in combination and have been defined in a variety of ways by different authors and user groups. Each cooperative management model employs a site specific design, which has led to an often confusing list of terms used to describe each of the various processes. Throughout the evolution of cooperative management, the literature indicates that the concept of co-management is "more varied, more complex and more dynamic than might be concluded from earlier literature" (Berkes 2007, 21). This chapter introduces the concept of community-based adaptive co-management as a form of cooperative management. The evolving theory behind approaches to co-management is addressed, and local and international examples of co-management are presented.

What is Community-Based Adaptive Co-Management?

There are many terms used to describe collaborative management regimes. For the purposes of this research I have used several commonly used terms (community-based, adaptive and co-management) in tandem to describe a collaborative management process with distinct component parts. The compound term "community-based adaptive co-management" is best defined and discussed through an analysis of each of the constituent elements.

Community-Based Management (CBM) has existed in various forms before recorded history. As explained previously, Indigenous groups utilized local forms of CBM prior to European contact (Sherry and Myers 2002). This type of management system is based on the premise that those living and working next to a given resource are best able to manage for changes in that resource (White et al. 1994). The concept of CBM is focused on the people themselves and their involvement in the progression of resource management (Pinkerton and Weinstein 1995). CBM is a process of community empowerment (Wiber et al. 2009) where a distinct community manages resources within a defined area to meet its own particular needs. CBM is a consensus-driven process utilizing site-specific conflict resolution mechanisms to achieve a balance in the sharing of resources and decision making power of individuals and communities (Pomeroy and Rivera-Guieb 2006).

From a community perspective, CBM is a bottom-up approach that situates the power to make management decisions at the community level while allowing for the basic principles of accountability to be realized (Berkes and Berkes 2009). It is the communities themselves that utilize their own management methodologies and information (e.g. Traditional Ecological Knowledge) to make decisions at a technical and social level which will directly impact their way of being and livelihoods (Pinkerton 1989).

The origin of the term "co-management" is unclear. Yandle (2008) states that the term was coined by Sven Jentoft approximately 20 years ago; however, Pinkerton (1989), suggests the term originated during the *Boldt Decision* by the US Treaty Tribes in Washington State, which occurred in the late 1970's. Regardless of the term's specific origin, the practice of co-management has existed for much longer (Jentoft 2000). Japan, for example, has one of the world's oldest co-management regimes dating back to the Meiji Fishery Law of 1901 (Makino and Matsuda 2005) and Norway documented a legal management arrangement with fishers in the 1890s (Jentoft and McCay 1995). In general, the co-management of common pool resources, such a marine fisheries, is a sharing of both power and responsibility between the government and local resource users (Berkes and Berkes 2009; Carlsson and Berkes 2005; Pinkerton 1989). It is important to note that, in BC, the term 'government' applies to First Nation, federal and provincial governments indicating that lateral power sharing among governments is considered co-management as opposed to only vertical power sharing between governments and communities as the statement implies.

Co-management can move beyond the community level to address issues at a broader scope and scale while developing functional relationships between different stakeholders including government(s) and non-government agencies and communities (Pomeroy and Rivera-Guieb 2006). Co-management allows for government to play an active role but it is important to note that this role should be based on the development of a relationship with the community and its members (Wiber et al. 2009; Chuenpagdee and Jentoft 2007; Fraser et al. 2006; Carlsson and Berkes 2005; McGaw 2003; Cassidy 2004; Jentoft 2000). The purpose of any co-management regime is more than just the management of natural resources; of equal importance is the management of people and their relationship to one another

(Weinstein 2007). Trust building and an equal and equitable role in resource management are key ingredients in any successful co-management regime (Pomeroy and Berkes 1997).

As the literature on co-management arrangements has evolved it has been increasingly noted that the use of adaptive management is of great value in the development of new co-management regimes (Armitage et al. 2007). Within this research context, adaptive management is "learning-by-doing", a process which was originally developed to deal with the uncertainty that existed within newly established management regimes (Berkes and Berkes 2009, Walters 1986). As each region has site-specific characteristics, the development and implementation of a co-management regime must be adaptive to changing social and environmental contexts (Carlson and Berkes 2005, Davenport and Anderson 2005, Pinkerton and Weinstein 1995). Time-tested co-management regimes recognize that the concepts of co-management — including relationship building, capacity building, social learning and institution building — are not static once put in place (Armitage et al. 2007). The relationship that managers and communities have with their environment must be allowed to evolve over time and adaptive management is an integral part of that process (Pomeroy and Rivera-Guieb 2006).

Adaptive management often attempts to quantify uncertainties through the use of computer modeling and experimentation (Berkes and Berkes 2009, Walters 1986). Traditional Indigenous perspectives on resource management are premised on the idea of the holistic interconnection of all things and that the natural environment is cyclic and forever changing. It is within this conceptual understanding of environmental systems that resource management must be adaptive (Berkes and Berkes 2009).

The term Community-based Adaptive Co-management (CBACM) is inclusive and refers to a bottom-up collaborative approach to natural resource management. The literature

indicates that an emphasis on process and learning is key to the development of new collaborative management regimes (Berkes and Berkes 2009; Armitage et al. 2007; Weinstein 2007; Jentoft et al. 2003; Pomeroy and Berkes 1997; Pinkerton and Weinstein 1995). There are many similarities between CBM, co-management and adaptive management; however, each has its own specific goals which, when linked together, help to strengthen the process.

For example, CBM is community focused and community driven (Pinkerton 1989). It allows community members to become directly involved in the management of marine resources that are important to them. However, not all of the resources of value to local communities can be managed at a local scale. Marine resources cross territorial and administrative boundaries (e.g. migrating pacific salmon) as do potential impacts (e.g. pollutions sources) and benefits. Therefore, a co-management relationship with government (in this case First Nations governments and the federal government of Canada through the DFO) is required to manage resources between and among different user groups (Berkes and Berkes 2009; Wiber et al. 2009; Carlsson and Berkes 2005; Pinkerton 1989). Co-management allows for community involvement in the regional decision-making process whereby governments and communities receive the benefit of information and idea sharing (Berkes and Berkes 2009). Co-management also allows communities to share resources among governments and with government agencies whose capacity and infrastructure cannot be matched at the local community scale (Doug Aberley, September 9, 2009; Pinkerton 1989).

The "glue" that holds these two regimes together is the development of an adaptive relationship (Armitage et al. 2007). Marine management plans need to be adaptable to changing socio-economic conditions, including markets, changing stakeholders and

environmental conditions. In addition, new collaborative management regimes will usually experience problems, disagreements and concerns (Pomeroy and Rivera-Guieb 2006). It is the ability of a given management regime to adapt to these issues that is pivotal to its success (Pomeroy 2007). The literature indicates that CBACM plans are not static; rather they must be designed to be flexible, adaptable and to evolve over time (Berkes 2007; Armitage et al. 2007; Pomeroy and Rivera-Guieb 2006, Walters 1986). In addition, it is important to note that First Nations and local communities will be extremely wary in new collaborative relationships. If there isn't a mechanism that allows for a sense of fair play to be nurtured new collaborative frameworks have the potential to collapse.

Components of Community-based Adaptive Co-management

In his chapter on "Adaptive Co-Management and Complexity", Berkes (2007) describes six different elements of CBACM[11]: (1) power sharing, (2) institution building, (3) trust building, (4) process and social learning, (5) problem solving and (6) governance. These concepts are pivotal to an understanding of the elements of CBACM and have been discussed by a variety of other authors (Yandle 2008; Chuenpagde and Jentoft 2007; Pomeroy 2007; Weinstein 2007; Pomeroy and Rivera-Guieb 2006; McGaw 2003; Pomeroy and Gerkes 1997; Pinkerton 1989; Pinkerton and Weinstein 1995; Ostrom 1990). Each of these concepts will be discussed below and supported through the use of local, regional and global examples which have benefited from the CBACM process.

CBACM as Power Sharing

Across coastal BC marine resources are managed primarily by the federal government of Canada through the Department of Fisheries and Oceans. However, due to the drastic

11 It is noted that Berkes (2007) does not explicitly use the term CBACM in this chapter.

decline in what was once a thriving fishing industry, there has been a push from local resource users to manage resources collaboratively at a local scale (Weinstein 2007). This has led to a number of co-management agreements with First Nations throughout the coast of BC. One of the most important aspects of any collaborative management model is that there must be some form of power sharing between the different parties (Berkes 2007).

In BC, this raises the issue of who has the right to manage fisheries. Pinkerton and Weinstein (1995, 9) suggest that most Canadians might identify three possible management rights scenarios:

1. An absence of rights: where the fishery is open access and resources are not managed locally or by government (e.g. beyond the 200 mile limit).
2. Private Rights: where individuals who own licenses with a specific quota are entitled to access their portion of the total harvest.
3. Government Rights: where government has the legal right of ownership of marine resources and a right to manage those resources. The DFO is currently the government agency that develops policy and management regimes for fish populations and other marine species on coastal BC.

There are also two other management rights scenarios which are identified in the co-management lexicon: community rights (Pinkerton and Weinstein 1995; Ostrom 1990) and Indigenous rights (Jentoft 2007).

Community rights are generally considered to be informal rights where communities manage resources on their own "simply by doing it" (Pinkerton and Weinstein 1995, 9). Community rights allow communities to make rules and manage resources at a local or regional scale (Pinkerton 1989). Examples of informal and formal community rights exist throughout the world, particularly in small non-westernized countries where small-scale

fishing activities are prevalent (Pomeroy and Rivera Guieb 2006). For example, as described by Katon et al. (1999), the governmental structure on San Salvador Island (Philippines) was highly centralized and unable to manage fisheries in remote areas. In addition, the fishers themselves were too fragmented to form coalitions or management groups, which resulted in an open access fishery without a formal form of management. This lack of management structure led to unsustainable harvest rates that had a direct impact on the livelihoods of local community members. This prompted the communities themselves to assert their informal rights to develop a community-based coastal resource management project designed to protect local coral reefs. These community rights began as informal rights to protect the degradation of the reef which was directly impacting the livelihood of local fishers and communities. As in other cases, these informal community rights evolved into a formal set of community-based rights once the positive results of the activity were recognized by regulatory agencies.

Another example of community-based rights is found in the Japanese fishery. As Makino and Matsuda (2005) explain, local Japanese fishers have been the primary decision makers on fisheries resource management for thousands of years. During and prior to the Early Feudal area (1603-1700) communities controlled fisheries adjacent to their communities. They assumed an informal responsibility to manage resources which included specific fishing policies and the exclusion of outsiders. During the Modernization Period (1868-1901) the Japanese government attempted to implement a centralized top-down fishing strategy which would have essentially removed the informal rights of communities to manage their own fisheries. As with the example above, the centralized Japanese government simply didn't have the capacity to enforce fisheries management policy and the

plan failed. This resulted in a return to the customary rights of communities to manage local fisheries and served to add formality to community-based marine management.

In Canada, Aboriginal rights are recognized and affirmed by Section 35 of the *Constitution Act*, 1982. In terms of fisheries management, the concept of Indigenous rights can be summarized as the right to harvest and utilize traditional resources by the most efficient means available throughout their traditional territory and under their own system of management and governance (Davis and Jentoft 2003). As described earlier, Indigenous rights are viewed by the government of Canada as non-absolute and must be reconciled with other government responsibilities (e.g. the conservation of marine resources and public safety) (Davis and Jentoft 2003). With the affirmation of Indigenous rights the potential for a regime shift, in terms of resource management, exists.

One of the key problems with Indigenous and government co-management initiatives has been the issue of power distribution and sharing. Borrini-Feyerabend et al. (2004) point out that power sharing can be one of the largest impediments to co-management as it can make the formation of partnerships problematic. Pomeroy and Rivera-Guieb (2006) state that "imbalances of power are not conductive to even-handed negotiation" (203). Cassidy (2004) explains that there are multiple levels of power sharing which must be addressed; indicating that First Nation governments and the federal and provincial governments seek power laterally and vertically.

In BC, the provincial government manages resources within the freshwater environment and the federal government manages resources within the marine environment; questions over decision-making rights often arise at the confluence of these resource systems. First Nations are highly diverse; each Nation has its own specific self-government

arrangements (Cassidy 2004). Historically, the traditional territories of many First Nations overlapped with one another. Within these regions of overlap First Nations had specific culturally-based methodologies which allowed them to co-exist (see Chapter 2). The introduction of the western-style concept of land "ownership" has challenged relationships between many First Nations in BC. The power dynamics between and among the First Nations and different regulatory agencies must be addressed if a successful co-management regime is to be successfully implemented (Fraser et al. 2006; Davis and Jentoft 2003; McGaw 2003; Ostrom 1990; Pinkerton 1989).

CBACM as Institution Building

The concept of CBACM depends on the ability for local communities to exercise their traditions of self-organization and decision-making (Berkes 2007). Davis and Jentoft (2003) point out that "the efficacy of fisheries management is largely a question of institutional design and dynamics" and that they are "crucial to the fishing industry, its structure and operation" (137). As described in Chapter 2, specific institutions which addressed the concepts of resource allocation, marine management, decision making, conflict resolution and power sharing have existed between and among First Nations in the past. These community-based institutions were based on deeply held beliefs and cultural values. Barrett et al. (2001) and Pinkerton (1989) point out that it is easier to adapt existing institutions that are relevant to the communities rather than to develop new and untested ones from scratch. In their work on tropical biodiversity, Barrett et al. (2001) further state that "the best management designs adapt to suit the biophysical and socioeconomic context and commonly involve the distribution of authority across multiple institutions rather than concentrating it in just one" (497). Davis and Jentoft (2003) agree that institutions which

include the social, economic and cultural underpinnings of the local management area are considered to be robust and dependable, and are able to survive changes in personnel and socioeconomic constructs.

It is necessary for the regulatory agencies to reform their role in co-management schemes (Pomeroy and Berkes 1997). Government legislation and policy must be introduced to provide an enabling environment which will allow community-based institutions to flourish and establish a mechanism for joint decision making to occur (Pomeroy and Berkes 1997). For example, on the west coast of Vancouver Island, several institutions were established at both the community level and at the federal level to assist with the development of a new co-management relationship. A diversity of community members including First Nations, commercial and recreational fishermen, local governments, and environmental and volunteer groups established the Regional Aquatic Management Society (Day 2003). Members of this institution were able to present their views and develop marine management strategies and goals at a local level. These common community-based ideas were then presented to regulatory agencies within a separate institutional framework known as the West Coast Vancouver Island Aquatic Management Board (WCVIAMB) (Pinkerton 2007). This institution allowed regulatory agencies to engage with local community-based institutions to develop co-management strategies in a collaborative fashion based on community goals and aspirations (Day 2003). It is this interplay between government agencies and organized community groups that is necessary for co-management to evolve and prosper (Ostrom 1990).

CBACM as Trust Building

In order for community-based and government-based institutions to interact cooperatively, trust must be established (Iain and Hunt 2006; Day 2003; Davis and Jentoft 2003). One of the first steps in moving towards co-management is the formation of a community-based institutional arrangement in which all of the local community stakeholders can discuss strategies and goals as they relate to marine management (Pomeroy and Rivera-Guieb 2006). In the case of the WCVIAMB, community members were able to draw on a variety of informal and formal relationships which the communities had developed over time (Day 2003). The concept of trust and consensus building was in large part based on the willingness of the communities and various stakeholders to demonstrate their commitment to the process through significant contributions of time, money and effort (Day 2003).

The development of trust between different community groups takes time and trust building is a process that is required before organizations and institutions can begin to develop. Weinstein (2007) describes this process as "cutting through any adversarial history" (20) which may be prevalent between different community groups at a local scale. This involves the recognition that different community groups (e.g. First Nations' and non-First Nations) may have different worldviews. The definition of terms such as "conservation" and "marine planning" may be understood in different ways within different community groups. Day (2003) identified that tension among participants with different world views led to persistent organizational challenges in the WCVIAMB co-management process. Cross-cultural co-management examples are prevalent throughout the world and it is trust and respect that make partnerships possible and effective (Fondahl et al. 2009; Berkes 2007). Each group must recognize and understand similarities and differences and be able to "adjust

the ways that they categorize experience thus building new, shared metaphors" (Berkes 2007, 27).

One of the key issues which tend to inhibit the development of a lasting co-management relationship between government and communities is the "us vs. them" mentality (Pinkerton and Weinstein 1995). Through many years of ignoring or at least undervaluing the cultural and human capital of BC's coastal communities the DFO has, in many ways, alienated itself from the region. The unexplained introduction of regulations which were contrary to local concepts of resource use and management (e.g. the introduction and support of industrial fish farming operations) has led to low rates of compliance and acceptance of DFO management strategies and a general reduction in community confidence in the DFO to manage marine resources (Weinstein 2007).

With many small community groups seeking to undertake co-management, trust between the communities and regulatory agencies is often very difficult to establish (Pomeroy 2007). Communities accuse regulatory agencies of the mis-management of local and regional fish stocks, which has directly impacted their way of life both financially and, in many cases, culturally (Pinkerton 1989). Similarly, government officials may "equally distrust fishermen, whom they see as unrelenting predators who will eliminate the last fish unless more strictly regulated" (Pinkerton 1989, 4). Regulatory agencies are unwilling to relinquish part of their control over local fisheries if they believe that local communities are incapable of effective marine management (McGaw 2003).

Community-based co-management regimes require the development of new relationships based on trust and dialogue where governments and local communities work together to the mutual benefit of each group (Pinkerton and Weinstein 1995; Pinkerton

1989). The successful co-management regime is based on the trust which is extended both laterally and vertically between and among each of the partners to work collectively towards a common goal that is in the best interest of those concerned and of the environment (Pomeroy and Rivera-Guieb 2006).

CBACM as Process and Social Learning

As the term "adaptive" in CBACM implies, co-management regimes are an ever evolving process in which all parties involved are engaged in a learning-by-doing exercise. As with traditional management practices, CBACM regimes are not static and should not be categorized as an endpoint but rather as a social process which constantly evolves and adapts to new external and internal inputs (Berkes 2007; Charles 2007; Pomeroy and Rivera-Guieb 2006). Pomeroy and Rivera-Guieb (2006) describe co-management regimes as an "iterative process of revisiting and revising plans and activities, determining whether objectives have been achieved, adapting to new conditions, and setting new objectives" (223). It is the adaptive nature of a given co-management regime that contributes greatly to its overall success and resiliency. In terms of relationship and trust building, a co-management plan need not overemphasize the specific nature and power dynamics of each relationship at a given period of time because those relationships and the distribution of power will change over time as the process evolves (Berkes 2007).

Social learning involves recognition by both the communities and the regulatory agencies of the contribution that each partner can make to the process of co-management (Wostl-Pahl and Hare 2004). In recent years the concept of social learning and its relationship to the management of natural resources has gained in importance (Wostl-Pahl and Hare 2004). It is a process by which a "society gathers and internalizes knowledge about

the changing conditions of both its internal and external environment" (Friedman 1971, 246). A clear and evolving understanding of different world views is also a part of the process of social learning. For example, Indigenous people have different ways of knowing which can be described as a diverse intellectual heritage derived from relational forms of learning that have evolved over long periods of time (Berkes 2007; Wilson 2008; Low 2007). As described by Dale (2007), a successful collaborative regime must fully utilize the "knowledge base in the resource system" (84). This introduces the concept of social capital or human capital, which can be described as "what individuals and communities build up over time in the way of knowledge, skills, experience, attitudes and values about how to solve problems" (Pinkerton and Weinstein 1995, 2). Social capital is essentially a wealth of knowledge that is directly applicable at a local scale. This vast knowledge base has also been described as Traditional Ecological Knowledge (TEK) and Local Ecological Knowledge (LEK) (Low 2007).

Historically, management agencies have had a difficult time with the inclusion of TEK, LEK and other forms of locally-based knowledge. This type of information does not follow the quantifiable and positivistic approach to the management of resources that regulatory agencies have utilized in the past which has been described as Western Scientific Knowledge (WSK) (Low 2007). More recently, the value of TEK and LEK information is slowly being recognized by regulatory agencies. Low (2007) argues that the integration of different information systems such as TEK and WSK can assist with relationship building and an understanding of social learning.

The process of social learning is especially important during the development of new management regimes where changes in social practice, stakeholder roles and stakeholder responsibilities are required (Wostl-Pahl and Hare 2004). It is this recognition and

integration of different forms of knowledge that is linked to the flexible and dynamic nature of a successful CBACM regime.

CBACM as Problem Solving

With any co-management regime, problems may arise on a variety of different levels. The goal of most co-management regimes is to solve a problem or realize an opportunity within the natural resource environment (Chuenpagdee and Jentoft 2007); this is part of the adaptive process. For example, with the WCVIAMB, local communities were unhappy with current marine management policies and have used co-management to effect change in how fisheries are managed within their local area as well as to develop new fishing opportunities on a local scale (Day 2003). Chuenpagdee and Jentoft (2007) state that the most common driver for the development of a fisheries co-management regime is a crisis in the fishery that results from overfishing, pollution and inappropriate fishing practices (e.g. capture of juveniles, improper gear types, poaching). They go on to clarify that it is often not only the crisis in the fishery but the associated social problems that arise (e.g. loss of income, lack of food) as a result of the crisis that act as the primary driver towards resource co-management. It can therefore be concluded that successful co-management regimes require both a focus on the utilization of the resource but also that managers "are able to pose and address social science questions" (Wiber et al. 2004, 459). Wostl-Pahl and Hare (2004) agree that "human dimension plays a key role in resources management" (193). Carlsson and Berkes (2005) state that "co-management is a continuous problem-solving process, rather than a fixed state, involving extensive deliberation, negotiation and joint learning within problem-solving networks" (65).

The ability to recognize the social context under which problems arise is a key ingredient to conflict prevention and consensus-building. With the Indigenous peoples of BC, the process of problem solving has been well established under separate collaborative management regimes. For example, over 50 First Nations[12] are or have been involved in the BC treaty process. Treaty process discussions can be viewed as a form of consensus-building as both parties wish to come to an agreement regarding land claims and other treaty rights. The lessons learned in one forum are transferable to another and will evolve to address new criteria and relationships. As with the treaty process, the devolution of power must be viewed as a result of the co-management process and not the starting point (Berkes 2007).CBACM strategies are not solely focused on managing environmental resources, they are equally a process where "high priority is given to questions of communication, perspective sharing and development of adaptive group strategies for problems solving" (Berkes 2008, 194). Identification of the issues or problems to be addressed is the first step. The real effort must be focused on finding equitable solutions to those problems which requires strong cooperative relationship development as much as scientific and traditional knowledge of the resource.

CBACM as Governance

Governance as described by Graham et. al (2003) is a "process whereby societies or organizations make their important decisions, determine whom they involve in the process and how they render account" (1). In Canada, the most common form of marine management involves a top-down centralized process where the federal government (through the DFO) retains the power to make policy and management decisions (Wiber et al. 2009). This form of marine management expresses the federal government's

12 See http://www.gov.bc.ca/arr/treaty/regional.html for a continually updated list of First Nations involved in the treaty process.

proprietorial claim over Indigenous territorial coastal waters (Davis and Jentoft 2003). This claim has been solidified through the development of extensive fisheries management policies that are designed to regulate access to resources and participation in fisheries (Davis and Jentoft 2003). Despite the fact that government based top-down management strategies are often blamed for resource collapse, they have persisted and continue to dominate fisheries management in BC and Canada (Davis and Jentoft 2003; Jentoft et al. 1998; Pinkerton 1989).

The recognition of Indigenous rights, the treaty process and concerns expressed by fishers have led regulatory agencies to re-think contemporary models of marine management (Wiber et al. 2009; Berkes 2007; Pomeroy and Rivera-Guieb 2006; Jentoft 2003; Pinkerton 1989; Pinkerton and Weinstein 1995). There has been a clear shift in the evolution of marine management with movement towards a people-centered approach where the community is an essential partner together with governments and other stakeholders (White et al. 1994). Berkes (2007) states that "co-management as governance is consistent with the principles of good governance – legitimacy and authority based on a democratic mandate, transparency (openness), and accountability" (31). Pinkerton and Weinstein (1995) state that "the scientific literature shows that an effective way to produce appropriate, workable and enforceable regulations is for fishing communities to write, or participate in writing them" (5). Indigenous people have a recognized constitutional right and entitlement to fisheries resources within their traditional territories. Often, as described by Davis and Jentoft (2003), regulatory agencies approach these rights and entitlement with "the mindsets and institutional tools of paternalistic providers, expecting 'their' indigenous peoples to be content with and appeased through receiving state-mediated 'largesse'" (189). Co-management examples such as the WCVIAMB described by Day (2003) and Pinkerton (2007) indicate that the paternalistic mindset is beginning to change. Berkes (2007) states that a true collaborative

relationship requires the devolution of power to local communities and groups. Davis and Jentoft (2003) describe the recognition of Indigenous rights as an opportunity for non-Indigenous fishing communities and Indigenous communities to form new partnerships in coastal zone management and achieve real governance through the collaborative management of marine resources.

Chapter 4

Research Design and Method

The primary purpose of this research project is to develop a site-specific collaborative resource management framework for the communities of the Broughton. Such a framework must ensure that the goals and objectives of local community-member experts as they relate to marine management are identified and utilized. To that end this research is informed primarily through an Indigenous community-based participatory approach to research (Wilson 2008; Pomeroy and Rivera-Guieb 2006; Smith 1999) focusing on three distinct communities within the Broughton: the 'Namgis First Nation, the Gwawaenuk Tribe and the non-First Nation community members of Cormorant Island (village of Alert Bay). To ensure that community participation was as robust as possible a number of co-operative research tools were utilized including: purposeful sampling (Bradshaw and Stratford 2005), snowball sampling (Creswell 2007), collaborative development of research design and structure (Smith 1999), and clear dissemination of research results via community meetings, presentations and local community newsletters (Creswell 2007; Pomeroy and Rivera-Guieb 2006; Smith 1999). Throughout the research process the inclusion and consultation of participants regarding the direction of this research and its goals was of primary importance.

As this project had a principal focus on research with First Nations it was important to address issues related to cross-cultural research (Wilson 2008; Smith 1999), as I am not of First Nations descent. To address these issues and ensure consistency in my approach, this research was developed and implemented within a specific conceptual framework: that of Indigenous methodologies (Wilson 2008; Smith 1999). This framework was further

strengthened by conducting my research in accordance with the research protocol developed by the 'Namgis First Nation which specifically itemized the relationship of the researcher to research participants (Appendix A). In addition, Indigenous approaches to research were elaborated upon through the inclusion of concepts and theories developed by other marginalized groups including feminist perspectives on research (Mountz 2003; Nast 1997; England 1994; Staeheli 1994). Aspects of feminist theory were utilized in an effort to complement themes that were described within the Indigenous perspective, including concepts regarding power dynamics, and "critical and reflexive forms of engagement" (Nast 1994, 55).

In addition to the participatory aspects of this research project a variety of literature sources pertaining to community-based co-management along the coast of BC as well as globally were reviewed. Literature sources were used to identify co-management theories, concepts and practices (see Chapter 3). In addition, existing examples of co-management were reviewed to better understand which methodologies would be most applicable to the community members of the Broughton.

Researcher Positionality

In the development, implementation and writing of this thesis it has been important for me to address my positionality as it pertains to conducting research within the communities of the Broughton. Staeheli (1994) questions, "Can we as researchers speak for politically marginalized peoples and groups if we do not belong to those groups?" (99). This is a key ethical issue also raised by England (1994), which confronts many researchers within the social sciences. From my perspective, I have a unique positionality in this regard. I am a Caucasian male, university trained in the western scientific knowledge paradigm who has a

long history of working closely with the 'Namgis First Nation and the Gwawaenuk Tribe in a number of different capacities (e.g. as a fisheries biologist and natural resource manager). Research with an Indigenous group is site-specific; it involves working with individuals with unique world views and social institutions. I have spent many years living within the Broughton. During my time in the region I have had the opportunity to build trust and solidify relationships within the participant communities. I have evolved as an individual and developed an understanding of the community, its environment and its interactions. To many, I am a part of the community and could be described as an "insider" but, as I am not of Indigenous descent I may be viewed as an "outsider" by others.

To address issues of positionality, personal bias and power, I endeavored to be critically reflexive during all aspects of the research process. Critical reflexivity, as described in Hay (2005, 293) and defined by England (1994, 82) "is a process of constant, self-conscious, scrutiny of the self as researcher and of the research process". Staeheli (1994) further reinforces this theme and describes the need for "critical examination between the researcher and the researched", "co-operative work" and that one must be "self-reflexive" (100). Throughout this research project, I reflected on my positionality and individual bias. Keeping a daily journal allowed me to record and reflect on my motivations and understanding of the research process as it was taking place. During the content analysis, these notes provided me valuable insight on myself as a researcher and the research process itself.

Outsider Status

An "outsider" as described by Hay (2005) is "a research position in which the researcher is rendered 'outside' a social circle, or feels 'out of place' on account of differences such as visible appearance, unfamiliarity, or inability to speak the language or vernacular used" (288). During this research effort there were times when I was working with individuals who I did not know very well. In those situations it was important for me to recognize that I may have been perceived as an outsider. In addition, I recognize that, as a non-First Nation professional (i.e. fisheries biologist), I will always be considered to be an "outsider" regardless of the amount of time I spend working with First Nations.

To ensure robustness in research design, as an outsider I recognized how I viewed the community and how it viewed me. As Kobayashi (1994) describes, often phenotypical or genotypical attributes have evolved into "essentialist (ascribing essential and immutable qualities to a category of persons on the grounds of "race" or "sex") and naturalistic (maintaining that such qualities are "naturally" rather than socially produced, and therefore part of a natural order that cannot or should not be changed) assumptions" (76-77). In some, but not all social interactions over the course of my research it was necessary to address and understand the effects that these social constructs may have had on my research. The 'Namgis and Gwawaenuk communities place a significant amount of confidence on the interrelationships between family groups, tribes and people. Although I didn't specifically employ any methods or tools to be better accepted within the community it is important to note that my family name is well known and has been a part of the community for several generations. In addition, I have a positive relationship with the majority of the community members. In those few situations where I was not well known to an individual (which could

have potentially led to distrust or caution) my social position was related to one in which the individual felt familiar (i.e. "You worked with my uncle Ted digging clams a few years back" etc). In this way, through my interrelationship with various community members, I believe that my outsider status was moderated. That said, naturalistic assumptions are a challenging aspect of our social reality and may have led some to question my positionality when working with the 'Namgis First Nation and Gwawaenuk Tribe.

Insider Status

During the research process I found that I had a previously developed relationship with the majority of the research participants. I was generally in a position where I was "socially accepted as being 'inside', or a part of, the social groups or places involved in the study" (Hay 2005, 285). As with outsider status; "insider" status has both strengths and weaknesses. In his paper "*The Indian and the researcher: tales from the field*" Brayboy (2000) clearly describes the "duality of an Indigenous person who is also a researcher" (416). He speaks to the benefits of being an "insider" including: a cultural understanding, trust, and perceived naturalistic or essentialist notions and tendencies. As a researcher who lives within the community I enjoyed many of the benefits described by Brayboy which made it especially important to reflect critically on myself and my actions and to understand that issues regarding colonialism can influence how individuals view one another, recognizing that everyone is subjected to conscious or unconscious authenticity tests (Brayboy 2000).

As DeLyser (2001) states, "gaining perspective on something you're in the middle of poses distinct challenges...starting with an insiders perspective can make research harder rather than easier...you may fail to notice pertinent questions or issues because of the inability to step back from a situation and fully assess the circumstances" (441-442). I

believe that we "belong to several communities simultaneously" (DeLyser 2001, 442) and that my positionality within this research context is ultimately as an individual working within the 'space of betweenness' (Staeheli 1994) which has enabled me to address issues related to both "insiderness" and "outsiderness".

Conceptual Framework

Indigenous Perspective

In the past, colonial research within the western paradigm has been conducted by 'outsiders' primarily of western descent. As described by Hay (2005) colonial research is:

> imposed, often exploitative research in both imperial and non-imperial contexts that maintains distance from and domination of, the marginalized 'others' that it seeks to study and which denies the validity of their knowledge, ways of knowing, experience, and concerns (277).

Howitt and Stevens (2005) further elaborate on the detrimental effects of colonial research noting that non-participatory, non collaborative approaches to research have often lead to the exploitation of indigenous groups. Tafoya (1995) explains that the practices of the western paradigm can separate your "language and your spirituality by looking at individual components rather than looking at the total person and the complexity of the connections and relationships that allow that individual to function" (27). Wilson notes one of the differences between the western paradigm and indigenous methodologies:

> One major difference between those dominant paradigms and an Indigenous paradigm is that those dominant paradigms build on the fundamental belief that knowledge is an individual entity: the researcher is an individual in search of knowledge, knowledge is something that is gained, and therefore, knowledge may be owned by an individual. An indigenous paradigm comes from the fundamental belief that knowledge is relational. Knowledge is shared with all creation. (Wilson quoted in Steinhauer 2002, 177).

The de-colonization efforts of many Indigenous communities coupled with globalization and empowerment has led to a rejection of intrusive and non-participatory research methodologies by Indigenous groups, many of whom now define their own research goals and definitions. Non-aboriginal groups have also abandoned the methodologies of the past and have developed new methodologies such as post-colonial research which "aims at being emancipatory not simply through being more culturally sensitive or seeking local research approval, but through respect for the legitimacy of 'others' knowledge, ways of knowing and being and through activism in support of their pursuit and exercise of self-determination" (Howitt and Stevens 2005, 35). From a Maori's perspective (Smith 1999) the Indigenous paradigm is:

> both less than and more than a paradigm...it is a social project; weaves in and out of our cultural beliefs and values, Western ways of knowing, our histories and experiences under colonialism, Western forms of education, our aspirations and socio-economic needs, and Western economics and global politics" (191).

I believe that researchers who take "an integrated understanding of the local, tribal community context" (Rasmus 2002, 297) understand the necessity of these relationships and how they are interwoven within indigenous research methodologies, these researchers gain something in their research; they are 'a part of' rather than 'apart from' the community. Smith (1999) summarizes the benefits of this approach to the Maori peoples of New Zealand

> Maori people, as communities of the researched and as new communities of the researchers, have been able to engage in a dialogue about setting new directions for the priorities, policies, and practices of research for, by and with Maori (183)

My research has recognized that Indigenous methodologies are fluid and dynamic as opposed to a standardized set of rules that a researcher is required to follow. I believe that I have taken advantage of the Indigenous paradigms' use of mixed methodologies to help

achieve the objectives of this collaborative research effort. My research with the 'Namgis First Nation and the Gwawaenuk Tribe is focused on the holistic, respectful relationships that I have continued to develop over nearly a decade of collaborative communication. I have built upon and learned from these relationships and have broadened my understanding of past and current methods of resource use within the local marine environment which has allowed me to better understand the motivations and desires of its people. Wilson (2008) states that "all things are related and therefore relevant" (58). That, to me, is the indigenous paradigm. It is a holistic approach to research which recognizes the value of relationships, different world views, and the connections between humans and their environment. Communication is facilitated through a respectful yet impassioned voice that serves to balance the power relationships that are often observed between the researcher and those being researched. Through my many years of work with the local communities of the Broughton my understanding of the local Indigenous approach to research has broadened. As a researcher, I have a responsibility to reflect critically on my actions, work collaboratively and to respectfully recognize the interrelationships between the people, the land and the sea. It is in this understanding of the Indigenous approach to research in which both myself and this project have been situated.

When conducting my research with the 'Namgis First Nation and the Gwawaenuk Tribe I used the following principles to guide my work (adapted from Atkinson (2001), as quoted in Wilson 2008):

- I must ensure that the 'Namgis First Nation and the Gwawaenuk Tribe themselves must approve of the research and the research methods;
- I must recognize the diversity and unique perspective that each individual brings to their respective community;
- I must understand the principles of reciprocity and responsibility;

- It is of vital importance that each participant feel safe which includes respecting issues of confidentiality;
- I must listen deeply with more than just ears ensuring that I ask questions when required to clarify positions which may be unclear to me due to my own perspective;
- I must be reflective and non-judgmental;
- I must have an awareness of the connection between logic of mind and the feelings of the heart;
- critical self reflection must be a key component of my research;
- I must acknowledge that I bring my own subjective self.

'Namgis First Nation Research Protocol

Indigenous methodologies are developed specifically by and with the Indigenous population who wish to conduct research. The 'Namgis First Nation is an Indigenous group that has maintained cultural traditions and practices while developing the capacity to work and thrive within western scientific and political frameworks. To that end, the 'Namgis First Nation has developed a 'Namgis-specific Indigenous research methodology and protocol which incorporates traditional and 'western' approaches to research (Appendix A). The protocol states that:

> Visiting researchers are welcome provided that they commit themselves to observing certain 'Rules of Conduct'. Those for the 'Namgis First Nation have been developed at the direction and request of our Council, Advisors and the Keepers of our Culture ('Namgis research protocol 2009, 1).

This protocol is not designed to limit research with the 'Namgis First Nation; rather, the purpose is to build a relationship with visiting researchers to allow for a collaborative working relationship. As stated in the 'Namgis research protocol the following must be met:

(a) research be of benefit to the 'Namgis First Nation, both in its intent and its outcome; and

(b) that it be conducted according to professional standards and ethics.

Specific rules and procedures are also highlighted to ensure that the 'Namgis First Nation is involved throughout the research process including proposal and developmental phases and the dissemination of the results. A formal contract between the researcher and the 'Namgis First Nation in normally signed upon acceptance of the research protocol and the 'Namgis retain access and rights to any and all collaborative research efforts (Appendix A).

Feminist Theory

Due to the specific design of this study the feminist paradigm, in terms of situating gender as the focus of the discussion, was not directly applied. However, many of the paradigm's lessons and approaches to design and rigour were used. There is a deep connection between Indigenous rights and Feminist theory; the latter which pushed the boundaries that allowed the former to move forward (Peters 2004). For many, feminist theory is a rebellion against historically masculinist policies and politics. Yet, one of the main goals of feminist (and Indigenous) researchers is to "advance the conceptualization of collaborative, flexible models of knowledge production" (Mountz et al. 2003, 30). The feminist paradigm complements both the Indigenous methodologies and collaborative approaches to marine management within the Broughton in that it recognizes that research with can be "radical, dynamic, exciting and contribute to progressive social change" (Mountz et al. 2003, 29). Motivation towards progressive social change is necessary if new collaborative marine management models are to persist through changing political and environmental landscapes. With this research I hope to enlighten local communities and governments as to the value and significance of new and robust approaches to marine resource management implemented by the Indigenous groups within the Broughton.

Feminist and Indigenous researchers have recognized that "the 'personal' affects the way in which we do research: it influences the questions we ask, the ways in which we interpret answers to those questions, and what we do with our research results" (Madge et al. 1997, 88). I have entered into this research with personal bias and a unique positionality. Although many relationships had already been developed though my past work with communities within the Broughton Archipelago, it is important to recognize the "complex relations between people carrying out research and the informants who are often called the researched" (Madge et al. 1997, 89). Indigenous and feminist researchers are aware of "the power relationships in which data collection is embedded" (Mountz et al. 2003, 29), these exist between researcher and those researched as well as within and among the "relationships formed across cloudy fields of power influenced but not exhausted by sex, age, professional rank, language ability, institutional affiliation, job status, access to resources, time and manner of entry into the project and research and life experiences" (Mountz et al. 2003, 32).

The Feminist approach to research has, for me, complemented my understanding of Indigenous methodologies. As my work has had a strong applied component the methods and lessons provided through the Feminist paradigm have been of great benefit in terms of ensuring rigour in my research design and methodology.

Participatory Research Methods

Over the course of this research I utilized a qualitative design incorporating critical reflection, intersubjectivity and a holistic approach to research from an Indigenous perspective (Wilson 2008, Creswell 2007, England 1994, Staeheli 1994, Mountz et al. 2003).

My primary approach to participatory research was the use of face-to-face semi-structured interviews and the collaborative development of my research design.

Interview Design and Process

This project used semi-structured interviews to gather information from purposefully sampled individuals. The personal and in-depth nature of interviews "brings people 'into' the research process" (Dunn 2005, 103). Interviews provide information on people's perceptions, their lived experiences and their feelings regarding the topic being discussed (Dunn 2005). This research project sought to engage with local individuals in an in-depth nature, which was best achieved through the interview process.

Interview Design

When determining how to best facilitate a dialogue with community members several approaches to interview design were considered, including the use of questionnaires and focus groups. Questionnaires can be useful in that they can gather both qualitative and quantitative information and have the potential to gather information from a large number of research participants. However, questionnaires have an inherent limited complexity and length which "prevents them from being able to explain action (as this requires us to understand people's intentions), the significance of action, and the connections between acts" (McGurik and O'Neill 2005, 181). I wanted to ensure that my research was completed in an open and collaborative manner and recognized that questionnaires can be one of the most impersonal approaches to research. Given my past relationship with the communities to be studied, the impersonal nature of a questionnaire was inappropriate. In discussions with the 'Namgis, it was concluded that the depth of information gathered through face-to-face

interviews would be of far greater benefit than the often "superficial coverage" (McGurik and O'Neill 2005, 181) provided by a questionnaire.

The use of focus groups, where groups of individuals are interviewed at the same time, was also considered. When contemplating the use of focus groups I recognized that many of the issues associated with the politics and power of a First Nations-led marine management plan can be considered contentious. Given that each of the communities is small and close-knit, research participants may have been unwilling to discuss contentious issues in a non-anonymous setting such as a focus group. Although focus groups can generate new ideas through participant interactions (Cameron, 2005) I felt that the need for anonymity to allow for a frank discussion regarding the development and implementation of a First Nations-led collaborative marine management plan was of primary importance and that focus groups would not allow me to achieve that end.

Thus, I used semi-structured interviews to gather information from specific, purposefully sampled individuals. Initially I developed an interview guide with questions that I judged to be relevant to each specific research objective (Dunn 2005). I then presented this guide to the 'Namgis First Nation for review. Using this guide as a template, I then revised the interview questions collaboratively with Dr. Doug Aberley (Director for the 'Namgis treaty and Natural Resource Department), who was chosen by the 'Namgis as a representative. Many questions were changed and some were added based on Dr. Aberley's extensive experience and collaboration with the 'Namgis.

Semi-structured interviews are designed to be flexible and to allow for a variety of data to be collected (Dunn 2005). Within the context of this research project it was important to recognize that not all of the issues surrounding the development of a community-based First Nations-led marine management plan were known. It was important to ensure that

specific questions were asked, but of equal importance was to allow interview participants flexibility in their discussion, to ensure that any issues which had been previously unrecognized were recorded and later addressed (Interview questions can be found in Appendix B).

Participant Selection

Interviews were designed to gather data from a variety of people, in an effort to acquire information which was both holistic and representative. To accomplish this task, I used purposeful sampling to identify individual experts from the 'Namgis First Nation, the Gwawaenuk Tribe and the non-Indigenous community of Cormorant Island. As described in Hay (2005), purposeful sampling is a "sampling procedure intended to obtain a particular group for study on the basis of specific characteristics they possess. [It] aims to uncover information-rich phenomena/participants that can shed light on issues of central importance to the study" (292). Purposeful sampling requires that a set of criteria be developed in order to ensure that appropriate individuals or experts are selected. Of critical importance was to select individuals that would "produce ideas and evaluations that were the most meaningful to the project's goals" (Sherry and Fondahl 2004, 19).

As the goal of this research was to obtain information which would assist in the development of a community-based marine management plan it was important to define the term "expert" as it related to participant selection. Ziglio (quoted in Sherry and Fondahl 2004, 19) defines the term as "the acquisition of experience, special skill in or knowledge of a particular subject". To ensure that the most appropriate individuals were selected, I identified a list of specific requirements identified collaboratively with the 'Namgis First

Nation prior to the onset of the selection of participants. Within this thesis research the term expert applied to individuals with the following qualifications:

1. a present or past connection to and meaningful involvement with marine resources of the Broughton Archipelago;
2. an interest and/or stake in marine resources and their management;
3. a member of the 'Namgis First Nation, Gwawaenuk Tribe or non-Indigenous Cormorant Island community member who has lived or currently lives within the Broughton Archipelago;
4. recognized by peers as a practiced user of local marine resources with representative experience and expertise; and
5. an ability and willingness to participate in the project.

(adapted from Sherry and Fondahl 2004)

Within the 'Namgis First Nation a significant amount of research effort has been focused on elders and individuals with a knowledge and understanding of the marine environment (pers. comm. Doug Aberley April 2009). As a result, local experts were very well known and easily recommended by the 'Namgis for inclusion in the interview process. The same was true for the community of Cormorant Island, with a population of approximately 500 (Statistics Canada 2009). Local experts were well known and recommended by community members (e.g. the Mayor of Alert Bay). As described in Chapter 2, the Gwawaenuk Tribe is very small. Of the 39 registered members (Indian and Northern Affairs Canada 2009) only five available members were considered experts.

Initially, participants were purposefully sampled based on recommendations by prominent members of each of the target communities including: Doug Aberley ('Namgis treaty and Natural Resource Department), Mike Berry (Mayor of Alert Bay and a marine biologist who has worked in the region for over 30 years) and Charlie Williams (Chief of the Gwawaenuk Tribe). At the end of each interview, the participant (who having undertaken the interview process had a clear understanding of the specific project goals as well as the

interview process itself), was asked to recommend additional individuals for involvement in the study. This process, known as "snowball" sampling, is the process in which purposefully sampled interview participants refer other participants to become part of the study (Hay 2005). Snow-ball sampling proved to be effective in a number of instances where individuals who had not been previously recommended were identified as experts. In general, however, the majority of the interview participants were identified prior to the interview process by prominent local community members. It should be noted that several individuals who were identified as experts were not interviewed as these individuals were not available during the fieldwork season. Snow-ball sampling saturation was achieved during the interview process where no new available individuals were recommended for involvement in the study.

Interview Process

Prior to the formal commencement of the interview process the interview questions and approach were pre-tested with several individuals from within the community who were not involved with the study. During each formal interview I presented participants with an information sheet (Appendix C) and an interview consent form (Appendix D). Any questions the interview participant had regarding the interview process were answered and the interview began after the consent form had been signed. Throughout the interview process I was careful to reflect critically on what was being said to ensure consistent real-time analysis of the information that was being presented. Did I understand what the interviewee was saying? Why was he/she saying it? How was he/she saying it? As the interviews were semi-structured in design I was able to gather more information on particular topics which arose during the interview and to further explore the motivations behind a particular comment or topic. As described in Dunn (2005), I utilized strategies to ensure

rapport throughout each interview, using both verbal and non-verbal cues. Due to the development of past relationships the sense of trust that existed between myself and interview participants enabled a fluid exchange of ideas.

Interviews ranged from one to five hours. After the first hour each participant was asked if a break was required; recognizing that interview fatigue may lead to changes in interview participation, breaks were taken as required thereafter. To ensure that data were collected as accurately as possible, interviews were recorded using a digital recorder provided that consent was given. A number of interview participants did not like the formality associated with a recording and declined to be recorded. When consent was given, recording devices were placed to the side to remove them as a focus of attention and which could potentially distract the interviewee. I found that when an individual consented to be recorded the interview had a far greater degree of fluidity. I was able to listen more closely, and many additional tangents were followed in an attempt to further understand concepts raised by the interviewee. When interviewees declined to be recorded I paid far more attention to note taking. As I am able to type much faster than write, during several interviews I recorded interviewees' ideas on a laptop during the interview process, which allowed me to gather more information and for the interview to proceed more smoothly. That said, the presence of a laptop between the interviewee and myself may have acted as a communication barrier, although this did not appear to be the case.

I conducted a total of 19 face-to-face semi-structured interviews over the course of this study. Of the 19 interviewees, ten were of members of the 'Namgis First Nation, five were non-indigenous community members of Cormorant Island and four were Gwawaenuk Tribe members. Eleven interview participants preferred to remain anonymous and five

interview participants declined to be digitally recorded. One interviewee felt uncomfortable with the responses after a review of the transcript and asked to be removed from the study.

Data Analysis and Interpretation

Content Analysis

The process of data reduction, organization, exploration and theme development is achieved through content analysis. Content analysis utilizes a variety of methods to organize information by identifying terms, phrases, actions and common themes that appear in research data including interview transcriptions and notes (Creswell 2007; Cope 2005). Content analysis is research-specific; "every study can develop its own analysis procedure, but must follow it to the letter" (Sherry and Fondahl 2004). The process of content analysis is essentially the selective reduction and organization of data into common categories or themes (Cope 2005). This involved the development of codes to identify unique and common data attributes. Coding conventions are not well established. To ensure that the coding of research data was a reflexive exercise, specific themes and categories were allowed to develop during the coding process rather than coding from a pre-defined set of ideas (Sherry and Fondahl 2004). Furthermore, to allow fluidity in the coding process a limit to the number of codes was not pre-established.

The best coding comes from knowing the data, knowing the individuals involved in the interview process and understanding the issues related to the research (Kirby and McKenna 1989). As I had lived and worked within the Broughton and had formed relationships with those being interviewed and the communities I was well suited to recognize communication styles and undertake the coding process. In addition, over the

course of the content analysis I went through much of the data several times to identify linkages that may have been missed during the initial review (Cope 2005).

Initially, each of the interviews was transcribed. Coding was then completed manually, a hard copy of each interview was printed and an initial analysis was undertaken where preliminary codes and themes were highlighted and notes were made in the margins of the text. As more and more interviews were analyzed common themes and categories began to emerge. Results were divided into three major categories: Process, Relationships and Action. Each category and its associated theme and code was then entered in to a Microsoft Excel database together with individual quotes to preserve the context of individual contributions. Although this proved to be time consuming, it allowed for the quick and easy reorganization of data though Microsoft Excel's various data-sort and filter functions. Search and data sorting functions were completed among individuals based on a number of different attributes including: the characteristics of the participant (occupation, community), setting (location of interview), code description and theme. In this way the coding process was able to feedback on itself. I reviewed the data in a variety of different ways (including by key word searches, categories and emotional response) to search for connections between ideas shared by individuals.

The process of coding itself involved an interpretation of data and was an integral part of the analysis (Cope 2005). As I coded the research data, I reflected on my decisions by referencing journal entries both in terms of the data and the process of interpretation (Kirby and McKenna 1989). I used journal entries to understand participant moods during the interviews (e.g. a recent death in the village may have had an impact on the interviewee's engagement). As research participants were purposefully selected, it was important for me to reflect critically on the social context under which these interviews were being conducted

(Kirby and McKenna 1989). Participants had different worldviews and life experiences but there were also many shared experiences and commonalities between individuals and myself allowing me to gain an understanding on their perspective.

Throughout the coding process it is important to reflect critically on both the coding procedure and on the results and conclusions of the analysis. Despite my best efforts it was vital for me to consider that I may have been introducing my own personal bias into the data analysis and inadvertently impacting the reliability of my results. As described in Cope (2005) the reliability of data analysis is enhanced when coded independently by different coders. Reliability can be defined as the extent to which a procedure or action generates the same result on repeated trials. To ensure consistency of coding I asked a fellow researcher, Christine Crekye (MA NRES candidate UNBC 2010), to undertake the analysis of a random sample of interviews, to confirm/validate inter-rater reliability. A total of five randomly sampled interviews (~26%) were analyzed by Ms. Crekye. Ms. Crekye's familiarity with issues regarding marine management and the interview participants themselves were not the same as mine; however, Ms. Creyke is a First Nation member (though neither 'Namgis nor Gwawaenuk). Ms. Crekye's analysis led to the development of similar codes and themes from the transcripts. This led me to conclude that my codes were not overly specific to myself or my specific positionality and were, to some degree, reproducible.

Community Checks

It was important to ensure that my participant communities verified my work to ensure the reliability of the results (Bradshaw 2005). Interview participants were asked if they wished to validate a transcription of the interview to see if they expressed themselves as they wanted. Furthermore, in instances where direct quotations were used from individuals

who preferred to have their ideas attributed to themselves, an excerpt of the thesis was available which included the quote and the context in which it was situated.

The process of triangulation was also used to ensure rigour in my research. As defined in Bradshaw (2005) I have checked my written "(a) sources against others...(b) [my] process and interpretations with [my] supervisors [and] colleagues; and (c) [my] text with [my] research participant community to enhance the credibility of [my] research" (74).

In December 2009, the interpretation of the interview results and the structure and design of the collaborative community-based marine management model were presented to the 'Namgis First Nation and the Gwawaenuk Tribe. They provided feedback on the direction of the research, analytical results and research goals and approved my moving forward in the formal writing of the thesis. In addition, I worked closely with my UNBC supervisor throughout the research process to ensure the validity of my research protocol and design.

Ultimately the rigour of this research lies in the methodologies by which it was conducted. From an Indigenous perspective, this research has been participatory in nature from collaboration on initial research design, approach, and objectives to the presentation of interim results and a community review of the final thesis prior to submission.

Changes to Research Design

The original intent of this research project was to focus on determining which actions were required to move towards the development of a community-based First Nation-led marine co-management plan within the traditional territory of the 'Namgis First Nation. The project design focused on interviews with 'Namgis First Nation members as well as local non-First Nation community members who lived within the marine component of the

'Namgis traditional territory. The 'Namgis First Nation identified the need for this research and, accordingly, the project was developed collaboratively. Upon further discussion with the 'Namgis at the onset of the field season, we determined that it would be in the best interests of the 'Namgis First Nation and other First Nations within the Broughton Archipelago to expand the scope of the project. As a result, the scale of this research project was broadened to include the territories of the four MTTC Indigenous communities within the Broughton (Gwawaenuk Tribe, Kwicksutaineuk-ah-kwa-mish First Nation, Musqamagw Tsawataineuk First Nation and 'Namgis First Nation).

To that end, efforts were made to include each of the three remaining Indigenous communities. Understandably, it would have been ideal (and more appropriate) if each of these Indigenous communities were contacted and collaborated with during the pre-development phase of the research process rather than at the beginning of the field season. I contacted each of the MTTC communities and provided a description of the proposed research. Further attempts were made to contact key individuals from each of the communities to explain the research project and answer any questions that might arise. Of the three remaining communities only one, the Gwawaenuk Tribe, expressed interest in joining the project, no response for or against the project was received from either of the other communities. I believe that, given more time, each of the two remaining Indigenous communities would have found benefit in their involvement in this research, however, given the specific circumstances, this project includes only two of the four MMTC Indigenous groups found within the Broughton: the 'Namgis First Nation and the Gwawaenuk tribe.

In terms of non-Indigenous community members and their inclusion in the project, the scope of the project was limited to interviews within the village of Alert Bay on Cormorant Island, home to the majority of non-Indigenous residents. The remainder of the

communities within the Broughton consist of small populations in remote settings and their inclusion in the process would have been cost prohibitive.

Issues and Limitations

The Gwawaenuk Tribe and the non-Indigenous community members of Cormorant Island had little involvement in the proposal and development phase of this thesis project. As stated above, this is due to the fact that their involvement in the project was sought at the request of the 'Namgis First Nation once the research field season had begun. Despite this omission, both community groups did agree with the research process and its objectives.

Not all of the potential community experts, as defined above, were interviewed. This was primarily due to a lack of availability of some experts during the field season, which took place during the spring and summer of 2009. During this time, coastal community members were involved in commercial fisheries or generally spent time away from their respective communities on various pursuits. As a result, several prospective interviewees within each of the communities were unavailable.

Chapter 5

Voice of the Communities

Many co-management and community-based regimes are implemented without sufficient input from the communities in which they are situated (e.g. see Makino and Matsuda 2005). Although these regimes are often implemented with the best of intentions, a lack of community inclusion at any stage in the development of a CBACM regime can lead to the eventual failure of the plan. As mentioned previously, each CBACM regime must be designed specifically for the communities which hope to use it. To that end, the primary goal of this research exercise is to ensure that the voice of community members is included during the planning and development process in an effort to create a site specific and robust marine management plan tailored specifically for the communities within the Broughton.

An analysis of interviews conducted with community members within the Broughton identified five major themes which community members felt important to address during the CBACM planning phase. These include: (1) Trust building, (2) Capacity, (3) Power, (4) Politics and (5) Funding. The following section will outline the CBACM visions of those interviewed, who include members of the village of Alert Bay, the 'Namgis First Nation and the Gwawaenuk Tribe.

Trust Building

One of the central concepts which community members identified as an important inhibitor to the formation of a lasting co-management regime was the perceived lack of trust that exists within the Broughton. This theme included the need to develop working relationships between multiple stakeholders within the Broughton. Five major stakeholder

groups were identified that required significant relationship development in order for an effective co-management regime to be developed. These stakeholders included: local First Nations groups, local non-First Nations resource users, Government (national, provincial and local), industry (boat owners, fish buyers, aquaculture, etc.) and finally, research institutions (universities, NGO's, external funding agents). As the list of identified stakeholders implies, interviewees concluded that trust and relationship building needed to take place on both lateral (among local community members, local communities and groups) and vertically (among federal, provincial and First Nation government structures). Throughout the interview process two of these relationships proved to be of central importance to community members in the development of a local co-management regime: First Nations political community relationships (lateral relationships) and First Nations and federal government relationships (vertical relationships).

Lateral Trust Building/Community Relationships

The relationships of First Nations within the Broughton exist on a number of different levels. There are personal relationships between individuals from different First Nations; there are family connections between and among different First Nations; and there is a distinct political relationship between First Nations government bodies (Brian Wadhams 9, June 2, 2009). Political inter-tribal relationships were identified by interviewees as a significant issue impeding the formation of a lasting and effective co-management regime. As described in Chapter 2, the political relationship between Broughton First Nations has evolved over time. Prior to contact with Europeans, marine resource management was based on a complex management structure which blended social status, spirituality and common property rights into an integrated and holistic structure (Galois 1994; Weinstein 2007). As

one community member notes "there were not many people here and there was an incredible abundance of resources...there [was] a management system that was very sophisticated" (Doug Aberley, September 9, 2009).

After contact, European settlers began to establish communities along the coast of BC. The immigration of European settlers sparked a demand for coastal resources, including those found within the highly productive Broughton Archipelago. Pre-contact management strategies were based on a clearly defined social and spiritual structure which did not readily allow for the inclusion of radically different cultural groups. The increased demand for marine resources coupled with drastic declines in local Indigenous populations (primarily due to disease) crippled the effectiveness of Indigenous management structures. The development of the Department of Indian Affairs and implementation of the Indian Act further eroded the autonomy of individual Indigenous communities and their ability to maintain traditional marine management techniques. As a result, European styled marine management concepts were implemented and, although they have continued to evolve, they have remained almost entirely based on European styles of management (see Chapter 2). This had a dramatic effect on local Indigenous groups, not only in their ability to effectively maintain their traditional marine management methodologies but also on the very way in which these societies related to one another. One interviewee states:

> We used to work together, all of us used to help each other out and take care of each other. The problems started when the white men drew lines on a map. They drew our territories down for us and told us what we had rights to and what we didn't. We already knew this, we knew whose family was responsible for what, but the white man and the DFO said that they would be responsible and took our land from us. They took our right to take care of our land and that was the most important right of all. (Anonymous 15, September 12, 2009.)

The lasting issues associated with the implementation of westernized management structures were identified by several community members. 'Namgis council member Brian Wadhams states "you know our past history tells us that our people worked together and we've lost focus on that again, because the government has put that line in the sand for us as First Nations people to fight over, it's divide and conquer." (Brian Wadhams, June 15, 2009). Further, another respondent states:

> We used to have a trusting relationship with each other but over time that trust has eroded. Each band is supposed to work with the federal government – the Indian and Northern Affairs and the DFO – separately and what's happened is we have turned against each other. Each band is trying to get as much as it can out of the treaty process and for licenses and things so it means that we have to take something away from each other and that has led to a big sense of distrust between bands, it really is a very sad thing, I wonder what my grandfather would say about it? (Anonymous 18, August 1, 2009)

Further:

> When you're using the Kwicksutaineuk-ah-kwa-mish and the 'Namgis in the same sentence and are trying to get them to sit at a table and talk about the mutual trust and marine resources, it can be difficult (Anonymous 1, May 4, 2009)

The treaty process was identified as a contributor to the sense of distrust between communities: "In the past it was all about respect and not moving in on different people. I think this is a problem today because different bands are trying to get as much as they can from the treaty process and aren't following the old protocols and it pisses people off" (Anonymous 16, June 15, 2009). A Gwawaenuk Tribe member states: "The 'Namgis have already claimed a lot of our area in treaty but they won't meet with other bands to discuss these treaty claims" (Anonymous 20, Dec. 22, 2009).

The debate over traditional territory overlap is well established within the Broughton. One Alert Bay community member states:

> The difficulty you'll find here is...that traditional territory overlap is rampant within the Broughton and it is a very difficult issue.

and then suggests:

> Which comes first is the question? Do we sit here and pick over overlaps? Lines on a map? and watch the marine resources go to hell in a hand basket?...That's not thinking very far ahead for the good of your children. Or do you put a plan together and see if you can get it to start working? (Anonymous 1, May 4, 2009).

Interviewees suggest that a CBACM regime is not possible without the development of trusting relationships among Broughton Archipelago First Nations. To re-establish trusting relationships community members identified a need to utilize the well established principles of the past. Hereditary chief Arthur Dick states:

> That's the one thing that the bureaucracy doesn't understand, the strong family ties that brought our families together and it's the new age educated ones that are drawing a line in the sand and saying you can't come here anymore; that is not the way of our people (Arthur Dick, September 22, 2009).

Hereditary chiefs were identified as a possible avenue in which to re-establish trust between communities: "we still have family ties to each other and we still get along we just need to find a way to get along when it comes to making collective decisions. Hereditary chiefs might be a good way to do this" (Anonymous 19, August 15, 2009).

Interviewees identified a need for a specific CBACM design which will allow for relationship and trust building to take place within the Broughton: "I think that thinking outside of the box might be one way to envisage [local management] without necessarily

going to the root of the old antagonisms between First Nation rights and the rights of Canadians" (Eric Hunter, July 29, 2009). "We can't just rush into this, we need to set things up, we need to trust each other to make decisions for the good of us all" (Anonymous 7, July 10, 2009). The concept of trust building is summarized by a Gwawaenuk community member who states:

> It's all a matter of building relations and you have to be consistent with that and create something. And relations need a lot of work and I think that from my experience over time...different relations strategies have been discouraged. And I think that's the weak point of everything" (Fred Speck, September 15, 2009)

Vertical Trust Building

Two types of vertical trust building were identified during the interview process. The first is the perceived lack of trust that regulatory agencies have towards local community groups and the second is the perceived lack of trust that local community groups have towards regulatory agencies.

Perceived Distrust by Regulatory Agencies of Community Groups

Pinkerton (1989) suggests that government officials may view local fishermen as "unrelenting predators who will eliminate the last fish unless more strictly regulated" (4). This concept was further reflected upon by local community members: "You know about the black market of fish around here and I don't blame them for being in that market, because the opportunities have gone" (Brian Wadhams, June 2, 2009). Interviewees perceived a lack of trust by both the public and regulatory agencies as to the intentions of a First Nation-led CBACM regime:

> The government thinks we will just take everything and make a mess of everything and so does the public, nobody trusts us to do what's right and can you blame them? People used to think First Nations were green and clean but now they seen some of us team up with big industry like those power projects or seen us cut down too many trees or fish too many fish, we need to somehow prove ourselves or this isn't going to work (Anonymous 18, August 1, 2009).

Another community members states:

> I can understand why they don't let us self-regulate. Look, there aren't fish left, right? But we still want fish so, look, no one wants to say it, but some people say, I'm going to take what I can get, know what I mean? If they were making the decisions they'd give all the fish in the Broughton to the band, outsiders would get nothin' (Anonymous 16, June 15, 2009).

A lack of trust with current First Nations governments (band councils) regarding their desire to develop and adhere to stringent regulations was also questioned by interviewees: "I don't think they believe in management or think they care for long-term conservation. Their only concern is to feed" (Anonymous 11, July 28, 2009). In addition, "So how would it be if that same Council was managing marine resources? We need people with experience to do that. I think I would like to see local management, but it would scare me to see some of those guys out there making decisions on our behalf" (Anonymous 5, August 5, 2009).

Interviewees suggested that a framework needs to be put in place to eliminate this perceived distrust. As described by one community member:

> A system of checks needs to be put in place. I mean even the government doesn't have any accountability, even right now. When there are no fish they blame the science or when they want to put in fish farms and they fuck everything up they just raise their hands and say it isn't true. We need to prove to them and ourselves that we aren't going to do that. We need to have accountability and we need it to be structured so there aren't any loopholes like the government uses, that is how we get solid management going here in the Broughton and how we get the public and the government to start believing that we can do this (Anonymous 15, September 12, 2009).

Community Distrust of Regulatory Agencies

A lack of trust between community members (First Nations and non-First Nations alike) and regulatory agencies (particularly the DFO) was identified during the interview process. This lack of trust has evolved over time and is based primarily on two factors: regulatory management structure/policy and a drastic decline in natural resources. In regards to policy, one respondent states:

> Well, when you work with the 'Namgis First Nation you hear almost immediately about the Mifflin Plan and the Davis Plan and from the 1960s onwards the perception here is that there has been a deformation of on the ground collaborative marine resource management in Area 12 (Doug Aberley, September 9, 2009).

This concept is further exemplified by several 'Namgis First Nation members: "we got no more boats thanks to the Mifflin plan" (Anonymous 14, Sept. 8, 2009). "The Mifflin plan hung everyone out to dry. The year the Mifflin plan was implemented I hung a sign on my door on Halloween night saying 'due to the Mifflin plan there won't be any goodies this year'" (Arthur Dick, September 22, 2009).

Interviewees suggested that current policy is not focused on directing benefits to community members who have the greatest stake in the loss of local resources. Dr. Weinstein states:

> So this region historically has been a resource hinterland for British Columbia. So there's been a developmental strategy, and some of the local benefits here have been in employment and employment has largely been in the forests and marine environment. The economy and money generated from those activities have largely flowed to outsiders and although some of the money in the past flowed to individual Indians, as well as Indian families, as well as some non-aboriginal community members; but the very significant monies has gone internationally. It was the financial mainstay for a number of prominent corporate multinational companies.

Further,

> The government initiated policy, and then subsequently modified it through the 1970's and 80's and into the 1990's. It didn't pay attention to the sustainability of aboriginal and local fishing economies in local and rural communities. The continuation of aboriginal commercial fisheries was not an issue to government planners. One of the priorities was record keeping of profits from the fisheries economy. But on provincial and national economic levels equivalent attention was not paid to how those benefits were distributed socially and regionally and that's not unusual. (Martin Weinstein, May 23, 2009)

Community members felt as though policy was determined without local consultation or inclusion, one 'Namgis community member states:

> They don't listen to the people that are local. Don't bring someone from Halifax that is going to put some more nails in our coffin. You only have to look at what's happened on the east coast to know what happened over there and they've brought the same people over to do it here! (Arthur Dick, September 22, 2009)

This concept is further exemplified by an Alert Bay community member who states: "I don't know, I have no faith in the DFO, you talk to half of them and they're from Ontario or Alberta, they've never even lived on the ocean. I can't see them on the board, once they're on the board it makes everybody angry, especially the natives, and I don't think they'd like to have any of them around (Anonymous 13, September 8, 2009). Long term charter patrolman, Eric Hunter states:

> So [the DFO] are walking in and no matter what happens there is no two doubts in my mind that DFO walks in with these great big flight bags with the most chips in their hand — that is the sign of authority. They exhibit that attitude and that right off gets the back up of all of the First Nation people who feel like the underdogs; like they've been cruelly treated and everything else...And DFO walks in with the big heavy bags. The 'Namgis Band comes in with the headdress and all the traditional regalia signifying authority, the fishing companies come in and it's got history on their side... and we've got one little insignificant entity that walks in and it's just called a fish, what did the fish bring? What chips do the fish have?

In terms of resource allocation, interviewees felt that allocation was based on poor data which was collected and analyzed by individuals outside of the community:

> In terms of stock estimation, that's gone from the many patrolmen spending hours and hours to basically a once every two weeks flyover, [name omitted] and one other DFO staff member fly quickly over the five indicator streams. The smaller streams don't get counted at all...the five indicator streams are quickly flown over at 200 miles an hour, and that's how they decide how to manage the fishery, just totally inadequate (Anonymous 1, May 4, 2009).

Interviewees described perceived imbalances present within current policy regimes. For example, in regards to the sport fishery allocation:

> When they set the allocation for the tribes and the 80,000 allocation divided by the population there was four fish per person and when I bring those stats out I say that a Russian for 365 a year gets the same allocation a day that we get per year! For 12 bucks [indicating the cost of a recreational fishing license] you have more rights than I do! (Arthur Dick, September 22, 2009).

These perceived imbalances were connected to a feeling that current management regimes were not in the interests of local community groups "They are entirely focused on commercial fisheries, not necessarily regular maintenance or monitoring" (Anonymous 1, May 4, 2009).

Distrust of regulatory agencies was often deeply rooted. One Gwawaenuk member states:

> There is a real concern about the management; I don't have any confidence with the way things are. I think a lot of things need to be addressed; I don't think they are taking it seriously. To be forward and blunt I personally think that it's somewhat deliberate in terms of them not taking care of the resources. First of all it's a way of life for the native people and it works towards people that aren't able to sustain themselves. It has a lot to do with land claims and everything. So if native people aren't taken care of then the more they lose in terms of their livelihoods and personal territories and resources. I definitely don't think that things are taken care of the way they should be; there are a lot more options and alternatives and they're not taken seriously (Fred Speck, September 15, 2009).

Despite a perceived lack of trust between interviewees and regulatory agencies, the majority of those interviewed expressed a desire and willingness to work collaboratively with government:

> I know that over time a lot of people are frustrated with DFO but I think, in my opinion what really needs to happen is even with the Department of Fisheries and Oceans is there needs to be a stronger effort made to develop relationships. I know there's a lot of work that needs to be done but...there's no relationship at all and that's the real key issue that needs to be done because my idea is to create and build relations with people and try to start something... That's what I mean in terms of external factors is how do we create a system in a way where we have proper influence (Fred Speck, September 15, 2009).

In terms of vertical trust building Mr. Speck highlights a key concept identified by a number of community members; that a specific structure needs to be developed which will foster relationship and trust building between local community groups and regulatory agencies.

Capacity

Community members identified several forms of capacity that they felt were necessary and important in the development of a CBACM regime. These included social or human capacity, infrastructure capacity and the capacity of regulatory agencies. The need for capacity was repeatedly defined as a necessary element: "We need each of the communities to have capacity and jurisdiction, at the same we need a central coordinating body to coordinate broader function" (Doug Aberley, September 9, 2009).

Social and Cultural Capital

In terms of social and cultural capital (see footnote 9), interviewees felt as though their experience and knowledge pertaining to the management of marine resources were undervalued:

> One of the things that concerns me the most is when they looked at the local knowledge that we have and it was viewed as comments to them. I look at science, I see the same thing. It becomes a professional opinion; because this is the way they can poke holes in it from the other side. And so how do we deal with that? And maybe when we talk about local knowledge it should

> be included in there as scientific local knowledge, because it's a professional opinion (Brian Wadhams, June 2, 2009).

Both Indigenous and non-Indigenous community members feel the need to respect local knowledge. They identified a need to use traditional and local ecological knowledge more within the decision-making process, indicating that it would improve efficiencies, save money, create worthwhile jobs and lead to more appropriate management practices:

> I think that there is a needed marriage between science and traditional knowledge. However, what I find with scientists is a bunch of expectations about traditional and local knowledge that really comes from their own science culture. Traditional ecological knowledge is something that sometimes provides a lot of information that is not shaped in a familiar way for scientists – it is a different kind of shaping that I think can be a useful source of self-reflection for scientists (Martin Weinstein, May 23, 2009).

In addition fisheries manager Mona Madill states:

> I think that they need to depend more on local and traditional knowledge instead of scientific because the scientific part takes so long. They should depend more on LEK and TEK because we've lived here forever and we know what's happening to the land and the water and the resources (Mona Madill, July 21, 2009).

Many of those interviewed felt that the local management of resources was not only possible but beneficial:

> I don't think it would be too difficult to take the thoughts of many Kwakwaka'wakw leaders, managers and examples of best practices from other places and come up with a detailed approach to community-based management and marine stewardship for this area. The capacity to manage that system is here... there are Kwakwaka'wakw individuals with the skills to manage that system with the collaborative assistance of experts from the DFO and other experts from North Island communities (Doug Aberley, September 9, 2009).

Local Community Capacity

Although community members recognized that social capital exists in the form of local and traditional knowledge, the availability of individuals to act as managers was often questioned. This was not identified as a limiting factor; rather it was described as an important concept that should be focused on during the early planning stages. Some community members felt as though the community was ready to begin local management immediately, indicating that qualified individuals were ready, able and willing to participate in the management of local resources. For example, one Gwawaenuk Tribe member states: "I think we can do everything right now" (Anonymous 4, July 17, 2009). However, many individuals expressed concerns regarding the availability of individuals to take on new tasks. For example:

> We have many elders who have been on the water fishing, hunting and gathering who know about local resources and how everything fits together. That generation would make excellent managers but they are old and most probably don't have the time or the energy to commit themselves to something new like this (Anonymous 19, July 15, 2009).

Additional community members reiterated this concept in terms of recruitment. One Gwawaenuk Tribe member states:

> The big questions is: Who's going to do it? Most of us don't live here anymore, and the village doesn't have what we need right now. We are a small tribe and we will need outside help (Anonymous 7, July 10, 2009).

Further,

> I want to say that one of the big problems with participation is when the salmon stopped coming back and there was no money in clams our young left to go to the cities where there were jobs. Some stayed behind but even they don't get to go out on the water and harvest the resources like we used to. With local management there would be jobs for our youth to come back to and jobs for our youth that have stayed – good jobs. Our knowledge has been passed down but it has not been practiced like it used to, local management would allow us to get back on the land and sea and become part of the circle again (Anonymous 16, August 1, 2009).

In terms of education, efforts are being made to address capacity:

> For example we've hired a traditional use person to come and teach the traditional stuff that we're talking about here - traditional gathering. So that young people can understand, and through that re-teach management to the young people to get them to be a part of this management plan through education and this includes all of the things like land use planning, marine use planning and building the capacity for the next generation. (Brian Wadhams, June 2, 2009).

Disparities in Capacity

Interviewees identified a disparity between levels of capacity among various First Nations within the Broughton. For example, the 'Namgis First Nation, the largest First Nation within the Broughton, have developed significant capacity to manage local resources. The 'Namgis resource management team consists of "a total of 22 people: a mapping analyst, a forester, four people in the fisheries department, a fisheries coordinator, a fisheries office assistant, two fisheries technicians, a cultural resources researcher, two planners, and an energy projects coordinator" (Doug Aberley, September 9, 2009). In contrast, the smaller First Nations located within the Broughton have little or no formal marine management staff and often do not have the infrastructure in which to house them. Despite this apparent lack of capacity, interviewees from the Gwawaenuk Tribe felt they had significant resources that were not formerly recognized by others:

> We have lived here, worked here and harvested here for generations, we know the land, we know the waters, we can manage these resources better than anyone on the planet. We know every rock and every halibut hole out there. You can't tell us that some scientist is going to know more than me or be able to make a better decision than we can – based on what? A two-month study? (Anonymous 7, July 10, 2009).

Historically, this had led to conflict between and among First Nations in the Broughton. For example, one community member states "The 'Namgis think that they have the right to impose their ideas on our areas because they are a big band with lots of capacity"

(Anonymous 4, December 22, 2009). From the 'Namgis perspective a willingness to help and assist other local First Nations was expressed. For example:

> With 1,700 members, there is no way that the 'Namgis could successfully operate with less technical capacity than they have presently developed. If people feel bad about that then I think they have to get over that. I know that the 'Namgis are always happy to share their techniques and other technical resources with other First Nations (Doug Aberley, September 9, 2009).

This is a significant issue within the Broughton. Several interviewees from the 'Namgis First Nation felt a paternal need to "take care of" small bands which they felt would be of benefit to all local First Nations and communities, while smaller bands felt as though they were giving up power if they allow the 'Namgis to make decisions on their behalf. Any community-based co-management framework would have to be designed so as to ensure that the power to make decisions within each Nation's traditional territory remained at the community level while still allowing for the sharing of much needed resources from Nations and governments with increased capacity.

Infrastructure

A lack of physical infrastructure was cited as an important impediment to the development and implementation of a CBACM plan. "We have no more seine boats thanks to the Mifflin plan that shut us down. The only time I ever get to go fishing on a boat is if I'm lucky enough to go with one of the Wadhams family or the Stoffers" (Anonymous 13, September 8, 2009). "We need money and boats" (Anonymous 4, July 17, 2009). "We live on islands out here, to do research and monitoring and whatever else we need boats for it and we don't have any, I think that is something that is really missing" (Anonymous 16, June 15, 2009).

Regulatory Capacity

Individuals expressed concern over the current capacity of the DFO to manage local resources. "The feeling here is that the federal government is not capable of managing marine resources in 'Namgis territory or on the coast. So that lack of trust has just grown and grown and grown as the DFO budget here has declined and declined and declined." (Doug Aberley, September 9, 2009). This concept was also reflected in the views of other respondents:

> The government has lost the capacity and are in disarray. In every branch, management and policy, the needs are enormous. There is more money needed than available. The best example is spending for enforcement staff in the field. They are wasting money. There are different ways to organize that are more cost-effective. In addition there is a high degree of demoralization in DFO staff. Many staff members are simply waiting for their pensions to click in. That is a terrible situation. (Martin Weinstein, May 23, 2009).

Interviewees suggested that the decline in DFO presence and capacity was directly related to the decline in marine resources: "there is currently only one DFO charter patrolman, in 2003, in an area that had previously been covered by seven or eight or even 12 to 15 charter patrolman in the 60s and 70s" (Eric Hunter, July 29, 2009).

In terms of their ability to enforce regulations, interviewees felt that the current management regime lacked capacity:

> I worked on a fish farm for almost six years and that's when I did my fishing, and I was never once checked by DFO or anybody. I mean I prawn trapped a lot and I wasn't selling it. But that must've been illegal, what I was doing right? Technically? Yes, I didn't realize what I was doing until I came here and started becoming involved in the food fishery (Anonymous 11, July 28, 2009).

One interviewee's comments summarize many community members' feelings towards the capacity of regulatory agencies to manage local resources:

> In summary just total disrespect, aggravation, dismay to the current marine management regimes, if in fact they exist at all. It's an extremely haphazard approach both federally and provincially...not just in terms of who's got jurisdiction over what, but also in terms of a marine management strategy that is consistent and has goals over time and in how many different re-organization of the Department of Fisheries. For example how many new ocean marine management strategies have we seen? One different from the previous one, some of the federal strategies are totally inconsistent with those of the provincial government. This community is a prime example of DFO mismanagement (Anonymous 8, May 20, 2009).

Power

In terms of the power to make decisions regarding the management of local resources, interviewees (First Nation and non-First Nation) unanimously stated that a shift in power from regulatory bodies to local communities was required. Interviewees felt that past initiatives had been pre-destined to fail as there had not been a true transfer of power from regulatory agencies to community groups:

> This is a big issue, from my perspective; the DFO has funded a lot of these organizations that don't really have any power. They operate at the funding whim of the federal government; nothing really changes as far as local control and allocation. The openings are all handled remotely in Vancouver. So I don't know that the demise of the KTFC is an indication that we can't run things here (Doug Aberley, September 9, 2009).

Due to politically distrustful and often antagonistic relationships which have evolved among different community groups within the Broughton and between those community groups and regulatory bodies, interviewees felt that decision making power had to be seated firmly within each individual community. The concept of an external body making decisions on their behalf was almost unanimously rebuffed.

> We have tried all of that. If we are going to do local management then we all need to be involved. I don't want other bands deciding what's best for my tribe and I don't want the government to decide. We decide, the people, and that's the only way it will work. This is our territory, our history, our land and we are the best stewards for it (Anonymous 7, July 10, 2009).

Several respondents suggested a form of complete power: "I definitely think we should have control over everything" (Anonymous 4, July 17, 2009). However, most suggested a coordinated level of power sharing. When asked if local community groups, local First Nations and government should be involved one 'Namgis community member states:

> I think it should include all of them but we have to have educated people in that department. We can't just have the old people there who might think that everything was just for First Nations and that we would just fish everything out for food fish (Mona Madill, July 21, 2009).

Another community member states:

> So for me, you have to start at the ground level, and that is the local community and here the foundation really is the aboriginal community because of the kind of empowerment that they have, but also the non-aboriginal community because we all live together, and I think that there is a way in which the aboriginal community can proceed in which there are benefits to everybody, both for the local environment as well as the broader community. Decision-making no longer at a distance, decision-making at a substantial level here in keeping with the vision here. Who are we? What are our values? What do we want to keep? How do we want to keep it and what are we willing to let go? Where are the trade-offs; where is the new balance point? Those are basic planning structures (Martin Weinstein, May 23, 2009).

A Gwawaenuk community member asks:

> Why can't we just make decisions for ourselves? I have a territory that I know really well, that me and my family have lived and worked in all of our lives, why should a board full of 'experts' make decisions for us? We are the experts. No, I think that we can decide when to go and get clams and from where. We can decide how many fish to take based on what we see out on the water. Those scientists can come and do their studies and then tell us how it is but they are always wrong [laughs]. I mean what do we need them for? To dig our grave a little deeper? No, it should be us managing and just

> because other bands are rich or have more of those 'scientists' working for them, I don't think they should have a say either – we decide what's best for us. That doesn't mean we can't work together on the bigger stuff that we share. It just means that when it comes to my territory I get the first say (Anonymous 7, July 10, 2009).

Politics

Several community members identified a need to separate the marine planning process from current political processes. Concern was expressed regarding the current political climate within local community governments: "Elected people won't meet with each other. "[name removed] and I tried for three years and they wouldn't come to the meetings" (Arthur Dick, September 22, 2009). Community members indicated that current community governments are focused on specific mandates that are not necessarily collaborative in nature (Anonymous 4, December 22, 2009). In addition, members currently working within First Nations governments identified a need to separate the marine planning process from current activities. For example:

> The thing with Native organizations is you get hired for this job and other things get tacked onto your job position. I don't like that. I don't like that in my position right now. I think you should have your portfolio and you should stick to it. Like if you're in fisheries, you should be in fisheries and stick to it and if you're going to have a really awesome job like tourism and go check out a campsite, then that's what you do. So it should be very job descriptions specific, one portfolio specific (Anonymous 11, July 28, 2009).

Ensuring that current political agendas were removed from marine planning initiatives was recommended in an effort to foster collaborative relationships without impeding projects which are currently under review.

> Members who are currently in office have a job to do and their job has a political focus. If we are to do marine planning properly we need to get the politics of it out. We need to get our technical people in place; this will allow us to work together for the greater good (Anonymous 19, August 15, 2009).

Respondents identified that the political aspects of local marine planning have served to hinder the process in the past. "The KTFC failed because it became too political...the government started using the KTFC as the consultation process" (Arthur Dick, September 22, 2009). This was further reflected upon by another interviewee:

> One thing that concerns me the most is when you get the political body involved. What we need to do is we need to get the technical people in place. We're talking about one or two technical people to develop a plan. A marine use plan, through the information that they get, through the traditional knowledge from all of the members and what we need to protect and how we need to protect it. (Brian Wadhams, June 2, 2009)

The inclusion of Hereditary chiefs was suggested as a possible mechanism to ensure that current political structures were separated from the marine planning process.

> [N]obody was allowed to do anything until [the chief] said so...They knew what they were doing, there were rules. But we don't follow those ways anymore (Mona Madill, July 22, 2009).

> In the olden days it was the hereditary chiefs that managed...What gives them the power is responsibility (Brian Wadhams, June 2, 2009).

> Hereditary chiefs are a different kind of politics. They would talk to each other and help us to join together as communities to manage things collectively. (Anonymous 7, July 10, 2009).

A Gwawaenuk community member summarizes the issues regarding current political processes and the need to foster communication among members:

> People are interested in culture and they're interested in traditions and that's a starting point because what I think what happens is that people get all frustrated and confused because they're torn between the two different government structures like the western government and the traditional government. This is what I've been doing for a long time too, Jamie: having one-on-one interaction with the people, and the cause is a real strong influence between us. I think that that is a really effective approach: the more you influence one person the more you can influence others too, and I think that that is what needs to be done. (Fred Speck, September 15, 2009).

Funding

Funding was identified as an impediment to the formation of a lasting co-management effort. When asked where funding dollars might be sought all of the interviewees suggested that the federal government should provide funding. To a lesser extent individuals suggested that the provincial and local governments should contribute funds. The 'Namgis First Nation Director of Natural Resources states:

> [Funding] is a concern so here's a model. You have the aboriginal fisheries strategy agreement (AFS) now and you have AAROM. The AFS is for individual First Nations or a couple and AAROM is to bring all sorts of First Nations together with lots of funding associated with that. We would perhaps scrap those systems, but keep the budget. How about if each First Nation was supplied a budget that would provide a core of technical assistance required to ensure that they had an equal voice in any of the collective negotiations that go on? So maybe part of this is that every First Nation should have GIS, I can attest that that has absolutely changed what we do here - whether it's a contract service or an internal service - that would be a fundamental part of this. Every First Nation should have a couple of patrol boats and a couple of guardians. Every First Nation should have at least one fisheries management administrator. So every First Nation would get that fundamental budget allocation to be able to collect information, patrol territories, to feel like they're fully involved (Doug Aberley, September 9, 2009).

In addition to federal and provincial funding localized funding feedback loops were also suggested. Fred Speck (September 15, 2009) suggests that a tax be applied to local industry which would feed back into local community management coffers: "they should somehow need to compensate for the damage that is being done". Again, Doug Aberley proposes some ideas:

> [W]ell, that's one of the exciting initiatives that's already out there in that the Broughton Archipelago is already a global destination for kayakers and they have an impact on the environment. One idea is that when you came to one of the kayak embarkation points you would pay $20 and you would get a passport, and you could go to Village Island, you could go to different places and there would be a guardian there and you get your passport stamped. You would have an incredible souvenir of your adventure and that

> $20 with an estimated 20,000 kayakers, that's $400,000. And they would get a great First Nation designed passport which would just be a great souvenir and nobody would blink about the $20... So I don't think it's impossible that a budget of several millions of dollars could be generated locally with the passport and other measures including taking management pressure off the DFO bureaucracy and having funding diverted here. Also, we would seek free assistance wherever we could, say for habitat restoration projects. We could use university researchers and actively court them by coming up with a whole series of research questions. Young researchers which come to the territory with their own funding and support. And on and on it goes.

Funding feedback loops such as tourist fees and core dollars, primarily from the federal government, were the main sources of funding suggested by community members.

Summary

In the interviews, five themes (Trust Building, Capacity, Politics, Power and Funding) recur that are relevant when considering CBACM planning and process within the Broughton. Interviewees suggested that it is vital to address these themes prior to moving forward with the formal implementation of a CBACM plan. Of primary importance was the need for First Nations in the Broughton to develop the ability to work collaboratively in order to build capacity and develop a CBACM plan. To do this trust must be established between different communities and each of those communities must be comfortable with power sharing arrangements, the decision making process and the application of funding.

Chapter 6

Moving Towards Community-based Adaptive Co-Management

This chapter will provide my recommendations on a CBACM pre-implementation planning framework, which are based on an analysis of the interviews conducted and literature reviewed. The components of this framework will be presented in a series of linked framework components together with recommended actions that will help to provide the basis for future marine planning and management within the Broughton.

The concept of collaborative management within the Broughton has raised expectations among fisheries managers and local community members. There is a clear desire by both regulatory agencies and local community groups to develop a functional plan and strategy that addresses the needs of all stakeholder groups while allowing community members greater say in the management of local resources.

Collaborative management strategies have been developed all over the world and have met with various degrees of success (Pinkerton and Weinstein 1995). Within the Broughton, attempts have been made to work collectively on fisheries related issues. However, these efforts at co-management have not resulted in a lasting co-management framework (e.g. KTFC). Part of the reason for this failure was a lack of pre-implementation planning and relationship development. Organizers failed to take the time to understand resource management issues within the local context and to develop the necessary site-specific tools which were needed to allow the co-management schemes to grow and evolve. Chuenpagdee and Jentoft (2007) argue that what precedes implementation is often of equal or greater importance than what happens as the process moves forward. Unfortunately, this

crucial first step is often hurried in an attempt to proceed to the implementation phase of a collaborative regime (Chuenpagdee and Jentoft 2007; Pinkerton and Weinstein 1995).

During this research process it has become clear that the community groups within the Broughton are within the pre-implementation stages in the development of a CBACM plan. This pre-implementation stage has characteristics similar to "step zero" as described by Chuenpagdee and Jentoft (2007) in other co-management frameworks. This concept is evidenced by the community members themselves in their discussions on the need to develop trusting relationships, organize community efforts and build capacity. Although there has been a great deal of research focused on the implementation of co-management system, less focus has been given to "step zero", a stage where linkages are established between community members and regulatory agencies, leaders and stakeholders are identified and capacity is developed (Pomeroy and Rivera-Guieb 2006).

The goal of this thesis research is to suggest strategies which will allow First Nations within the Broughton to work towards the collaborative management of local resources. The success of a community-based marine co-management strategy is dependent not only on how well the program is implemented but also on the way in which it is conceived (Chuenpagdee and Jentoft 2007). A focus on step zero or pre-implementation will allow community members to address those impediments to co-management which were identified during the interview process. During this initial planning phase communities will have the opportunity to be actively involved in the development of the plan while building capacity, trust and hope.

CBACM Pre-Implementation Framework

The following suggestions are based primarily on an analysis of two major sources of information: the voices of the communities (Chapter 5) and a review of existing CBACM literature (Chapter 3). It is important for each CBACM arrangement to be designed specifically for those who intend to use it (Berkes 2007; Jentoft 2007; Jentoft 2000; Pinkerton and Weinstein 1995; Pinkerton 1989). The pre-implementation process is focused on planning and designed to adapt and evolve to the wishes of community members. The intent here is to suggest a base planning framework that is place specific, addressing themes raised by community members and incorporating concepts derived from a review of existing literature.

The pre-implementation planning framework consists of three linked planning components: (1) Community Structure (community-based management), (2) An Area Technical Team (lateral community-based and co-management linkage) and (3) A Marine Planning Committee (vertical co-management). Each of these bodies is designed to fulfill specific goals which will allow community members to address issues raised during the interview process. Funding may be available from the federal government AAROM program to support the development of the CBACM process.

Community Structure (Community-based Management)

During the interview process community members expressed a desire to situate the power to make resource management decisions at the community-level. This bottom-up approach to community-based co-management is not new and has been utilized internationally in a variety of different ways (Berkes and Berkes 2009; Berkes 2007; Jentoft 2007; Weinstein 2007; Pomeroy and Rivera-Guieb 2006; Pinkerton and Weinstein 1995;

Pinkerton 1989). A bottom-up approach utilizes the input of community members to develop the overarching policy for the local management of marine resources. Community members with different interests, levels of knowledge, concepts and ideas collaborate to identify priorities, solve problems and identify ways in which conflicts and claims to resources can be resolved (Pomeroy and Rivera-Guieb 2006).

Individual communities within the Broughton are small and accustomed to working together to address issues and to providing their opinions to a centralized source (i.e. band council). Within the Broughton there exists a multitude of different stakeholders, each of whom has a distinct right to have her/his voice heard. The communities of the Broughton are island communities: individuals live immediately adjacent to the marine resource. Due to this proximity each individual has the ability to contribute valuable information to the planning process. Deep community involvement in planning processes has been shown to have a greater potential for lasting and appropriate policy development as it is the community members themselves who are making decisions and setting priorities (Weinstein 2007; Pomeroy and Rivera-Guieb 2006; Notzke 1995; Pinkerton and Weinstein 1995). With deep involvement, the communities have a stake in ensuring that the process works as they will be the beneficiaries of planning outcomes. Pinkerton and Weinstein (1995) state:

> the larger social science literature show that an effective way to produce appropriate, workable, and enforceable regulations is for fishing communities to write, or participate in writing them and to enforce or participate in enforcing them (5).

When community members are closely involved in making decisions they are also less likely to blame regulatory agencies for failure to manage resources properly if resources decline; rather, they are more inclined to identify problems and work hard to find solutions (Berkes 2007; Pinkerton and Weinstein 1995; Ostrom 1990).

At this early stage in CBACM development, it is important to ensure that each separate community is able to gather its own information from its own members. An effective way to gather and amalgamate information is through the use of a community coordinator/organizer, one or several community-based planning committee(s) and a GIS technician (Steve Diggon, Turning Point Coordinator, pers. comm. 2009) (Figure 4). Similar community-based structures have worked well in co-management regimes throughout the world (Yandle 2008; Pomeroy and Rivera-Guieb 2006; Makino and Matsuda 2005) as well as regionally, as in the case of the Turning Point Initiative and Aquatic Management Board on Western Vancouver Island (WCVIAMB). As per the communities' wishes (based on data collected during the interview process and subsequent presentations), the Broughton CBACM plan must ensure that the voices of community members are heard first as they relate to the management of marine resources and that the suggestions and ideas put forth by community members are incorporated into marine management decisions and, ultimately, policy development.

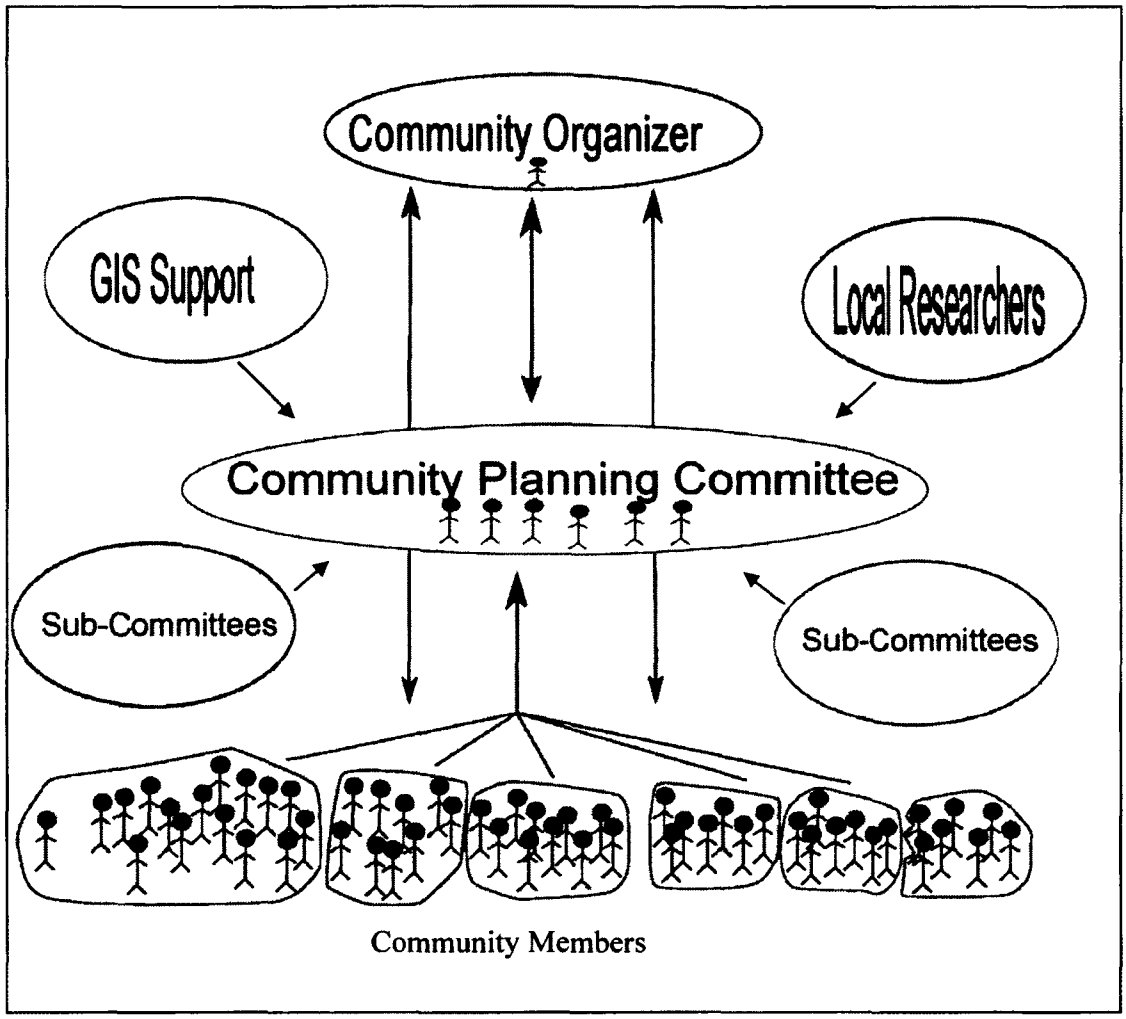


Figure 4. The pre-implementation community planning structure consists of four basic elements. The community planning committee (and sub-committees) represents the community members and uses their input and expertise to set planning priorities for each individual community. Once priorities have been finalized, they are acted upon with the assistance of the GIS technician and local research groups. The community organizer links the concepts and ideas developed by community members to other planning levels (i.e. Area Technical Team and Marine Planning Committee), works with community groups, relays information back to community members and facilitates the marine planning process at the local level.

Community Organizer

The selection of a community organizer is an integral first step in moving the development of the CBACM pre-implementation framework forward. Within each community, I recommend that a community organizer be selected to work closely with community members and groups. This individual will act as a CBACM facilitator, whose primary role is to ensure that the community's voice is being heard and included in policy and structural design.

To do this, the community organizer assists in the development of working groups, facilitates meetings with these groups, facilitates meetings with a community planning committee (to be discussed in the next section), engages community members (information sharing), gathers community information (interviews, questionnaires), and generally generates excitement regarding the CBACM process. This individual will also act as a liaison or 'bridge' between community organizations and other components of the proposed CBACM framework including the Area Technical Team and the Marine Planning Committee, as well as with regulatory agencies and other stakeholders as the CBACM plan matures (discussed below).

The individual selected can be internal (i.e. from the community) or external (i.e. from outside the community), a decision which will depend on what the community feels is most valuable. The individual should be selected based on her/his knowledge and experience on issues which community members have identified as important, including knowledge on community organization, mobilization, marine planning and monitoring, marine biology, information dissemination, and conflict management. Based on other frameworks and

strategies that utilize a community coordinator/organizer, communities should consider selecting a community organizer with the following skills:

- open-minded;
- adaptive;
- respectful;
- sensitive to local First Nation culture;
- able to facilitate and guide rather than lead the process;
- familiar with the process of community organizing and participation processes;
- understanding of social and community relationships including conflict management;
- have a clear grasp of community-based co-management concepts and processes;
- have the ability to work with teams of professionals and non-professionals;
- know when to phase-out and 'let go' (if external);
- have very strong interviewing and documentation skills;
- able to facilitate group meetings and discussions; and
- able to effectively communicate with multiple user groups and regulatory personnel (Weinstein 2007; DENR et al. 2001; Almerigi 2000).

Community members identified a need to ensure that the CBACM plan was removed from current political processes. As such, the community organizer should have a clear agenda or portfolio which pertains specifically to the community-based management of marine resources rather than other more politically based agendas (i.e. treaty).

Suggested Action

Individual communities may be able to utilize AAROM funding to put a community coordinator or organizer (as mentioned above) in place. After a community coordinator has been selected he or she can then assist with the development of the next step in the planning structure: the selection of the Community Planning Committee.

Community Planning Committee

Community committees can be effective tools in CBACM regimes and have been utilized across the world and locally (Steve Diggon, Turning Point Coordinator, pers. comm. 2009; Weinstein 2007; Pomeroy and Rivera-Guieb 2006; Day 2003). A community planning committee is composed of key individuals within the community who represent particular groups of stakeholders. The size of a given committee varies (though it is often around four or five individuals) and should be comprised of individuals who represent different sectors of the community (Pomeroy and Rivera-Guieb 2006). For example, one representative may be a commercial salmon fisherman, one a clam harvester, one a cultural coordinator and one a marine biologist/planner. The actual composition of the committee will depend on the composition and structure of the individual community. The key concept here is that each committee member must represent a group of interested stakeholders and bring their voice to the table. The information gathered by the Community Organizer (through interviews, focus groups and questionnaires for example) will help to determine the most appropriate composition of this committee, recognizing as well that the composition of the committee will be dependent on the availability and willingness of community members to participate.

The community committee is an essential component of the proposed Broughton CBACM pre-implementation framework as it can empower community members with responsibility and greater control over decisions affecting local resources. The devolution of power from regulatory agencies to community groups was one of the most important themes identified by community members during the interview process, and the establishment of a community committee has proven to be an effective form of community empowerment (e.g.

Steve Diggon, Turning Point Initiative, pers. comm. 2009; Weinstein 2007; Fraser et al. 2006; Pomeroy and Rivera-Guieb 2006; Cassidy 2004; Day 2003). Thus, whereas the community coordinator may be external, it is important for the planning committee to be composed exclusively of local community members.

The selection of committee members should not be taken lightly. Pinkerton (1989) states "the motivations and attitudes of key individuals can make or break co-management no matter how much legal backing or supportive arrangements an agreement has" (29). Committee members should be respected, motivated and committed members of the community who represent a larger group of interested stakeholders and who are willing and able to dedicate themselves to the process. Within other community-based and co-management frameworks it has been useful for committee members to have the following characteristics:

- have a high level of commitment;
- be willing to start projects but not to lead and dominate the process;
- be willing to include individuals from different classes, sexes and age groups;
- be credible within the community;
- be respectable and accessible;
- be representative of an active segment(s) of the larger community (family group, fishers, etc);
- be experienced in managing marine resources;
- have a connection to the marine environment;
- be able to identify problems and find solutions;
- be able to work with other First Nations within the Broughton;
- not be politically motivated;
- have excellent organizational and communication skills;
- be able to act on the basis of consensus and collaboration;
- be willing to assist in information gathering; and
- be available to commit to the process (Weinstein 2007; Pomeroy and Rivera-Guieb 2006; Borrini-Feyerabend et al. 2004; Almerigi 2000).

There need not necessarily be only one community committee. Several community members put forth the concept of a guild or *namima* based structure (Anonymous 3, October

28, 2009; Anonymous 1, May 4, 2009), a concept which is also reflected in the literature (e.g. Weinstein 2007; Pomeroy and Rivera-Guieb 2006; Pinkerton 1989). Within this structure, several community groups can be established to address specific issues which pertain to the management of marine resources. Pomeroy and Rivera-Guieb (2006) describe the 'community organization' which is made up of organized community members who represent their interests in the co-management program. This concept is further reflected in First Nations traditional management practices (e.g. *namima*) that occurred prior to European contact. For example, a specific group of core people may be brought together to manage the clam resource, a process which is already underway in the Broughton (Brian Wadhams, June 2, 2009). These individuals would have a site-specific understanding of the resource and may be composed of the clam harvesters themselves or individuals with a specific stake or tie to the resource. These sub-committees would report to the centralized planning committee and each sub-committee would be managed and organized by the community coordinator. Under the guild or *namima* system, the power to manage specific resources is further directed to the community members (e.g. whether a clam beach should be fished or left fallow) and political aspects of marine management become less influential as each group has a site-specific focus.

In addition, several community members suggested that the formation of a committee composed of Hereditary chiefs might be a useful way to build dialogue, trust and foster co-management activities between First Nations within the Broughton and to further remove current political practices from the marine planning exercise. The availability and willingness of local Hereditary chiefs is unknown but a sub-committee consisting of Hereditary chiefs could be formed with a specific mandate and specific objectives which would aid in the ultimate development of a formal CBACM regime. For example, the role of

the Hereditary committee perhaps consisting of chiefs from each of the First Nations within the Broughton, might be to manage conflict and foster collaboration. Inclusion of Hereditary chiefs into the planning and decision making process has been effective in the case of the WCVIAMB (Day 2003).

Ultimately, the role of the planning committee(s) is to bring the voice of the individual community member to the forefront of discussions and to use their individual expertise to determine how to apply the information presented by community members towards the management of marine resources. Support and additional capacity for this effort is provided by the Area Technical Team, which is described later in this chapter.

Suggested Action

Community members, with the assistance of the community organizer, can begin to discuss the CBACM pre-implementation planning process. Interested community members can be sought out and appointed as required. The community coordinator may use surveys, questionnaires, interviews and community meetings to help facilitate this process. It should be noted that the Turning Point Initiative, which also utilizes structured groups composed of community members, did not receive AAROM funding to support community groups. Community members may be required to volunteer to be a part of the process, something which should be considered when discussing the details of the position.

GIS Technician

GIS in marine planning has proven to be an incredibly helpful tool that has been used to great effect in numerous resource management and planning initiatives (e.g. Gorman et al. 2008; locally within numerous First Nations along coastal BC). Each of the MTTC First

Nations within the Broughton presently uses GIS technology to develop resource maps within their territory for planning purposes. Currently, GIS capacity ranges from extensively developed GIS capabilities (i.e. the 'Namgis First Nation) to contracted external GIS capacity (Chief Charlie Williams Gwawaenuk Tribe, pers. comm. 2009). Each First Nation has found value in GIS products. For example, the 'Namgis First Nation has mapped approximately 10,000 traditional use sites within their core traditional territory and have been utilizing these data for planning purposes (Doug Aberley, pers. comm. 2009). GIS products, generally maps but modeling is also common, are presented in a visual way that is easy for community members to understand and relate to, which helps to facilitate discussion. The use of GIS technology can greatly assist local First Nations in marine planning and development working towards the formal establishment of a CBACM regime.

Suggested Action

Each individual community may be able to utilize AAROM funding to build its GIS capacity, including the acquisition of a full time GIS technician.

Participatory Research

As work plans outlining prioritized planning activities are developed there will likely be an opportunity for local professionals to assist (where possible/necessary) with the completion of these activities. The use of local professionals serves to further link different stakeholders to the planning process, which in turn builds relationships and understanding regarding the goals of the local CBACM process. Research efforts (e.g. resource inventory) should be participatory in nature with people from local communities (First Nation and non-First Nation) actively participating. This participation can be in the form of contributing local or traditional knowledge or providing physical labour or professional expertise. A key

directive in participatory research is to empower community members and link various stakeholders to a common cause (Fraser et al. 2006). The overall design of the Community Organizational framework is presented in Figure 4. Within this proposed pre-implementation framework, each community within the Broughton would have its own community framework in place.

Suggested Action

As information gaps and priorities are identified by community members and the Community Planning Committees, the community coordinator together with the community and marine planning committee (to be discussed later in this chapter) should consider the use of local experts, professionals and community members to complete tasks and gather information as required.

Area Technical Team (Lateral Co-management)

The proposed Area Technical Team (ATT) is composed of three individuals: (1) a socio-economic planner, (2) marine planner, and (3) a GIS technician. The ATT provides a linkage between the community-based approach highlighted above and the co-management of resources between and among different communities within the Broughton. The purpose of the ATT is fourfold.

First and foremost the proposed role of the ATT is to provide technical advice, resources and capacity to allow community members to act on identified priorities and to assist with the continued evolution of the CBACM planning framework (i.e. working towards the development of a formal CBACM arrangement). The team is put in place to provide capacity but also to bridge gaps in capacity between local First Nations. The concept of capacity gaps was raised by community members who indicated that large communities with

significant capacity (e.g. the 'Namgis First Nation) have an unfair advantage that has the potential to allow them to dominate the marine planning process. For example, the 'Namgis Nation has a comparatively advanced marine planning process and would not require as much technical support as some of the other Indigenous communities. Therefore, greater attention and resources would be provided to those who need it most. Several interviewees indicated that "need is not a number" (Arthur Dick, September 22, 2009), suggesting that resources should be allocated based on need and not population size. The proposed ATT would provide resources where they were needed most. Similar strategies have been utilized to great effect in numerous planning initiatives (Pomeroy and Rivera-Guieb 2006; Turning Point Initiative; WCVIAMB).

Secondly, the role of the ATT is to link local community planning processes together in a way that will foster collaboration and build trust (lateral co-management). As identified by community members, the ability of local First Nations to work together has been hindered due to changes in marine planning authority and conflicting political goals. As described previously, these issues are, in large part, the result of a colonial history, the implementation of the *Indian Act* and the westernized management style imposed by regulatory agencies. The proposed ATT would allow local First Nations communities to work together indirectly (during these early initial planning stages), which will allow for trusting relationships to be re-established as local communities appreciate that they have similar goals and aspirations. This will also allow for economies of scale to be achieved as overlapping initiatives can be collaboratively developed indirectly through the ATT, which will further serve to foster effective working relationships as projects are successfully completed.

Thirdly, the proposed ATT would ensure accountability by reviewing projects as they are in progress and as they are completed, a process which is also completed by the Marine

Planning Committee. These reviews will address the communities' desire for an accountability feedback mechanism that ensures that projects are completed within allocated timeframes and budgets. This will, in turn, enable the proposed marine planning process to continually move forward and perhaps to build momentum as the results are presented to each of the communities.

Finally, the proposed ATT would act as a vertical link between empowered community groups and the Marine Planning Committee (see figure 6 on p. 110). The proposed ATT is essentially the 'glue' that brings each of the communities together (horizontal linkage), and links them with the Marine Planning Committee (vertical linkage) while providing support, expertise and advice on the development, monitoring and maintenance of projects. As a purely technical body, the ATT also serves to further ensure that political processes related to treaty and other issues are kept separate from the marine planning process. The proposed ATT would be accountable to each of the communities. The team is not in place to decide which projects need to be developed: that is the role of the community committee and community coordinator.

ATT members can be selected internally or externally and should consist of motivated individuals with the appropriate expertise. To simplify the selection process it would be useful for the positions to be posted and for applicants to be selected through consensus among the community coordinators and the marine planning committee (Steve Diggon, Turning Point coordinator, pers. comm. 2009). The use of an ATT has proved to be very effective for First Nations who are a part of the Turning Point Initiative and WCVIAMB during the early stages of formal marine planning development. Technical teams have also been used around the world to provide support to small coastal and terrestrial communities (e.g. Berkes 2007; Weinstein 2007; Ayers 2005; Pomeroy and Rivera-Guieb 2006; Lobe and

Berkes 2004; Jentoft et al. 2003; Pinkerton and Weinstein 1995). The ATT linkage to the community is presented in Figure 5.

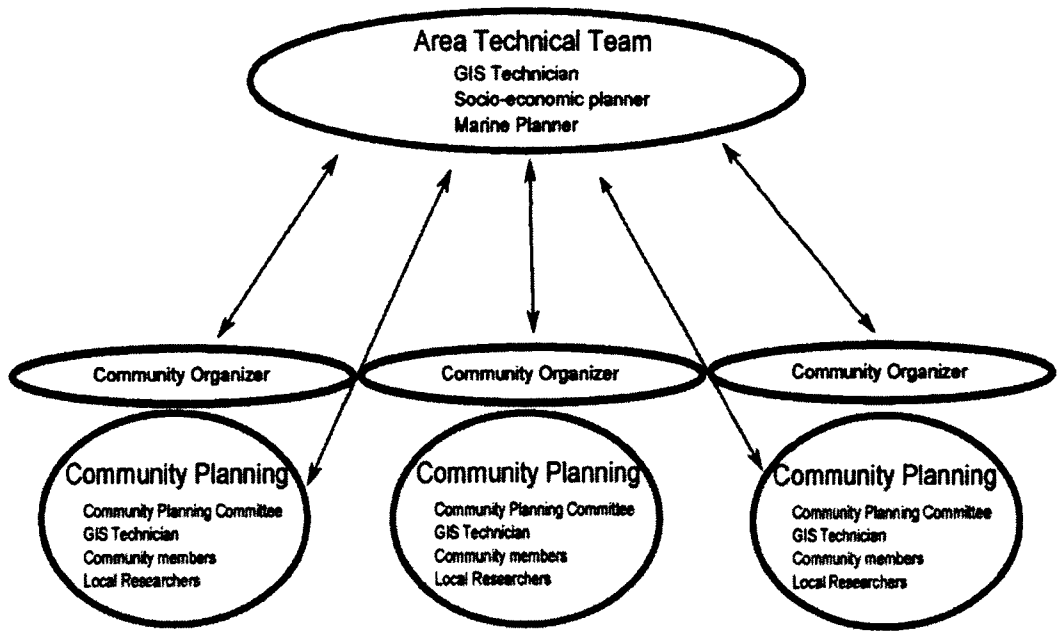


Figure 5. Community planning groups as described previously exist within each distinct community (three represented here as an example). Within the community planning framework, the primary role of the ATT is to provide capacity to each community group, which will allow them to achieve their marine planning goals. For example, if an individual community identifies that more information is required on a particular salmon stream before appropriate planning mechanisms can be implemented then the ATT facilitates the acquisition of that information. In some cases the ATT is able to work directly on projects identified by community members and in others the ATT will suggest local contractors (if possible) to complete the work. In order for different communities to work together a level of trust must be established. Within the early planning stages the ATT will help to coordinate linked planning initiatives. For example, if two community groups have identified information gaps on the same salmon stream then the ATT will facilitate the filling of that gap and allow communities to work together, indirectly at first, to achieve economies of scale. As highlighted in the above figure, the ATT will work collaboratively with community coordinators as well as the community members themselves to ensure that communities have the capacity to develop and implement marine planning initiatives.

Marine Planning Committee (Vertical Co-management)

The proposed Marine Planning Committee is composed of (1) a marine planning coordinator/facilitator, (2) the elected chiefs of each First Nation community, (3) the Area Technical Team, and (4) the community organizers from each community. This committee focuses on vertical co-management acting as the vertical link between communities and other governments and stakeholders within the marine planning process. The committee meets with external stakeholders and governmental agencies to bring the combined voice of each community (priorities, policy and process) to discussions on local and regional management policy and practice. This proposed process would be facilitated by the marine planning coordinator.

The proposed Marine Planning Coordinator (MPC) would act as chair for the Marine Planning Committee and work to link the community-based planning process (community structure) and lateral co-management processes (ATT) into the vertical co-management process. To achieve this, the MPC communicates across all levels of the planning framework including community committees (and sub-committees), community coordinators, the ATT, and each community's elected chief. This individual would be responsible for allocation of funds, seeking and developing new sources of funding, fostering economies of scale and the development and maintenance of accountability feedback mechanisms. As the title suggests the proposed MPC is a coordinator: this individual would act as a facilitator, is supportive of the process, and is accountable to the communities, but would not hold the power to make specific decisions on marine planning.

With the assistance of the MPC, the Marine Planning Committee acts as a vertical bridge to stakeholders and other levels of government, including Federal and Provincial regulatory agencies, local governments and local communities. The proposed committee would present linked community marine planning initiatives to external organizations and coordinate their collaborative development into regional and national marine planning initiatives. This would allow for regulatory agencies and community planning groups to develop local marine planning initiatives collaboratively in a way that is focused on the resource rather than on political motives. Linkage to multiple agencies can also allow local community groups to address issues which are not wholly local in nature, such as transboundary species (i.e. passing salmon stocks), which would require regional or province-wide planning initiatives.

Of note is the proposed inclusion of elected chiefs within the planning process. During the interview process community members clearly identified a need to ensure that political processes were kept separate from the community planning framework. Originally, elected chiefs had not been suggested as part of the planning process or part of the vertical linkage between the community voice and external governmental and non-governmental agencies. However, within current Indigenous structures elected chiefs are an important social and political voice for their respective communities. The exclusion of this voice from vertical linkages to various external stakeholders does not appear to be appropriate at this time. In an effort to ensure that political motivations are not the primary focus of discussion (the presence of an elected official does not necessarily make this so), the proposed marine planning committee is designed to make decisions based on information collected through community-based approaches (community structure) and technical advice provided by the ATT. As this process evolves, the effectiveness of having an elected body sitting on the

marine planning committee can be validated or rebuffed. All committee members are accountable to the communities they represent. Within the adaptive framework presented above the communities themselves will ensure the proper validation of the process. The overall proposed CBACM planning framework as described above is presented in Figure 6.

Suggested Action

Each of the communities involved in the CBACM process will have to reach consensus on the selection of a MPC. AAROM funding may be available to fund this position, as was the case with the Turning Point Initiative. The MPC will coordinate regular meetings with external governmental agencies to link the community-based planning framework with the vertical co-management process.

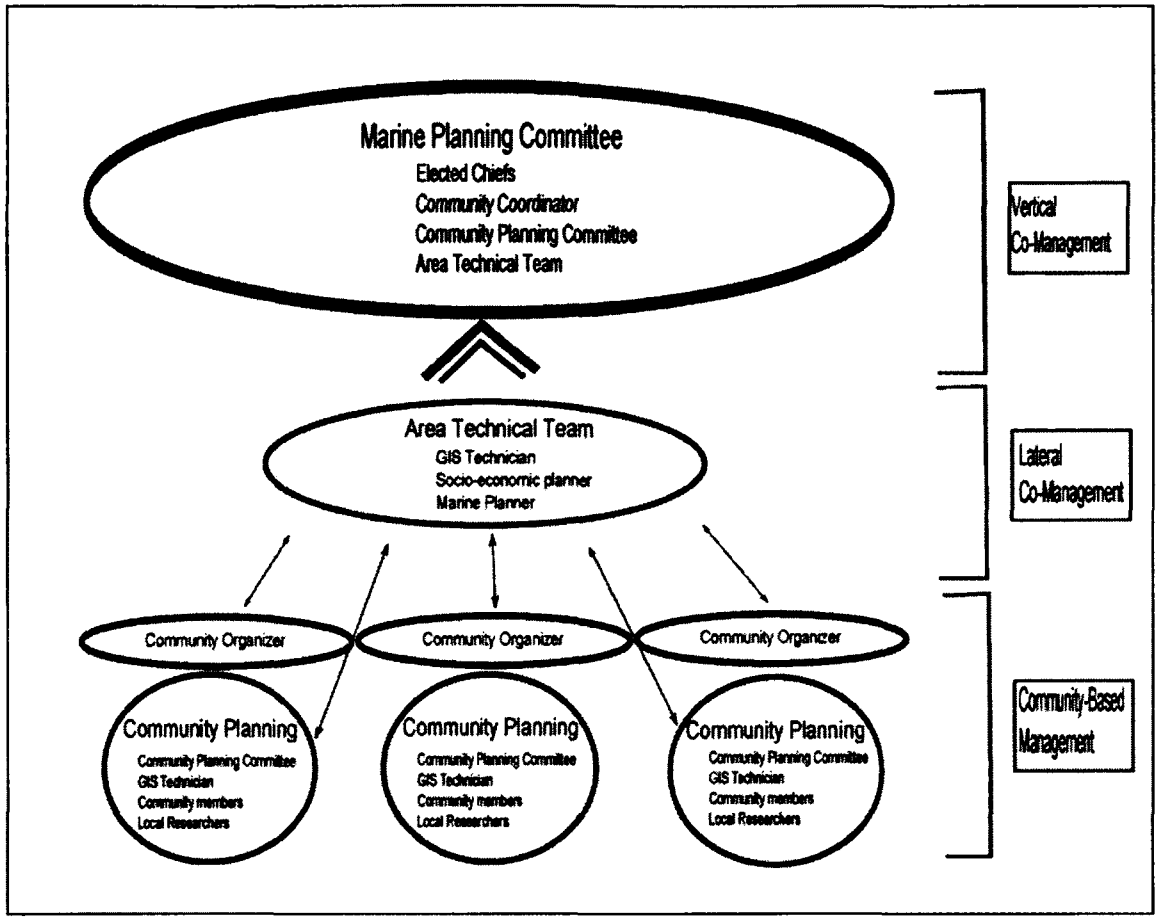


Figure 6. The CBACM framework illustrated above consists of three linked processes. The community-based approach to marine planning and management is comprised of the Community Planning framework (community planning committee, GIS technician, community members, and local researchers) and the Community Organizer/coordinator. The community-based approach allows for marine planning priorities and goals to be identified by the community members within individual communities (three communities are represented above for illustration purposes). Lateral co-management between different communities is achieved, in part, through the ATT (socio-economic planner, marine planner, GIS technician). This team provides technical capacity to each member community and provides a lateral linkage between individual planning processes. The marine planning committee enables technically sound, individual and grouped community priorities and initiatives to be presented, discussed and included in external governmental planning processes. This committee is designed to achieve vertical co-management. Ultimately, through the CBACM process presented in this figure the voice of the individual and collective community members is used to guide and inform decision making processes on both a local and regional scale.

Funding

As described previously, interviewees believed that the federal government should be responsible, at least in part, for funding the development of a CBACM strategy. Several community members also identified the AAROM program as a possible source of funding. The AAROM program website officially states "AAROM provides funding to qualifying Aboriginal groups to form aquatic resource and oceans management organizations capable of hiring or contracting skilled personnel to allow them to effectively participate in decision-making and advisory processes. The program has a relatively stable operating mandate of approximately $6 million annually in Pacific Region" (Canada, Fisheries and Oceans, AAROM 2004). The AAROM website goes on to list the main objectives of the AAROM program, each of which relates to the planning framework described above. The main objectives of the AAROM program are to:

- assist Aboriginal groups in acquiring the administrative capacity and scientific/technical expertise to facilitate their participation in aquatic resource and oceans management;
- encourage the establishment of collaborative management structures that contribute to integrated ecosystem/watershed management and planning processes;
- enhance existing collaborative management structures, where appropriate;
- facilitate representation of member communities in interactions with DFO at the multi-stakeholder level and potentially with other government departments;
- strengthen relationships through improved information-sharing between Aboriginal communities, DFO and other stakeholders and among Aboriginal communities;
- contribute to the federal government's broader objective of improving the quality of life of Aboriginal people; and
- facilitate sound decision-making in advisory and other processes related to a number of areas of DFO responsibility. (Canada, Fisheries and Oceans AAROM 2004)

The Turning Point Initiative has utilized AAROM funding extensively to support research, structural developments, hire staff and leverage for additional funding.

Although funding is available through the AAROM program for the development of a local CBACM regime within the Broughton it is important for a diversity of funding to be sought. Often, when small organizations rely on a single source of funding they are left to wonder if the projects and community activities will continue from year to year (Doug Aberley, September 9, 2009; Day 2003). This was evident in the KTFC, whose operating budgets were primarily federal and whose funding contracts were short term. This is also the case with relatively large initiatives like the WCVIAMB, for which the majority of funding has been provided by the federal government. Unstable funding sources have been identified as a major issue to the programs continuing operation (Day 2003).

Community members are more likely to become deeply committed and involved in a process if they know that it will continue to exist for long periods of time and that their efforts won't be wasted (Jentoft 2000; Pinkerton and Weinstein 1995). To that end, one of the roles of the Marine Planning Coordinator and Community Coordinators is to seek out external funding sources. In addition, several localized sources of funding (i.e. a passport for tourists) can be employed. As recommended by a number of community members, there may be an opportunity for fees to be charged to industry and other users of the local environment. These are concepts which should be further explored during the planning process.

Suggested Action

The acquisition of funding is one of the most important initial steps in the development of a CBACM plan. The structure presented above should be considered by local First Nations governments and modified as required to suit the needs of individual communities. Community meetings, questionnaires and interviews can be used to gather community feedback on the process. Individual communities can then discuss the

development of the CBACM process externally through government to government meetings. If consensus regarding the development of the CBACM planning structure can be reached, funding should then be sought, initially through the AAROM program.

Additional Considerations

Identification of Stakeholders

One of the first roles of the community committees, Community Coordinators, the ATT and marine planning committee is to identify the stakeholders. Who is going to be affected by marine planning decisions made by local First Nations? Stakeholders can be individuals, other First Nations, local non-First Nation communities, groups, and organizations. These individuals will have the potential to be affected in both positive and negative ways by decisions made by the Marine Planning Group. Interviewees expressed a desire to include many of these stakeholders in the planning process. Some stakeholders may already be part of certain planning committees, conducting research, or may be providing technical advice and assistance. Within these early stages, stakeholders can be identified as potential partners in the marine planning process. However, to do so it is important to determine which stakeholders should be represented and how they should be chosen. The representation of all stakeholders would be ideal but there must be a limit or the process will begin to degrade due to the representation of too many interests as was apparent in the WCVIAMB process (Pomeroy and Rivera-Guieb 2006; Day 2003). To determine stakeholder representation, the planning committees must ask: who is entitled to participate? Existing legal entitlements, dependency, cultural and spiritual relationships to the land and resource, local knowledge, interest in management, and any potential impacts (positive or

negative) which may arise as a result of marine planning initiatives must be taken into account (Borrini-Feyerabend et al. 2004). It is important to recognize that some stakeholders will have legally entitled rights which are mandated by federal and provincial agencies (e.g. fish farms) while others may not have legally recognized entitlements (e.g. unlicensed local community members) but still may maintain a deep connection or even dependence on the resource. The establishment of equitable representation, be it within community-based committees or by the Community Coordinator and at committee meetings with external groups, is necessary in the marine planning process (Pomeroy and Rivera-Guieb 2006).

Conflict Management

A CBACM planning process is more likely to result in a sustainable marine planning process if there are clearly defined rules for decision-making, raising issues and resolving conflicts (Day 2003). Conflicts may arise due to disagreement over such issues as power imbalances, capacity, technology, political motives, gender, age, insider and outsider status and ethnicity. Conflict may arise at any of the planning levels described above (Pomeroy and Rivera-Guieb 2006; Pinkerton and Weinstein 1995). Conflict management involves specific mechanisms that are designed to provide a process which will allow individuals or groups to resolve their differences (Berkes 2007; Jentoft 2003; Pinkerton and Weinstein 1995). The planning framework described above is well suited to address and resolve issues during the planning process (Steve Diggon, Turning Point Initiative Coordinator, pers. comm. 2009). Grievances can be discussed at multiple levels (i.e. within the community, between communities, and between governments) with multiple stakeholders and with marine planners who are neutral regarding conflict outcomes. Pomeroy and Rivera-Guieb (2006)

suggest that there are generally four stages to every conflict which must be addressed with appropriate conflict resolution strategies:

1. Potential or dormant conflicts (consensus building/relationship building)
2. Erupting conflict, with positions being developed (range of options depending on the nature of conflict and relationship among parties)
3. Evolving conflict towards a stalemate (mediation or arbitration) or evolving towards resolution/abatement (no assistance or facilitation);
4. Resolved conflicts (depends on situation) (205)

There are many approaches to conflict management from consensus building (which anticipates potential areas of conflict and works to cultivate alliances and mobilize support), to analysis, negotiation, mediation, and arbitration which become necessary after a conflict has arisen (Pomeroy and Rivera-Guieb 2006; Buckles and Rusnak 1999). It will be up to community marine planning members to decide which one will work best and several mechanisms may need to be applied before a best fit is found.

Chapter 7

Conclusion

Within the last decade, co-management has become a recurrent theme in fisheries management discussions and policy. In BC, the federal and provincial governments have come to recognize the importance of user participation in the local stewardship of resources and have taken steps to initiate co-management initiatives with local community groups. Through the recognition of Aboriginal rights the First Nations of the Broughton, the Kwakwaka'wakw people have been formally recognized as resource managers with a constitutionally entrenched right to harvest resources for food, social, and ceremonial purposes. The Broughton First Nations have a strong desire to re-establish the stewardship responsibilities that existed prior to European contact and view community-based adaptive co-management as a possible avenue in which to achieve this goal.

As co-management practices have been applied to different situations they have become more refined as new and innovative techniques have been used. Today, a number of tried and tested co-management techniques exist that offer promising new approaches to the management of marine resources. CBACM can be described as power sharing, institution building, trust building, social learning, problem solving and governance. Each of these aspects speaks to the often complex nature of collaborative management strategies. Effective marine management strategies are able to adapt to external and internal changes in people, policy and the environment. They are also community-based and collaborative, where the power and responsibility to steward resources is managed jointly between communities and regulatory agencies. This learning-based approach has been termed community-based

adaptive co-management and focuses on learning by doing, a method which works particularly well during the early co-management planning stages.

Interviews conducted with community experts from two First Nations (the Gwawaenuk Tribe and the 'Namgis First Nation) and the non-First Nation members of the village of Alert Bay identified five major themes which community members felt important to address during the CBACM planning process, including: (1) Trust building, (2) Capacity, (3) Power, (4) Politics and (5) Funding. Interviewees were passionate about their responsibilities as they pertained to the local stewardship of resources and indicated a clear desire to effectively change the way marine resources are currently managed.

During the initial stages of CBACM development it is important to ensure that an effective planning structure is put in place to allow for strong and lasting foundations to be built. Planning structures can take many forms. This research has used community member interviews, a review of existing collaborative management regimes and a review of pertinent literature to develop a CBACM framework which is site appropriate to the communities of the Broughton. The intent of this framework is to bring the collective voice of the community to the forefront of marine planning discussions.

The framework consists of three linked planning processes: (1) Community Structure (community-based management), (2) An Area Technical Team (lateral community-based and co-management linkage) and (3) A Marine Planning Committee (vertical co-management). Each of these bodies is designed to fulfill specific goals which will allow community members to address issues which were raised during the interview process. The community structures are situated within a community-based approach to the management of marine resources. It is within this community-based planning framework that community members

are afforded the opportunity to input their ideas, perceptions and priorities into the marine planning framework.

The ATT provides a linkage between the community-based approach highlighted above and the co-management of resources within different communities throughout the Broughton. The ATT provides capacity through technical advice to each individual community to ensure that appropriate information is collected to support the marine planning process. In addition, the ATT supports vertical co-management accountability in its role as a non-partisan technical entity. The overall planning framework is supported by the marine planning committee. This committee focuses on vertical co-management, acting as the vertical link between communities and other governments within the marine planning process. The main goal of the committee is to bring the combined voice of each community (priorities, policy and process) to the ears of external government and agencies. This process is facilitated by the Marine Planning Coordinator who coordinates the collective planning structure.

The success of a CBACM planning framework is largely dependent on the development and maintenance of relationships between different groups of people. By situating the voices of the community members as the centerpiece of the management framework (with external and internal expert assistance), CBACM within the Broughton can avoid becoming bureaucratized and allow for a management structure which is both flexible and adaptable.

There exists a rich opportunity for the Indigenous peoples of the Broughton to regain their stewardship responsibilities and manage local marine resources in an appropriate site-specific way that focuses on long-term strategies, communication and harmony. This study presents a challenge to regulatory agencies, governments and the community members

themselves to work together in moving towards a collaborative community-based adaptive co-management strategy within the Broughton Archipelago.

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Appendix A. 'Namgis Research Protocol

'NAMGIS FIRST NATION

Guidelines for Visiting Researchers/Access to Information

Not only in Alert Bay but also within many other British Columbia First Nations, visiting researchers are welcome provided that they commit themselves to observing certain 'Rules of Conduct'. Those for the 'Namgis First Nation have been developed at the direction and request of our Council, Advisors and the Keepers of our Culture.

These rules are not meant to make life difficult for the researcher; on the contrary, they are meant to ensure clarity and fairness in the relationship between, on the one hand, the visiting researcher and his/her supporting institution and possible funding sources, and on the other, the hosting First Nation, its research and development objectives, and the First Nation members serving as leaders and staff of the First Nation.

In exchange for accepting and abiding by the rules, the 'Namgis First Nation will support the researcher with, firstly, permission to conduct research within 'Namgis First Nation territory, and secondly with what pertinent resources it can offer.

Briefly stated the rules and guidelines listed below are intended to ensure that the following basic concerns of the 'Namgis First Nation are met:

a) That the research be of benefit to the 'Namgis First Nation, both in its intent and its outcome;
b) That it be conducted according to professional standards and ethics;

Note: With regards to the latter, prospective researchers and supporting institutions are referred to section 8 of "Ethical Guidelines for Research with Human Subjects", adopted March 1979 by the SSHRC re: individual and collective rights. Two principles basic to all ethical guidelines are:

1) No harm, and
2) Informed consent.

c) That the interests of the 'Namgis First Nation and the confidentiality of informants be protected with regard to the dissemination of original research data to any third party (that is to persons or institutions other than the researcher);

Note: "the interests of the 'Namgis First Nation...etc." are to be determined in consultation with the government of the 'Namgis First Nation and are not to be a matter of unilateral assumption on the part of the researcher or his/her supporting institution.

d) The 'Namgis First Nation welcomes projects leading to the dissemination of accurate and respectful descriptions of its heritage and culture, especially when native perspectives and interpretations are included in the presentation.

The 'Namgis First Nation may wish, however, to retain copyright of both the research data and any publications (including papers presented in a public or professional forum) arising from the outcome of the research project. This consideration would depend upon the nature of the proposed project, the degree of professional assistance provided by the 'Namgis First Nation, or local concepts of ownership of certain kinds of cultural knowledge.

The matter of copyright and of any restrictions the 'Namgis First Nation may wish to place on either the dissemination of research data or interpretations derived therefore, should be discussed or negotiated at the outset of the project. Likewise, any conflict between conditions set by the 'Namgis First Nation on the one hand, and commitments required of the researcher by any other institution or funding source, on the other hand, should be made known to the 'Namgis First Nation and resolved at the outset.

The RULES and PROCEDURES for visiting researchers wishing to conduct research on the reserve are as follows:

1) Prior to consent being given to conduct research, a written proposal must be submitted to the 'Namgis First Nation for its consideration.

   The proposal should be sent to the attention of the Band Manager, 'Namgis First Nation, P.O. Box 210, Alert Bay, BC VON 1AO Telephone (250) 974-5556 FAX (250) 974-5900.

2) The proposal should provide the following information:
   a) Name, address, telephone number of the prospective researcher.
   b) Title of research project.
   c) Detailed project description, to be based on the principle of "full disclosure" and to include:
      i) Statement of research objectives;
      ii) Proposed manner in which research will be carried out, including project phases and research methodology;
      iii) Purpose of the research;
      iv) Intended/proposed application of research results.
   d) Name of sponsoring agencies and/or institutions;
   e) Copies of ethical review policies and ethical review committee approvals for sponsoring agencies and/or institutions.
   f) Name of funding agency or agencies.
   g) Names and addresses of three references (or letters of reference).
   h) Anticipated date of start and completion of project
   i) Dates when research will be carried out within 'Namgis First Nation territory
   j) Include also: curriculum vita of applicant researcher.

3) The review and approval process is as follows:
   a) Assessment by the staff of the 'Namgis First Nation, or other designate of Council, for compliance with 'Namgis First Nation information requirements, including references check;
   b) Presentation of project proposal or request for information and all details relating to (2) to Chief and Council;
   c) Presentation to 'Namgis First Nation of all commentary and recommendations from staff and Cultural Advisors for final decision.

4) Upon approval by the 'Namgis First Nation of the proposed research project, the next step is the formalization of mutually agreed upon conditions governing the following:
   a) Conduct of research in the community and/or territory;
   b) Disposition and ownership of research data;
   c) Copyright of resulting reports and publications.

The above conditions are usually set out in the form of a signed contract between the researcher and the 'Namgis First Nation. A sample contract is attached. It should be noted that the 'Namgis First Nation generally requires:

a) That originals of all tape recordings and copies of all field notes remain with or be provided to the 'Namgis First Nation;
b) That copies of original research data not be disseminated to any third party (person or institution) without prior knowledge and consent of the 'Namgis First Nation
c) That the 'Namgis First Nation be consulted prior to the publication or public presentation of any outcomes of the research project, and;
d) That the 'Namgis First Nation receive 3 copies of all books, reports, or other documents published as a result of the research.

'NAMGIS FIRST NATION

Guidelines for Visiting Researchers/ Access to Information
CONTRACT

I (Applicant) (please print) _____, have read and understand the terms and conditions in the document titled 'Namgis First Nation Guidelines for Visiting Researchers/Access to Information' and hereby agree to abide by the 'Terms and Conditions' contained therein.

Date Signed: _____, 20 _____

Signature of Applicant: _____

Applicant Name of Institute, Contact and Address information:

_____

_____

_____

_____

_____

Signature of 'Namgis First Nation Representative: _____

Start Date: _____ **End Date:** _____

Please return this contract to:
'Namgis First Nation
Attention: George Speck, Band Manager
P.O. Box 210
Alert Bay, BC
VON 1AO Phone: (250) 974-5556; Fax: (250) 974-5900
E-mail: GeorgeS@Namgis.bc.ca

* Please note that the contract signed with the 'Namgis is currently archived with the 'Namgis First Nation in Alert Bay, BC

Appendix B. Interview Questions

1. Can you please describe your current or past reliance on marine resources?
    a. Details?
    b. Importance to culture?
    c. Locations of use?
    d. Timeline?
    e. Family connections?
    f. Commercial/subsistence?

2. In your opinion how well or well not do current marine management policies (federal and provincial) work?
    a. How have you been negatively affected?
    b. How have you been positively affected?
    c. Are there any policies that you feel are working/effective? Why?
    d. Are there any policies that you feel you'd like to change? Why?

3. What role do you think the provincial and federal governments should play in regional marine resource management?
    a. Why?

4. Do you think that Kwakwak'kwak First Nations should have more control over marine management planning and regional resources?
    a. Why or why not?
    b. In what areas? Commercial? Recreational? Tourism?
    c. Which resources?
    d. How much control?

5. Can you identify any traditional marine management techniques that have been successfully used by your First Nation in the past?

6. In terms of information that must be collected to make Kwakwak'kwak marine management work properly:
    a. Which key environmental indicators should be monitored?
    b. Where should monitoring occur?
    c. How much monitoring is required?
    d. When should resources be monitored?
    e. How should resources be monitored? Separate process for each species?

7. Should a separate marine management policy be developed by each Kwakwak'kwak First Nation for use within their traditional territory? Or should there be one management policy for all Kwakwak'kwak First Nations?

a. Why is/isn't this important to you?
b. Do you think your First Nation has the capacity to do this?
    1. If not, what needs to be done to allow for your First Nation to develop and administer a marine management plan?

8. For a regional marine management plan to work it will be necessary for local Kwakwak'kwak First Nations to work together. Can you describe your view of a traditional marine management decision making framework between MTTC First Nations?
    a. Kwakwak'kwak decision making framework?
        1. Who makes management decisions? Who are the experts?
        2. How are decisions made?
        3. How will decisions be enforced?
    b. Relationships between FN and non-FN groups?
    c. Government involvement?

9. Would you as a marine resource user like to participate in regional management?
    a. How would you like to be involved?

10. Who should pay for the cost of regional marine management/monitoring?
    a. Should Canada and BC be invited to participate?
    b. Should non-First Nation communities participate?
    c. What say should non-first nations interests have in Kwakwak'kwak policy?

11. How do you feel you will be affected by local marine management plans within the core traditional territory of each MTTC First Nation?
    a. Positive/negative?
    b. Perceived benefits? Detriments?
    c. Conflict management?
    d. Fees?

12. In terms of access to marine resources within your core traditional marine territory which of the following has priority?
    a. Conservation
    b. Your First Nations access to food, culture and ceremonial resources
    c. Your First Nations access to commercial resources
    d. Other MTTC First Nations access to food, culture and ceremonial resources
    e. Other MTTC First Nations access to commercial resources
    f. Non-First Nation access to commercial resources
    g. Non-First Nation access to recreational resources (harvesting i.e. sport fishing)

13. Is there anything that you would like to add?

Appendix C. Interview Information Sheet

From a Different Perspective:
First Nations' Strategies Towards Local Marine Management in the Broughton Archipelago, British Columbia

Information Sheet

Background

This research project is for my master's thesis in Natural Resource Management and Environmental Studies (MNRES) at the University of Northern British Columbia (UNBC). The purpose of this interview is to solicit your feedback regarding the development and implementation of a Kwakwak'kwak (Kwicksutaineuk Ah-kwa-mish, Tsawataineuk, Gwawaenuk, and 'Namgis) First Nations-led near-shore marine management plan. You have been selected for this study due to your current or past relationship with marine near-shore resources within the vicinity of the Kwakwak'kwak First Nation core traditional territories. Local First Nation management plans are currently in the developmental phase and propose to use traditional and community-based approaches to the management of near-shore marine resources. Your input on the approach, perceived positive and negative impacts and implementation of these approaches to marine management may provide valuable direction on overall structure and development. It is my hope that this research will guide and assist the Kwakwak'kwak First Nations with the development and implementation of a regional near-shore marine management plan.

Interview Process and Your Information

The interview will consist of a series of questions related to the project. It will be conducted at a place and time that is convenient to you, and is expected to take approximately 1-1.5 hours of your time. With your permission, the interview will be audio recorded and transcribed. Information which you provide may be used in the publication of research results, presentations, and incorporated directly into the management plans. However, any information you provide during the interview will be kept confidential, used only for the purposes of completing the described research project, and will not be used in any way that can identify you unless you wish otherwise. All information will be stored in a secure location and will only be available to either myself or my UNBC supervisor. All First Nation participant interview information will be returned to the respective First Nation upon

completion of the project. If you are a First Nation member your information will not be destroyed and may be used in future studies conducted by the your First Nation, unless you wish otherwise. Interviews from non-First Nation members will be kept in a secure location at UNBC for 5 years and then destroyed.

Your participation in this project is completely voluntary and I do not believe that there are any potential risks to your involvement in this study. The benefit to you may be that you have the opportunity to incorporate your input into the development of a regional marine management plan. You do not need to answer every question and you are free to decline to participate, without consequence, at any time prior to or at any point during the interview. If you do choose to withdraw from the interview once it has begun any information that you have provided will also be withdrawn and destroyed.

Project results will be presented in aggregate form, I will provide you with a summary of the research findings if you wish, and will be presenting them in the community once my research is complete.

Please keep this information sheet for your records. If you have any questions related to this project please contact me by phone or email:

Jamie Pepper: Telephone number: 250-974-7192 and/or email address: pepperc@unbc.ca

Gail Fondahl (UNBC Supervisor): 250-960-5856 and/or email address: fondahlg@unbc.ca

Any complaints about the project should be directed to the UNBC Office of Research (reb@unbc.ca or 250.960.5650)

Appendix D. Interview Consent Form

(This is the 'Namgis consent for only)

Interview Consent Form
Kwakwak'kwak Near-shore Marine Management Plan Study

I, _____(participant's name), understand that I am being asked to participate in an interview that forms part of a research project being completed by Jamie Pepper in collaboration with the University of Northern British Columbia. It is my understanding that this interview will cover information pertaining to the regional First Nation near-shore marine management plan development and implementation.

- ☐ I agree to be taped
- ☐ I want to remain anonymous or ☐ I want my ideas to be attributed to myself
- ☐ I am a 'Namgis First Nation member and consent to further use of my information by the 'Namgis First Nation
- ☐ I would like a copy of my interview transcript
- ☐ I would like to be provided with a summary of the research results

I have been provided with an information sheet and by signing below and returning this form, I am consenting to participate in this project via face-to-face interview as designed by Jamie Pepper of the University of Northern British Columbia.

Participant name (please print): _____

Signature: _____

Date: _____

Thank you for participating in this research project.