Kitasoo/Xai'Xais Integrated Marine Use Plan



2011

TABLE OF CONTENTS

Table	of Cor	ntents	i
List of	f Table	es and Figures	v
Glossa	ary		vi
		ons and Acronyms	
		Л ар	
		o/xai'xais marine vision	
1.1		niding Principles	
		se and scope of document	
2 F 2.1	_	rpose of Document	
2.1		_	
2.2	Sco	ope of Document	15
3 P	lan Ar	rea and Description	16
3.1		verview of Kitasoo/Xai'Xais Traditional Territory	
3	.1.1	Description of Territory	16
3	.1.2	Description of Community	16
1 (, ,	ita Di mai a Danasa	4.6
		unity Planning Process	
4.1	Coi	ommunity Planning Framework	19
4	.1.1	Development of MUP Committee	19
4	.1.2	Communications Strategy	10
7	.1.2	Communications Strategy	±3
4.2	De	eveloping the Community Marine Vision	21
4.3	Dat	ta Gap Identification and Resolution	21
4.4	Det	fining Management Direction	25
4.4	Del	mining management Direction	22
4	.4.1	Prioritizing of Issues	22

	4.4.	2 Component Planning	22
	4.4.	3 Zoning and Prescriptive Planning	22
	4.5	Conflict Resolution/Approval Process	2 3
	4.6	Integration with Other Planning Processes	2 3
5	Sta	tement of comprehensive claim	24
6	Pla	nning and Management Principles	25
•	6.1	Relationship with Federal and Provincial Governments	
	6.2	Relationships with neighbouring First Nations Communities	26
	6.3	Relationships with other coastal communities and industry	26
7	Lar	nd and Resource Values	27
	7.1	Terrestrial activities	
8	Key	/ Issues	
	8.1	Co-Jurisdiction/Shared decision making	28
	8.2	Territorial-based economic development	
	8.3	Government revenue sharing	28
	8.4	Impact-benefit agreements	28
	8.5	Stock restoration and rehabilitation	29
	8.6	Priority access to FSC	29
	8.7	Bottom trawling	29
	8.8	Oil and gas	29
	8.9	Monitoring and enforcement	29
	8.10	Recognition of trade	30
9	Cli	mate Change	31
10	0 Mo	nitoring and Enforcement	33
	10.1	Background	
	10.2	Monitoring and Enforcement Goals, Objectives and Strategies	33

11 I	Marine 1	Resource Management	 38
11.	1 Res	ource conservation and use	 38
1	11.1.1	Land and coastal tenures	 38
1	11.1.2	Bulk water export	 39
1	11.1.3	Off-shore Oil and Gas	 39
1	11.1.4	Alternative Energy	 40
1	11.1.5	Shipping and transport	
1	11.1.6	Salmon	44
1	11.1.7	Commercial fishing	
1	11.1.8	Eulachon	57
1	11.1.9	Aquaculture	59
1	11.1.10	Recreation and Tourism	61
1	11.1.11	Commercial Recreational Fishery	63
1	11.1.12	Food, Social and Ceremonial	66
		Abalone	
12 N		Use Designations	
12.	1 Mar	rine Sanctuary	 72
12.	2 Mar	rine Conservancy Areas	 72
12.	3 Hab	pitat protection areas	 73
12.	4 Aqu	aculture management areas	 74
12	5 Trai	nsportation corridors	 75
12.	6 Alte	ernative energy areas	 75
12.	7 Ada	nptive management zones	 76
13 (Commu	nity Economic Strategy	 81
13	1 Bac	koround	81

13.2	Economic Goals, Objectives and Strategies	. 81		
13.2.	1 Fisheries	. 81		
13.2.	2 Aquaculture and Mariculture	. 84		
13.2.	3 Seafood processing	. 85		
13.2.	4 Tourism	. 86		
13.2.	Marine transportation, shipping and ports and harbours	. 87		
13.2.	6 Alternative energy	. 87		
14 Capacity Building				
	Background			
14.2	Capacity Goals, Objectives and Strategies	. 89		
15 Plan	implementation, monitoring and amendment	. 92		
15.1	Implementation	. 92		
15.1.	Policy development and management	. 92		
15.2	Monitoring and Research	. 93		
	Adaptive management			
ENDNOTES 94				

LIST OF TABLES AND FIGURES

Figure 1: Kitasoo/Xai'Xais Traditional Territory and marine plan extent	xii
Figure 4.1: Marine Plan Components	20
Table 11.1: Marine species commercially harvested within Kitasoo/Xai'Xais Traditional Territory	48
Table 12.1: Zoning Matrix for Kitasoo/Xai'Xais Territory, which identifies allowable activities in each zone.	77
Figure 12.1 Kitasoo/Xai'Xais Nation Marine Spatial Plan	80

GLOSSARY

- **Aboriginal Rights:** Rights held by Aboriginal people, which arise from their pre-existing use and occupancy of the land. Aboriginal rights encompass all aspects of life, including practices, customs and traditions. Aboriginal rights are recognized, affirmed, and protected under Section 35 (1) of the *Constitution Act*.
- **Aboriginal Title:** A category of Aboriginal right that recognizes the Aboriginal interest in traditional lands, including exclusive rights of use and occupancy.
- **Adaptive Management:** The rigorous combination of management, research and monitoring that allows for credible information to be gained and management activities to be modified based on this information. Adaptive management acknowledges institutional barriers to change and designs means to overcome them.
- **Biological Diversity:** The variety of life and its processes, including the variety in genes, species, ecosystems and the ecological processes that connect everything in ecosystems.
- **Central Coast:** An areas ranging north-south from Princess Royal Island to Bute Inlet and eastwest from the height of land for the Coast Range Mountains to extent of the economic exclusive use zone (EEZ).
- Commercial use: Use of resources for barter trade or business and profit.
- **Conservation:** Maintaining biodiversity, ecological integrity, cultural heritage, and the full range of resources that are important for the survival of current and future Kitasoo/Xai'Xais generations. The Kitasoo/Xai'Xais vision of conservation includes the active presence of humans in the landscape. It includes preservation, maintenance, sustainable utilization, restoration and enhancement of the environment.
- **Ecological Integrity:** The soundness or wholeness of the organisms and natural processes that make up an ecosystem. An important aspect of ecological integrity is the ability of an ecosystem to maintain itself in the face of external stresses.
- Ecosystem: A biological community of interacting organisms and their physical environment.
- **Ecosystem Based Management:** An adaptive, systematic approach to managing human activities that seeks to ensure the co-existence of healthy, fully functioning ecosystems and human communities.
- **Enhancement:** Human-caused changes to ecosystem conditions directed at improving habitat quality or quantity for selected species in specific sites.

Escapement: An estimate of the number of adult fish returning to a stream to spawn.

Fish: "fish" includes (a) parts of fish, (b) shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and (c) the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals.

Habitat: The place where an organism lives and/or the conditions of that environment, including salinity, temperature, depth, exposure etc.

Indicator: Analytical tools that provide quantitative or qualitative information by which biophysical conditions can be measured.

Intertidal: The area of the ocean shore between high tide and low tide.

Joint Management: An agreement between two parties where there is a need to manage a given resource or area, and there is no agreement on jurisdiction. This allows joint-management to occur until such time that the overarching questions of jurisdiction are dealt with.

Joint Venture: A contractual agreement joining together two or more parties for the purpose of executing a particular business undertaking. All parties agree to share in the profits and losses of the enterprise.

Jurisdiction: Authority, legal or otherwise, and the issues, persons and territory it applies to.

Kitasoo/Xai'Xais Land Use Plan: A strategic document to guide initiatives in resource management, conservation and economic development, and express the Kitasoo/Xai'Xais' Aboriginal title and rights from the Kitasoo/Xai'Xais' perspective. It is a "living document" that will evolve over time to incorporate the results of ongoing work. It provides a shared vision and plan of action for how the Kitasoo/Xai'Xais will make decisions on future land and resource uses for communal purposes.

Marine Spatial Planning: The process of analyzing and allocating parts of three-dimensional marine spaces (ecosystems) to specific uses, to achieve ecological, economic, and social objectives that are usually specified through a political process.ⁱ

Precautionary Approach: An approach to management that errs on the side of caution. In other words, where the effects of a proposed management or development action are uncertain, it is better to err on the side of protecting the integrity of the ecosystem, rather than risk damaging the integrity and productivity of the ecosystem.

Sustainable Development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The principles of sustainability integrate three closely linked elements – the environment, the economy and the social and cultural system - into a total system that can be maintained perpetually in a healthy state.

Traditional Ecological Knowledge: A body of knowledge built up by a group of people through generations of living in close contact with nature. It includes a system of classification, a set of empirical observations and concepts or understandings about the local environment, and a system of rules or ethics that govern human behaviour and use of resources. The quantity and quality of this knowledge varies among community members, depending upon gender, age, social status, intellectual capability, and profession (fisherman, spiritual leader etc.). With its roots firmly in the past, traditional ecological knowledge is both cumulative and dynamic, building upon experience of earlier generations, adapting to socio-economic and environmental changes and adopting useful aspects of technological innovation.



ABBREVIATIONS AND ACRONYMS

B&B Bed &Breakfast

BC British Columbia

BCMCA British Columbia Marine Conservation Analysis

CCRD Central Coast Regional District

CIT Coast Information Team

CWB Community Well Being

DFO Department of Fisheries and Oceans

EBM Ecosystem Based Management

EEZ Economic Exclusive use Zone

ENGOs Environmental Non-Governmental Organizations

FSC Food, Social and Ceremonial

HDI Human Development Index

INAC Indian and Northern Affairs Canada

LUP Land Use Plan

MoF Ministry of Forest

MOU Memorandum of Understanding

MSP Marine Spatial Planning

MUP Marine Use Planning

MUPC Marine Use Planning Committee

MW Mega Watts

OOG Offshore Oil and Gas

PICFI Pacific Integrated Commercial Fisheries Initiative

PNCIMA Pacific North Coast Integrated Management Area

PST Pacific Salmon Treaty

RCMP Royal Canadian Mounted Police

SCUBA Self Contained Underwater Breathing Apparatus

SOK Spawn on Kelp

TAC Total Allowable Catch

TEK Traditional Ecological Knowledge

TUS Traditional Use Study

PLAN AREA MAP

Pacific Ocean

| Filter | Filt

Figure 1: Kitasoo/Xai'Xais Traditional Territory and marine plan extent.

1 KITASOO/XAI'XAIS MARINE VISION

The Kitasoo and Xai'Xais people live on the central coast of British Columbia, Canada. The following "Statement of Comprehensive Claim" was made in 1982 to explain to Canada and the world who we are and where we live.

Since 1982, many changes have taken place. People from Canada and around the world have become more interested in our lands. Logging companies are interested in our forests, tourists in our mountains, valleys, and the wildlife that is found there, fishers in our marine resources and environmentalists in our unique and rich ecosystems. As our Statement of claim indicates, we have been concerned about these lands and resources for thousands of years. We have another concern, and that is for our people.

We have always had a land and resource plan for our lands and oceans and the creatures they harbour. It lives in our heritage, in our oral history and in our everyday decisions as to where we collect our food, and where we fish and harvest our trees. Since the modern world doesn't understand our way of managing our lands and resources, we will write it down in order to explain our intentions.

Our vision for our land and resources is based on the best definition of the terms sustainable. To us this means the wealth of the forests, fish, wildlife and the complexity of all life will be here forever. It also means that we will be here forever. To remain here as the Kitasoo and Xai'Xais people we need to protect, manage and enhance the resources and our culture in order to ultimately protect our heritage. We also need to live in the modern world and have jobs to sustain our families and community. This plan will address the steps that are necessary for environmental, community and cultural sustainability.

The following Kitasoo/Xai'Xais Marine Use Plan explains how we intend to manage and protect our marine resources. We invite other people and governments to work with us to implement the plan but we seek no permission. Our right to implement this plan comes from our aboriginal rights and title and from our connection to this land for thousands of years.

No one speaks for us. Mutual respect and understanding comes from meeting with us and gaining an understanding of our people and our lands. Listen, learn, and understand, then we can work together.

1.1 Guiding Principles

1) Ensure conservation of natural and cultural resources

Conservation of natural and cultural resources is the highest priority of the Kitasoo/Xai'Xais Marine Use Plan. Natural and cultural resources must be sustained to maintain and safeguard our direct connection to the territory and its resources.

2) Ensure Kitasoo/Xai'Xais priority access to resources for cultural and sustenance use

Maintaining Kitasoo/Xai'Xais access to all areas of the territory is essential for cultural and sustenance purposes. The rights and opportunities of Kitasoo/Xai'Xais to hunt, fish, harvest, trap and otherwise use the land and sea resources for cultural, spiritual, sustenance, economic and trade uses must be assured and take precedence over all other uses, except conservation.

3) Enable appropriate Kitasoo/Xai'Xais commercial use of resources

Kitasoo/Xai'Xais economic development and diversification is required to create both employment and entrepreneurial opportunities.

4) Enable appropriate non-Kitasoo/Xai'Xais commercial and recreational use of resources

For non-Kitasoo/Xai'Xais use of land, water and other resources to be supported by the Kitasoo/Xai'Xais Nation, respect must be demonstrated for Kitasoo/Xai'Xais title and rights, Kitasoo/Xai'Xais culture, and the natural resources that continue to sustain Kitasoo/Xai'Xais culture. Non-Kitasoo/Xai'Xais commercial interests in the territory also must commit to providing viable and sustainable economic opportunities for Kitasoo/Xai'Xais people.

2 PURPOSE AND SCOPE OF DOCUMENT

2.1 Purpose of Document

The Kitasoo/Xai'Xais Marine Use Plan is a strategic document to guide marine resource management in our traditional territory. The plan is comprehensive and covers jurisdiction, resource management, economic development and capacity needs across all sectors of the marine market and non-market economy. The overarching goal is to realize a sustainable balance between economic development, social and cultural well-being and ecosystem health. To this end, the plan utilizes an ecosystem-based management approach to resource use

The plan is a living document. As our understanding of our territory changes so will the direction in this plan.

2.2 Scope of Document

The Kitasoo/Xai'Xais understand that the marine environment is no longer just about fisheries. Marine transportation, energy development, conservation, tourism and aquaculture are all important user groups in the marine environment. Ensuring that these activities occur in a sustainable manner requires an integrated approach to management. All prominent marine uses are addressed in this plan.

The scope of this document goes beyond those issues that may be addressed through the PNCIMA process. This plan was written as a marine road map for the Kitasoo/Xai'Xais people. We will realize the goals and objectives of this document through government-to-government negotiation, partnerships with industry, cooperation with other First Nations, direct action and treaty negotiation.

3 PLAN AREA AND DESCRIPTION

3.1 Overview of Kitasoo/Xai'Xais Traditional Territory

3.1.1 Description of Territory

The boundaries of the Kitasoo/Xai'Xais Territory are outlined in Figure 1. Klemtu (Kitasoo Indian Reserve #1) is located on Swindle Island, 57 km northwest of Bella Bella on the central coast of BC. The Kitasoo/Xai'Xais Nation has 15 reserves in their territory totalling almost 720 ha². While the Nation has been restricted to these reserves since the imposition of the Indian reserve system in Canada, Kitasoo/Xai'Xais people have occupied and used their traditional territory for centuries.

Kitasoo/Xai'Xais traditional territory is composed of both land and marine areas, totally 3938.5 km^s. Large watersheds draining several rivers and streams, deep valleys, and glaciated peaks of the Pacific Coast Range Mountains characterize the territory.

3.1.2 Description of Community

3.1.2.1 History, Culture and Change

Kitasoo people traditionally lived in the coastal areas of the territory, while Xai'Xais people primarily resided in the inlets. Kitasoo and Xai'Xais people lived in villages and seasonal camps throughout their territory until about 1875, when the two groups moved to Klemtu³.

The Kitasoo/Xai'Xais Nation has controlled and managed the environment and natural resources within their territories for thousands of years⁴. Traditionally, the Tsimshian Hereditary Chiefs were the owners of rights to hunt, fish, pick berries, or gather raw materials from geographically defined territories. Similar to all Coastal First Nations in BC the potlatch was central to cultural identity and traditions⁵. Title holders would usually pass their property rights and title from a man to his sister's son. However, for the Xai'Xais, a woman married to a chief often gave her crests, names and so on to him so that he could then hand them on to their children⁶.

Historically, people were highly dependant on the harvest of terrestrial and marine resources for survival and trade. Most of the year, Kitasoo/Xai'Xais people harvested and preserved a variety of resources including salmon, halibut, herring eggs, eulachon, seaweed, abalone, berries, plants, and many others. The annual harvest and preservation cycle "ensured there was enough food for survival and sufficient surplus for trade purposes". The hereditary system, potlatch ceremonies and the preservation cycle, governed resource ownership and extraction, ensuring the sustainable use of marine resources by the Kitasoo/Xai'Xais people for thousands of years.

However, over the last 50 years, access to marine foods and use of marine resources in cultural events has changed significantly. The Kitasoo/Xai'Xais believe this is due to lack of marine vessels locally, people's lack of interest in traditional harvesting, and mismanagement of the resources⁸. There is an overwhelming desire by the Kitasoo/Xai'Xais to improve their access to marine resources, and increase their role and presence in their marine traditional territory again.

3.1.2.2 Population

3.1.2.2.1 Historic Population

Research suggests that Kitasoo/Xai'Xais population prior to European contact was significantly higher than current levels. European explorers and settlers introduced epidemic diseases such as smallpox, measles, influenza, and tuberculosis⁹. These diseases had severe effects on population during the 1800s and early 1900s. By 1971, the Nation's population had decreased to approximately 284.

3.1.2.2.2 Current Population

Between 1997 and 2005, the Kitasoo/Xai'Xais Nation grew by 54 members (12%). The Nation's population grew at a much faster rate than BC (7.75%) and the Central Coast Regional District (CCRD) (-5.43%) for the same period. Overall, based on recent population growth rates, the Nation's population is growing by approximately 1.5% per year.

On-reserve population decreased by about 4% between 1997 and 2005, while off-reserve population increased by approximately 54%. In 2005, the Kitasoo/Xai'Xais Nation was split between 307 on-reserve individuals (62%) and 192 off-reserve individuals (38%). The Kitasoo/Xai'Xais has the third largest population of the Central Coast First Nations. In 2005, the population was 499, including 236 males (47%) and 263 females (53%). The Kitasoo/Xai'Xais Nation has a relatively young population, with approximately half of the population under the age of 25.

3.1.2.2.3 Population Projections (2005-2025)

Various studies have placed the projected Kitasoo/Xai'Xais growth rate between 1.7 & 2.3%. By applying the Statistics Canada average annual growth rate of 1.8%, the Kitasoo/Xai'Xais population would increase to approximately 780 over the next 25 years to about 1220 by 2055.

3.1.2.3 Employment, Income and Well-being

3.1.2.3.1 Employment

Employment on the Central and North coast has long been significantly lower than the provincial average. This is most pronounced in First Nation communities. A community survey indicated that 30% of Kitasoo/Xai'Xais were employed fulltime¹⁰, and a total of 56% of the community was employed. By comparison 64% of British Columbians are employed.

Marine sector employment still remains an important contributor to the Kitasoo/Xai'Xais economy; however, there has been a drastic change in employment levels over the past three generations. 50 years ago, most people worked in the marine sector: commercial fishing, canning and processing, or net mending. Today, 35% of residents earn some or all of their income from the marine sector. This work occurs predominantly in the areas of

aquaculture, fish processing and tourism. Over half of the Kitasoo/Xai'Xais population surveyed indicated that the current generation is less reliant on the marine sector than their grandparents were.

3.1.2.3.2 Average Income

Census data for the Kitasoo/Xai'Xais Nation indicate that average incomes for families and individuals are significantly lower than for the rest of BC. For example, in a local survey Kitasoo/Xai'Xais reported an average annual income of \$18,250¹¹; well below the provincial average of \$31,544 (2001). In addition, Kitasoo/Xai'Xais Nation members living in Klemtu receive more of their income from government transfer payments than other communities on the Central Coast and in BC. In 2001, Kitasoo/Xai'Xais people received 23% of their income from government transfer payments, compared to 17.5% for the CCRD and 11.8% for the province overall.

3.1.2.3.3 Well-being

Perhaps a more useful quality of life indicator for a community is well-being. Indian and Northern Affairs Canada (INAC) has developed two tools for measuring and comparing the quality of life of registered Indians: the human development index (HDI) and the First Nations community well-being index (CWB). Klemtu fares better than the other First Nation communities on the Central Coast in the area of labour. However, Klemtu's CWB of .67 is within the provincial average of First Nation communities (.70) and well below BC's non-First Nation average (.85).

3.1.2.4 Education

Kitasoo/Xai'Xais Community School is governed as a private school. The school serves k-12. In 1998, the school was expanded and renovated to incorporate new elementary and secondary classrooms, science and home economics classrooms, and a gymnasium.

Education levels continue to be a significant barrier to employment for the Kitasoo/Xai'Xais. Fifty-six percent of Kitasoo/Xai'Xais respondents indicated that they have only completed some high-school. A further 18% have completed high school, while only 9% have completed some post-secondary training. Individuals, businesses and experts surveyed for this plan reported that a lack of appropriate education makes it difficult to find suitable employment/employees.

4 COMMUNITY PLANNING PROCESS

4.1 Community Planning Framework

4.1.1 Development of MUP Committee

In 2006 a Kitasoo/Xai'Xais marine use planning committee and technical working group were formed to direct the development of the Kitasoo/Xai'Xais Marine Use Plan. A broad cross section of elders, hereditary chiefs, elected counsellors, commercial fish harvesters, youth and representatives from related Kitasoo/Xai'Xais agencies and departments were selected to the committee. The committee's work was supported by technical staff from a variety of fields including: project management, biology, strategic planning, global information systems technology, and research.

4.1.2 Communications Strategy

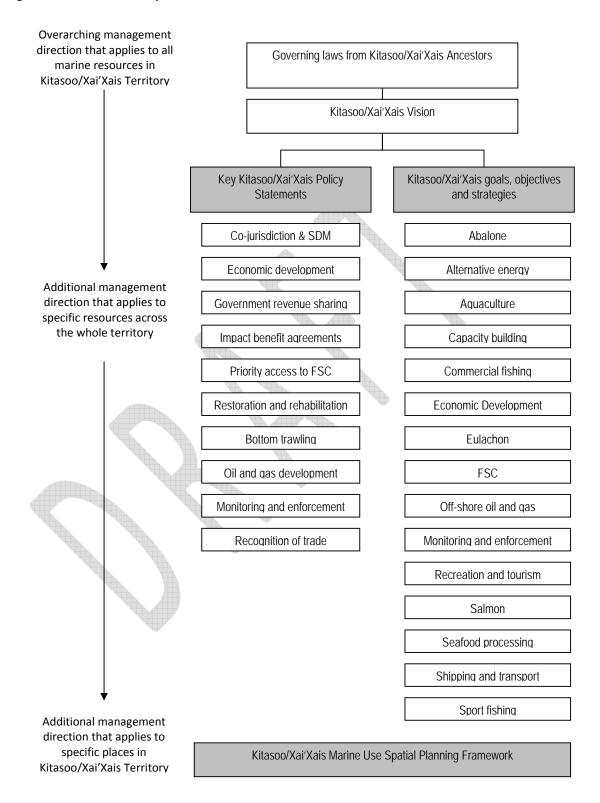
Creating a community plan requires a strong communication strategy with other Kitasoo/Xai'Xais departments and agencies and Kitasoo/Xai'Xais members. Community input was integral to the successful completion of this plan. To achieve a high level of input a variety of strategies were used. Studies were conducted to:

- Collect community input on ecologically sensitive areas and important use areas;
- Solicit community values and interests around marine economic development in Kitasoo/Xai'Xais Territory; and,
- Determine which marine species are important to the Kitasoo/Xai'Xais traditional diet.

In addition, all marine use planning products were approved by the marine use planning committee, elected council and Kitasoo/Xai'Xais community members. Approval strategies included:

- Open houses where planning products were presented and feedback solicited;
- Community planning sessions on specific topics (e.g. spatial planning);
- Newsletters and ad-channel announcements; and
- An open door policy and readily available planning materials.

Figure 4.1: Marine Plan Components



4.2 Developing the Community Marine Vision

The Kitasoo/Xai'Xais people created a marine resource strategy in 2002. While the strategy was focused on fishery resources, it included extensive consultation with the Kitasoo/Xai'Xais community. Through the creation of this strategy, a marine vision for Kitasoo/Xai'Xais Territory was created. This vision still rings true today and was adopted by the present Kitasoo/Xai'Xais marine use planning committee to guide the direction of our new marine use plan.

4.3 Data Gap Identification and Resolution

Territorial level planning requires reliable, quality data at a high resolution. Unfortunately, very little data useful to Kitasoo/Xai'Xais Marine Use Plan has been collected formally or at the right scale. The Kitasoo/Xai'Xais Marine Use Planning Committee identified 4 significant data gaps:

- Socio-economic data: Demographic information about the Kitasoo/Xai'Xais population, community skills and capacity and marine related economic aspirations of the community.
- Industry data: Characteristics and potential of various marine industries in Kitasoo/Xai'Xais Territory.
- Ecological data: High resolution information on ecologically and biologically important areas, First Nation high use areas, and sensitive habitats.
- Community needs data: Preferred composition of traditional foods in the community diet and requirements to meet future need given population growth projections.

To address these data gaps 3 studies were designed and implemented on behalf of the Marine Use Planning Committee:

- A Traditional Ecological Knowledge (TEK) Study that interviewed elders and key knowledge holders to identify areas important for cultural use, food harvesting and conservation.
- A Socio-economic Study that was designed to: determine community demographics, assess community skills and capacity, and establish the marinerelated economic aspirations of our community. A second component of the study investigated the current economic potential of all the industries within our territory.
- A Community Needs Study that was designed to determine which and the
 quantity of marine resources required for food and feasting purposes assuming
 the community had unlimited access to healthy and abundant resources.

4.4 Defining Management Direction

4.4.1 Prioritizing of Issues

The marine environment is becoming increasingly complex. No longer can it be managed for fisheries use only. While FSC and commercial fisheries are still integral to the well-being of our people we understand that there are myriad of other issues that impact our social, cultural, economic and environmental well-being. As such, this plan is comprehensive in its approach. Still, there are many issues that are of immediate concern to the Kitasoo/Xai'Xais people. The committee undertook analysis of all the marine issues in our territory and selected those that are most pressing to our people. These issues were addressed first, as we hope that corrective action will not be postponed. Areas of priority are summarized in Section 9 of our plan.

4.4.2 Component Planning

For each marine issue, goals, objectives and strategies were created, which detail management and economic direction of the Kitasoo/Xai'Xais people. Goals, objectives, and strategies documents were created using the following process:

- Collecting and summarizing latest literature on each issue for the MUP committee.
- Brainstorming session at the MUP committee level. The knowledge at the committee table was formidable and provided an excellent base from which to create each document.
- Creating a goals, objectives and strategies document based on brainstorm results.
- Reviewing the draft document at the committee level and where appropriate receiving feedback from 3rd party experts.
- Creating an MUP committee-approved 2nd draft based on comments received through review process.
- Reviewing and receiving approval of documents at elected council and community level.
- Cross-referencing all completed documents on an on-going basis to ensure that
 documents compliment each other where appropriate and build an overall
 management and economic strategic direction for the Kitasoo/Xai'Xais peoples'
 marine resources.

4.4.3 Zoning and Prescriptive Planning

A technical discussion paper reviewed by international experts and based on the best available science and outlining the various options for spatial management was presented to the Kitasoo/Xai'Xais marine use planning committee in early 2009.

Initial zoning options were created using the community traditional ecological knowledge and community needs studies. Combined, these studies provided information on what areas are particularly important for FSC harvest and the potential size FSC exclusive use areas would need to be to provide for Kitasoo/Xai'Xais FSC needs. Other zones were chosen based on information from a socioeconomic study, committee knowledge, previous community processes (e.g. land use planning), federal and provincial information, and BC Marine Conservation Analysis (BCMCA) outputs.

The MUP committee refined these preliminary zone locations and size based on their collective knowledge. The MUP committee recommendations were presented to the community through a series of community workshops. Based on feedback from the community, additional refinements were made to the zones. For further information on the spatial planning process undertook by the Kitasoo/Xai'Xais MUPC see section 12 of the Marine Use Plan.

4.5 Conflict Resolution/Approval Process

The Kitasoo/Xai'Xais marine use plan is a document of significant size and scope. In order to receive meaningful review of the plan the MUP committee sought council and community approval throughout the process. In addition to research, which directly sought community input on the plan, open houses, community workshops and information sessions were held throughout the planning process.

The MUP committee used a consensus-based approval process to approve the final plan components. The committee made a recommendation to the Kitasoo Band Council to adopt the plan in its entirety. The Kitasoo Band Council unanimously approved and adopted the Kitasoo/Xai'Xais Integrated Marine Use Plan in December 2011.

4.6 Integration with Other Planning Processes

To ensure consistency in message and planning outcomes, other ratified community planning documents were referenced throughout the marine planning process. These include:

- Kitasoo/Xai'Xais Integrated Land Use Plan
- Spirit Bear Tourism 5 year Strategic Plan
- Kitasoo/Xai'Xais Marine Use Plan (2002)
- Kitasoo/Xai'Xais Agreement in Principle (Treaty)

All draft marine use planning products were cross-referenced with existing planning documents to ensure the plans complimented each other. The MUP committee revisited issues where the MUP contradicted other plans. The result is a final MUP that compliments existing community plans, contributing to a holistic approach to natural resource management, conservation, economic development, and social and cultural well-being in Kitasoo/Xai'Xais Territory.

5 STATEMENT OF COMPREHENSIVE CLAIM

Since time immemorial we the people of the Kitasoo Indian Band, situated in what is now called the province of British Columbia, have been and remain the rightful owners, users and sovereign occupants of our tribal territories, as outlined on the attached map (Figure 1).

The peoples of the Kitasoo Indian Band, namely the Xai'Xais and Gvuquayaitxv peoples who are Heiltsuk in language, culture and tradition, and the Kitasoo people who are Tsimshian linguistically and culturally, created a permanent settlement in Klemtu in the late 19th century, on the lands of our ancestors. Our peoples have traditionally used, occupied and exercised jurisdiction over our tribal territories for countless thousands of years. We have never surrendered our tribal territories or jurisdiction through conquest, treaty or any other means to the British Crown or its colonial governments or to the Crown in the right of Canada or to any other government or people.

Nor has this original ownership, occupancy and use by our people and jurisdiction over our tribal territories by peoples non-indigenous to our tribal area.

Therefore, we assert our right and claim to our tribal area, including all landforms, air, and subsurface, fresh and tidal waters, foreshores, and watersheds of all streams and rivers flowing into these fresh and tidal waters, extending into the Hecate Strait. We assert our right to our land and to its preservation, development, and management and to the benefits that have been and may be derived from all resources and development or resources within our tribal territories.

We herby present this statement of comprehensive claim to the government of Canada, through the department of Indian Affairs, as an assertion and statement of our right.

We the elected Council of the Kitasoo Indian Band, are authorized to act on behalf of our peoples for the purposes of the statement of claim. We represent the Indian population of the Band and also the descendants of Kitasoo/Xai'Xais peoples in our tribal area. We are also signatories to the Declaration of Claim of the Tsimshian Nation.

This Plan is without prejudice to the Aboriginal rights, title and other interests of the Kitasoo/Xai'Xais, or any position that may be taken by the parties in treaty and/or legal proceedings. Further, the Plan does not prejudice or preclude on-going dialogue or negotiations that the Kitasoo/Xai'Xais Nation is involved in now or in the future.

The Plan is a statement of Kitasoo/Xai'Xais marine use management intent. It does not imply Kitasoo/Xai'Xais consent to any specific land or marine development or resource management proposal. Provision of this Plan to the federal or provincial government or any other third party, does not constitute consultation or otherwise fulfil their obligation to consult.

6 PLANNING AND MANAGEMENT PRINCIPLES

6.1 Relationship with Federal and Provincial Governments

For plan development an implementation to be effective it was imperative that all levels of government agreed upon several key principles. The principles are as follow:

- All Parties must respect and recognize Aboriginal rights, title, and interests;
- Integrated Marine Use Planning Process will not prejudice any past, present, or future actions or activities undertaken by First Nations;
- First Nations, Canada, and (the Province of BC) will work cooperatively on integrated marine use planning on a Government-to-Government basis and be involved in the development of the integrated marine use plans and decisionmaking processes;
- All parties commit to work in a spirit of reconciliation, mutual respect and in a collaborative manner that:
 - Acknowledges First Nations view on the cultural significance, spiritual affiliation and historical importance of the fishery and the marine environment,
 - Promotes effective relationships among First Nations,
 Canada, British Columbia, local communities and other stakeholders;
- Integrated Marine Use Planning should consider:
 - First Nations play a unique and important role in the integrated planning process
 - First Nations possess valuable knowledge of the marine environment
 - o First Nations should lead in information gathering, sharing and consultations within their own communities; and
 - Integrated marine use plans will be developed through an open, flexible and inclusive process in which all communities and other interested parties will be provided the opportunity to participate on issues affecting them

6.2 Relationships with neighbouring First Nations Communities

For the successful development and implementation of the Kitasoo/Xai'Xais MUP the Kitasoo/Xai'Xais worked closely with other First Nations. The Kitasoo/Xai'Xais MUP was developed in a way that:

- Respects the rights and title of the original peoples;
- Respects the Nations values and interests and traditional knowledge and how they relate to the management of human activities and the natural resources;
- Where possible through an open, flexible, and inclusive process harmonizes community planning outputs on regional issues;
- Ensures planning and management activities and direction enhance or complement existing cultures;
- Recognizes and respect differences in planning and management approaches and outcomes of marine planning processes; and
- Supports one another in the development and implementation of marine use plans.

6.3 Relationships with other coastal communities and industry

The Kitasoo/Xai'Xais recognizes that inhabitants of coastal communities on the Central Coast possess a unique knowledge and have a vested interest in our territorial waters. Non-First Nations communities were engaged in the marine use planning process under the following principles:

- All Parties must respect and recognize Aboriginal rights, title, and interests;
- First Nations, Canada, and (the Province of BC) will work cooperatively on integrated marine use planning on a Government-to-Government basis;
- Recognize that First Nations have a role to play in the development and implementation of integrated marine use plans that is unique to stakeholders and other coastal communities;
- All parties commit to work in a spirit of reconciliation, mutual respect
 and in a collaborative manner that acknowledges First Nations view on
 the cultural significance, spiritual affiliation and historical importance of
 the fisheries and the marine environment;
- Will work together in a manner that is mutually beneficial and protects and enhances the marine environment and advances the cultural, social, and economic well-being of coastal communities;
- Recognizes and respect differences in planning and management approaches and outcomes of marine planning processes.

7 LAND AND RESOURCE VALUES

7.1 Terrestrial activities

The Kitasoo/Xai'Xais ratified a comprehensive land use plan in 2000. Where appropriate, the Kitasoo/Xai'Xais incorporated land use planning outcomes into the final marine plan. The Kitasoo/Xai'Xais recognize the interconnectedness of the marine and terrestrial ecosystems and have positioned marine Kitasoo/Xai'Xais Exclusive Use Areas adjacent to terrestrial conservancies where appropriate. The Kitasoo/Xai'Xais recognize there are marine areas that have no adjacent terrestrial protection but have cultural and/or ecological significance. Consequently, the marine plan incorporates these important areas into the overarching Kitasoo/Xai'Xais conservation management objectives.

The Kitasoo/Xai'Xais has worked closely with the Province of BC to develop conservancy management plans for conservancies in the Kitasoo/Xai'Xais Territory. Detailed management direction in marine areas has not been fully incorporated into management plans due to the fact Cabinet has not approved the addition of marine areas to the existing conservancies. However, the Kitasoo/Xai'Xais has worked with the province to recommended marine boundary options for each conservancy management plan. Three marine boundary options have been proposed and they include:

- 1) 200m offset intended to include nearshore and intertidal values
- 2) **Island Inclusion Boundary** extend boundary option 1 to include offshore islands and islets. Effort is directed at encapsulating the 30 meter depth contour.
- 3) **Offshore extension** intended to include more pelagic values and broader ranging/highly mobile species in a variety of depth zones.

When marine areas are incorporated into the conservancies, the only activities that can be regulated through the land use planning process are those activities that fall under the Provincial Land Act¹². The Land Act is the primary article of legislation that is used by the provincial government to convey land, including the seabed, to the public for community, industrial, and business use. The Act allows the granting of land and issuance of Crown land tenure in the form of leases, licenses, permits, and rights-of-way. We recognize a more diverse suite of regulations are required to meet our communities marine management objectives and consequently we will capitalize on other regulatory opportunities including the Fisheries Act, Oceans Act, Canada Marine Act, Navigatable Waters Act, Transportation Act.

8 KEY ISSUES

While our plan is comprehensive and we expect to work with a number of parties to realize its implementation, there are a number of specific issues that are a priority to the Kitasoo/Xai'Xais. We expect to work with government and industry to address these issues as soon as possible.

8.1 Co-Jurisdiction/Shared decision making

The Kitasoo/Xai'Xais maintain rights and title over our entire territory. In the past, consultation about resource harvesting and development in our territory has been inconsistent and for the most part inadequate. Moving forward, we believe decisions about the activities in our territory must be made in conjunction with the Kitasoo/Xai'Xais Nation, on a co-jurisdiction basis. As with the Provincial and Federal governments, resource extraction and development in our territory should require the approval of the Kitasoo/Xai'Xais Nation.

8.2 Territorial-based economic development

We have stood witness to resources leaving our territory in record numbers with no benefit to our Nation or community. In commercial fisheries alone, catch value from Kitasoo/Xai'Xais Territory was over \$5.2 million in 2007. Sustainability requires that social and economic well-being is achieved at a local level. Policy changes must occur to ensure that industry development and resource extraction in our territory benefits local communities.

8.3 Government revenue sharing

The Kitasoo/Xai'Xais will not be able to reach our authority, resource management, and economic goals without significantly increasing our institutional, human and capital capacity. In particular, we require a stable source of capital to manage our territory. Currently, the Federal and Provincial governments receive significant resource revenues and taxes from the resource wealth in our territory. We want a share of that wealth and will work with both levels of government to realize revenue sharing agreements.

8.4 Impact-benefit agreements

The status quo of no accountability to, or relationship with, the Kitasoo/Xai'Xais Nation that took place with the development of the logging and fishing industries cannot occur with new developments and industries. Any new industries or developments in Kitasoo/Xai'Xais Territory must be accompanied by an IBA with the Kitasoo/Xai'Xais Nation.

The Kitasoo/Xai'Xais are particularly concerned about the commercial recreational fishery industry in our territory. At the same time, we believe that sport lodges and our Nation can

benefit from working together to create a responsible and sustainable industry. We will work with the sport lodges to sign protocol agreements that create security for the lodges and increase our capacity to manage, restore and rehabilitate our natural resources.

8.5 Stock restoration and rehabilitation

The health of many of the fish stocks in our territory are a pressing concern to the Kitasoo/Xai'Xais Nation. We maintain that immediate actions though improved management, increased funding for enhancement, and spatial planning must occur to return stock numbers to sustainable levels. This work needs to start now and the Kitasoo/Xai'Xais expect government to work with us.

8.6 Priority access to FSC

Harvest of resources from our territory is an important part of the contemporary and ongoing activities of the Kitasoo/Xai'Xais people, providing resources for food, medicine, fuels, building materials, and ceremonial and spiritual uses. However, we are finding it increasingly difficult to access fish for FSC purposes. The Kitasoo/Xai'Xais have to go further and stay out for longer periods to feed their families. We believe that areas must be set aside for the exclusive use of the Kitasoo/Xai'Xais people. By doing this, we will ensure priority access for our people, while at the same time creating refuge from industrial activity and intensive commercial and recreational fishing for marine species.

8.7 Bottom trawling

The unselective and destructive nature of bottom trawling is inconsistent with ecosystem based management. Bottom trawling should be prohibited throughout Kitasoo/Xai'Xais Territory.

8.8 Oil and gas

Reliance upon the marine environment is a fundamental and defining factor of Kitasoo/Xai'Xais culture, identity and economy. The potential harm posed by offshore oil and gas exploration or development is a real and significant threat to our way of life. We have serious concerns regarding the safety and advisability of engaging in these activities. The Kitasoo/Xai'Xais Nation does not support oil and gas exploration or development in our territory.

8.9 Monitoring and enforcement

Policy and regulation will not lead to sustainable practices without sufficient monitoring and enforcement. The government's current approach to monitoring activities in our territory is woefully inadequate. Successful implementation of our plan requires that the Kitasoo/Xai'Xais are able to directly enforce our plans, laws, polices and guidelines.

8.10 Recognition of trade

Trading with other Nations plays an important role in our culture and economy. Unfortunately, many of the species that were the cornerstone of our trade with other Nations (e.g. eulachon, spawn on kelp) are seriously depleted. Ensuring that stock numbers will once again support trade has considerable cultural importance to the Kitasoo/Xai'Xais.



9 CLIMATE CHANGE

Climate change has the potential to have significant negative impacts on our marine territory. These impacts will affect our community, economy and the health of our ecosystems. Concerns include:

- Rising ocean levels: A warming atmosphere will lead to melting ice caps and the expansion of water. Together these two processes could lead to 7 to 23 inches of sea level rise globally over the next century. Rising ocean levels threaten our community and could change ecosystem boundaries.
- Acidification: The ocean is a huge sink for carbon. Since the industrial revolution, the oceans are estimated to have absorbed 50% of the carbon released into the atmosphere. Unfortunately, this has lead to an increase in ocean acidity of 30%. Likely one of the most serious impacts of climate change on ocean ecosystems, acidification reduces the ability of marine algae and free-swimming zooplankton to maintain protective shells. Because these organisms are the foundation of the marine food web, acidification could lead to changes in the food web and possibly jeopardize the viability of ocean ecosystems.
- Increasing temperatures: As the atmosphere warms so do our oceans.
 A warming ocean will lead to species migration. For some species, this will open up new areas for colonization. For others it could lead to extinction. How warming oceans will impact specific species is difficult to say; however, species composition in our territory is likely to change. This could affect our access to food and impact our commercial opportunities.
- Shifting weather patterns: Scientists predict that climate change will lead to increased rain for coastal BC. For our community, this will mean increased storm runoff. The IPCC projects that storm water runoff could increase by as much as 10-40 percent by 2050. This could increase the frequency and severity of flooding, and decrease marine water quality.
- Spreading of exotic species: A warming climate is predicted to enhance non-native species' transportation pathways while decreasing ecosystem resilience, making habitats more vulnerable to invasion. Invasive species have already led to economic and environmental damage in our territory. This is likely to become an increasing concern as climate change intensifies.

We are deeply concerned about each of these issues and the impact on our territory. While we cannot solve the climate change issue within the confines of our marine plan we have taken two types of actions to try to reduce the impacts on our environment:

- Increasing resiliency of species and ecosystems. A larger genetic pool, and healthier species populations and ecosystems will better enable species to respond to a changing climate. We plan to increase the resiliency of species and ecosystems by:
 - Including ecosystem reserves, community exclusive use areas and habitat protection areas in our territory. These zones will reduce anthropogenic impacts on species and ecosystems, making them healthier.
- Reducing total allowable catches for many species. We believe that harvest levels for many species are too high. We aim to reduce harvest levels to more sustainable rates, improving the outcome of many fisheries over the long-term and improving ecosystem health.
- Reducing other human impacts. Our plan has strategies for reducing the human impacts of everything from human waste to marine transportation. In each case, our goal is to create a more resilient marine environment.
- 2. Aligning industry development and economic goals with environmental beliefs and interests. Each industry was scrutinized for its impact on the environment and climate. In most cases, we present mitigation strategies that we believe will allow industry and a healthy environment to co-exist in our territory. In other cases, such as off-shore oil gas, we believe the environmental and climate impacts are too great to justify development.

Our plan reflects our goals for our economy, our environment and the climate.

10 MONITORING AND ENFORCEMENT

10.1 Background

As with all policies and management decisions, integrated marine use planning is only as good as its implementation. While the Kitasoo/Xai'Xais have always believed we have sovereign right to rule the Kitasoo/Xai'Xais Territory, other levels of government do not recognize this right. This lack of recognition affects all Kitasoo/Xai'Xais management and is a considerable barrier to effective management of our territorial resources.

Successful implementation of Kitasoo/Xai'Xais planning requires that the Kitasoo/Xai'Xais are able to directly enforce its plans, laws, polices and guidelines. Given the increased demand of negotiating resource management agreements with the Province and third parties it is even more critical that the Kitasoo/Xai'Xais work with other levels of government and have a clear understanding of what is occurring within the Territory. This further contributes to the need for Kitasoo/Xai'Xais to increase our capacity and ability to assert control over resources and decision-making related to resource management.

Monitoring and enforcement of resource management use in Kitasoo/Xai'Xais Territory requires staff, training, agreed upon authority, transportation, facilities, equipment and capital. The current level of monitoring and enforcement provided by the Coast Guard and DFO is inadequate to deter illegal activity and poor fisheries practices. For the Kitasoo/Xai'Xais a cornerstone of a more sustainable marine environment is the establishment of strong rules and regulations and a significant presence on the water.

It is highly preferable to have Kitasoo/Xai'Xais personnel in monitoring and enforcement positions, as they would bring cultural and local knowledge to the positions, have more credibility with the community, and are likely to have lower turnover rates.

In addition to institutional and human capacity needs, adequate monitoring and enforcement in Kitasoo/Xai'Xais Territory can only occur with stable and flexible access to capital. Objectives and strategies for access to capital are presented in Section 14.

10.2 Monitoring and Enforcement Goals, Objectives and Strategies

Goal: The Kitasoo/Xai'Xais are exercising monitoring and enforcement authority, which is provincially and federally recognized, over all marine activities within Kitasoo/Xai'Xais Territory.

Objective: Collaboratively develop monitoring and enforcement strategies with the Federal and Provincial government, which identify jurisdictional roles, authorities and responsibilities.

Strategy: Inform other enforcement agencies (BC Parks, DFO, MoF, Archaeology Branch, RCMP, etc.) – regarding Kitasoo/Xai'Xais policies,

culture and institutions as well as Kitasoo/Xai'Xais monitoring and enforcement personnel and programs.

Strategy: Require Kitasoo/Xai'Xais co-management staff to conduct all DFO observing and monitoring in Kitasoo/Xai'Xais Territory.

Strategy: Establish memorandums of understanding between Kitasoo/Xai'Xais Nation and applicable Federal and Provincial agencies, to negotiate jurisdictional roles, and monitoring and enforcement authority and responsibilities.

Strategy: Establish a protocol between Kitasoo/Xai'Xais Nation and applicable Federal and Provincial agencies identifying jurisdictional roles, and monitoring and enforcement authority and responsibilities.

Strategy: Establish a communications strategy that ensures effective flow of information and timely action on monitoring and enforcement issues.

Objective: Exercise Kitasoo/Xai'Xais management authority over the monitoring and enforcement of recreation fisheries in Kitasoo/Xai'Xais Territory.

Strategy: Establish resource use and protocol agreements with commercial operators in Kitasoo/Xai'Xais Territory – these agreements should include a clause in which the operator recognizes Kitasoo/Xai'Xais title and jurisdiction to Kitasoo/Xai'Xais Territory, and agrees to abide by set bag limits based on local species abundance and mandatory catch reporting and respect of area closures.

Strategy: Develop Kitasoo/Xai'Xais heritage laws, regulations, guidelines and/or protocols to guide monitoring and enforcement of the recreational sport fishery.

Strategy: Create warning notifications of regulation infringements that can be handed out or placed on fishing gear.

Strategy: Create publications that state Kitasoo/Xai'Xais policies for illegal or improperly marked fishing gear. (e.g. gear will be pulled and put on beach if improperly marked.)Strategy: Establish Kitasoo/Xai'Xais authority to review, approve and/or veto recreational fisheries licenses and tenures.

Objective: Exercise Kitasoo/Xai'Xais management authority over monitoring and enforcement of the commercial fisheries within Kitasoo/Xai'Xais Territory.

Strategy: Establish resource use and protocol agreements, which include commercial fisheries monitoring and enforcement provisions, with commercial fish licence holders in Kitasoo/Xai'Xais Territory.

Strategy: Develop Kitasoo/Xai'Xais heritage laws, regulations, guidelines and/or protocols to guide monitoring and enforcement of the commercial fishery.

Strategy: Establish Kitasoo/Xai'Xais authority to review, approve and/or veto commercial fisheries licenses.

Strategy: Work with other Provincial and Federal agencies to create a seafood traceability program. Program should focus on decreasing poaching and adding commercial value to sustainably caught seafood.

Strategy: Where poachers do not possess a commercial licence, fines should include but not be limited to the confiscation of boats and gear.

Objective: Exercise Kitasoo/Xai'Xais management authority over monitoring and enforcement of FSC marine resource use within Kitasoo/Xai'Xais Territory.

Strategy: Require food fish committee to develop community food fish policy, which reflects Nation's interests.

Strategy: Establish a community engagement process to ensure all community voices are heard.

Strategy: Create and utilize electronic records of catch to allow for more indepth analysis such as trend data for catch per unit effort

Strategy: Create a network of Kitasoo/Xai'Xais Band members who have the recognized authority to enforce food fish laws in Kitasoo/Xai'Xais Territory.

Strategy: The food fish committee should work closely with Guardian Watchmen to close areas.

Strategy: Develop a policy for non-band members' harvest based on Kitasoo/Xai'Xais Customary Laws.

Strategy: Develop a policy on the selling and trading of food fish based on Kitasoo/Xai'Xais Customary Laws.

Strategy: Create and maintain signs identifying existing boundaries and allowable fishing areas. Enforcement staff should maintain signs, and ensure compliance by Kitasoo/Xai'Xais members. Strategy: Expand monitoring and enforcement program to include all FSC marine resources and policies.

Strategy: Ensure food fish committee makes all in-season management decision for the FSC fishery.

Strategy: Create an enforcement strategy to address FSC infringements, which includes consequences for illegal activity.

Objective: Re-establish positive and lasting relationship with neighbouring First Nations.

Strategy: Pursue fishing and hunting protocols with neighbouring Nations. Focus should be on re-establishing trading and bartering resources.

Strategy: Establish information sharing agreements, to aid in the effective management our marine resources.

Strategy: Ensure Nations are able to trade and barter resources without penalization from Federal agencies.

Strategy: Develop protocol agreements between neighbouring First Nations regarding marine research in Kitasoo/Xai'Xais Territory.

Objective: Exercise Kitasoo/Xai'Xais management authority over monitoring and enforcement of non-fishing marine resources within Kitasoo/Xai'Xais Territory.

Strategy: Establish resource use and protocol agreements, which include monitoring and enforcement provisions, with non-fishing marine resource users in Kitasoo/Xai'Xais Territory.

Strategy: Develop sector specific resource management policies for non-fishing marine resources in Kitasoo/Xai'Xais Territory.

Strategy: Work with the Provincial Government to legislate all companies working in Kitasoo/Xai'Xais Territory to hold a Kitasoo/Xai'Xais tenure/protocol agreement to operate.

Strategy: Establish Kitasoo/Xai'Xais authority to review, approve and/or veto provincial and federal tenures/licences.

Goal: A professional, strong and respected Kitasoo/Xai'Xais Guardian Watchmen Program, with full enforcement powers.

Objective: Ensure Kitasoo/Xai'Xais Guardian Watchmen and the Coastal Guardian Watchmen Network are recognized and respected by existing monitoring and enforcement agencies.

Strategy: Create and coordinate uniforms and vessel designations to identify Guardian Watchmen on the water.

Strategy: Establish operational frameworks, through an MOU, that clearly identify the relationships, information sharing arrangements and roles and responsibilities of various enforcement agencies.

Strategy: Include section in management agreement that gives Kitasoo/Xai'Xais Guardian Watchmen full enforcement powers in Kitasoo/Xai'Xais Territory.

Strategy: Establish Guardian Watchmen cabins in Canoona River and West Coast of Aristazable Island to monitor areas and collect conservancy user fees.

Objective: Ensure Kitasoo/Xai'Xais Guardian Watchmen and the Coastal Guardian Watchmen Network are recognized and respected by general public and commercial operators within Kitasoo/Xai'Xais Territory.

Strategy: Establish a general brochure about the Guardian Watchmen program and First Nation's role in monitoring and enforcing rules in BC's marine environment that is available through a wide variety of venues (airports, ferries, websites etc.) to the general public.

Strategy: Establish information products to raise awareness about the Kitasoo/Xai'Xais Guardian Watchmen program and inform people of Kitasoo/Xai'Xais jurisdiction and authority over Kitasoo/Xai'Xais Territory.

Strategy: Require Kitasoo/Xai'Xais presentations by Guardian Watchmen to clientele of sport fishing lodges.

Strategy: Require (through tenure renewal or protocol agreements) sport fishing operations to cooperate and share data with Kitasoo/Xai'Xais Guardian Watchmen when collecting catch data and conducting monitoring and enforcement efforts.

Objective: Establish a community network of Kitasoo/Xai'Xais, which work with the Guardian Watchmen to monitor Kitasoo/Xai'Xais Territory.

Strategy: Create a terms and conditions for participation in the community network, which includes observe, record and report protocols.

Strategy: Create a communications protocol for reporting observed infractions.

Strategy: Community Network should be open to all members of the community as well as industry working in the Territory.

Strategy: Collaboratively develop monitoring and enforcement strategies through an MOU with applicable industries that identify collaborative opportunities for monitoring.

Strategy: Develop communications materials that are easy to use and provide consistent and accurate information to the Guardian Watchmen.

Objective: Support and work to expand the Guardian Watchmen Network Regional Monitoring Strategy.

Strategy: Resource personnel and Kitasoo/Xai'Xais Guardian Watchmen collect and enter monitoring data into Guardian Watchmen Network program and provide feedback to Guardian Watchmen Network.

Strategy: Identify additional monitoring and indicator needs and communicate to Guardian Watchmen Network.

Strategy: Utilize data to inform management of Kitasoo/Xai'Xais resources, adapt land and marine use plans, and develop economic opportunities.

Goal: Ensure monitoring and enforcement activities support the sustainable management of marine resources.

Objective: Ensure enforcement personnel work collaboratively with existing monitoring and assessment programs to collect data and adapt management policies and programs.

Strategy: Develop a collaborative monitoring and assessment strategy with other Kitasoo/Xai'Xais marine entities, including enforcement programs, salmon enhancement program, marine planning committee, land use planning committee, forestry committee, and stewardship programs.

Strategy: Develop a collaborative monitoring and assessment strategy with federal and provincial monitoring and assessment agencies, neighbouring communities, ENGOs, and research institutions.

Strategy: Develop a collaborative monitoring, assessment and reporting strategy with marine user groups.

Strategy: Create adaptive management protocols, which ensure that new resource management information is integrated into policies, programs, and monitoring and enforcement practices

11 MARINE RESOURCE MANAGEMENT

11.1 Resource conservation and use

The Kitasoo/Xai'Xais continue to depend on the health of surrounding ecosystems to survive and flourish. Over the past two centuries, however, the western industrial economy has disturbed ancient linkages between human communities and their environment. To address the harm of the industrial economy on natural ecosystems the scientific community coined the term ecosystem based management (EBM), which recognized that conventional resource management did not consider broader ecosystem dynamics and was threatening biodiversity. Over time, the EBM concept has expanded to include ecosystem health, restoration, and the maintenance of social and economic well-being for present and future generations.

The Kitasoo/Xai'Xais have been practicing 'ecosystem-based management' for thousands of years. These traditional resource management and enhancement practices contributed to the sustainability of some of the richest cultures and societies on the planet.¹⁴ The principles and practice of what western scientists and resource planners now call EBM are integral to the resource management principles outlined below.

11.1.1 Land and coastal tenures

In December 2009, The Kitasoo/Xai'Xais Nation, along with other Coastal First Nations, signed a ground-breaking agreement with the Provincial government. This *Reconciliation Protocol* introduces a more collaborative, coordinated and efficient approach to land and resource engagement and decision-making. The Kitasoo/Xai'Xais Nation acknowledges that this Protocol is an important step toward shared decision-making and look forward to implementing a greater influence on what happens within our traditional territory. However, the Protocol does not address our rights and title over our territory, or our ultimate goal of full jurisdiction and ownership of the lands and tenures in our territory. We will continue to pursue this goal through litigation and treaty processes as appropriate.

The most significant tenured industries in our Territory are addressed in the sections below; however, there are certain activities (e.g. logging camps) that are not addressed individually. The following goals, objectives and strategies apply to all tenured operations in Kitasoo/Xai'Xais Territory:

Goal: Tenured operations in Kitasoo/Xai'Xais Territory are sustainably managed.

Objective: Ensure waste from tenured operations in Kitasoo/Xai'Xais Territory is responsibly managed and disposed of.

Strategy: Require responsible parties to maintain all fuel storage sites in our Territory to a high standard, agreeable to the Kitasoo/Xai'Xais Nation.

Strategy: Require garbage on tenured sites to be transferred to an appropriate waste disposal site.

Strategy: Require human waste and grey water to be properly treated before being released into the environment.

Strategy: Prohibit the use of non-biodegradable cleaners and cleaners containing phosphates.

Strategy: Prohibit all tenured activities in culturally sensitive sites.

Strategy: Require all commercial operators to have appropriate oil spill response plans and equipment to address potential spills.

Strategy: Review existing fines for pollution. Revise if necessary and properly monitor and enforce. Fines should reflect the social, economic and environmental cost of pollution.

Objective: Improve Kitasoo/Xai'Xais' control over operator's adherence to tenure, licence and permit provisions.

Strategy: Require Kitasoo/Xai'Xais' ownership for all tenure, licence and permit types (including, but not limited to: water rights permits, aquaculture tenures, park use permits, all season resort tenures, adventure tourism tenures, moorage and marina tenures, wind and water power tenures, and angling guide licences) in Kitasoo/Xai'Xais Territory. The Kitasoo/Xai'Xais would then sub-lease these tenures to developers, operators, and industry.

11.1.2 Bulk water export

With the enactment of the *Water Protection Act* [1996], the Government of BC prohibited the export of bulk water. The Kitasoo/Xai'Xais support this legislation and its continued enforcement.

11.1.3 Off-shore Oil and Gas

11.1.3.1 Background

Currently there is a moratorium on offshore oil and gas development along BC's coast. Because of the moratorium, an accurate assessment of the size of the oil and gas fields is not available; however, the Royal Society of Canada has estimated that as much as 1.3 billion barrels of oil and 9.8 trillion feet of natural gas may lay off the coast of BC¹⁵. In 2004 the Coastal First Nations – Turning Point Initiative released a report¹⁶, which recommends that the Federal government maintain the current moratorium on offshore oil and gas exploration. Rationale for maintaining the moratorium include:

- Inadequate understanding of the environmental, social, and economic impacts;
- Opposition from some key stakeholder groups and First Nations;
- A deficient regulatory regime; and
- Failure to demonstrate with reasonable probability that the benefits of off shore oil and gas development exceed the costs

11.1.3.2 Management Principles

The Kitasoo/Xai'Xais currently support the moratorium on off-shore oil and gas exploration and development. This includes opposition to exploration and seismic testing, off-shore oil and gas operations, as well as pipeline development, or tanker and condensate shipping through our territory.

11.1.4 Alternative Energy

11.1.4.1 Background

In BC, there are great opportunities to use wind, hydro, tides and waves to generate electricity. However, BC's geography also presents some special challenges. The biggest hurdles include long distances to the transmission grid and difficulty in accessing high potential areas¹⁷. This is especially true for the Central Coast region. However, four factors could decrease the cost to the power producer, thereby increasing the likelihood of alternative energies being pursued on the Central Coast. These include:

- New technologies such as DC transmission lines;
- Project clustering;
- Government grants and funding that encourages green energy production; and
- Carbon credits.

While often promoted as a green alternative to conventional energy generation, wind, hydro, tidal and wave energy have significant potential for negative social and environmental impacts. Negative social impacts can occur when the energy project competes with other land uses, or disrupts the social make-up of coastal communities through the introduction of migratory workers or high wages. Special consideration must be given to conflicts with Kitasoo/Xai'Xais present and past use, and our spiritual values. There are a host of environmental impacts associated with renewable energy. These impacts are specific to the individual project; however, they can be categorized as follows:

- Impacts on fish, wildlife, and vegetation; and
- Impacts from flow releases, noise, transmission lines and construction.

While the benefits of alternative energy generation are many, the negative impacts cannot be ignored. Some areas may not be appropriate for energy generation development. In other areas mitigation will be necessary to ensure the negative social and environmental impacts do not outweigh the positive outcomes of the project.

Potential types of energy production in Kitasoo/Xai'Xais Territory include: Wind energy, tidal and wave energy, and run-of-the-river hydro. Each of these prospects is briefly described below.

11.1.4.1.1 Wind Power

Wind power generation is a commercially viable form of energy generation in BC. In fact, there are a number of wind energy projects in the development stages throughout the

province. Within Kitasoo/Xai'Xais Territory, Aristazabal Island and the entire Central Coast off-shore is considered to have good to very good wind speeds for wind power generation. From 2000-2004 BC Hydro undertook a detailed inventory of wind potential in the province by installing wind monitoring stations throughout the province.

No monitoring stations were installed on the Central Coast because distances to the transmission grid were thought to make projects in the area economically infeasible¹⁸. Despite this, areas within Kitasoo/Xai'Xais Territory have been tenured for wind power generation. While the technology is economically viable, there are still many social and environmental uncertainties associated with wind energy. Kitasoo/Xai'Xais concerns include: impacts on trap lines and effects of clear cutting if wind farms are on land; and, impacts to benthic communities, access to fisheries resources, and impact of underwater cables, if turbines are in the water.

11.1.4.1.2 Tidal and Wave Power

Unlike wind power, tidal and wave power are still relatively new technologies, which are not yet economically viable. British Columbia has significant ocean energy potential. Over 6000 megawatts (MW) of wave energy and over 2000 MW of tidal energy development opportunities alone have been identified to date¹⁹.

There is growing interest in developing British Columbia's ocean energy potential. The Ministry of Energy, Mines and Petroleum Resources and the Ministry of Agriculture and Lands are in the process of developing a Crown land tenure operational policy for ocean energy projects. In the interim, a new directive – the Ocean Energy Project Application Directive – has been released to provide direction to provincial officials and proponents for administration of ocean energy applications and replacements to access, investigate and potentially develop ocean energy sites on Crown land.

While tidal and wave technologies appear to hold promise the associated risks and uncertainty outweigh any benefits the Kitasoo/Xai'Xais believe we could gain from such development in our territory.

11.1.4.1.3 Run-of-the-river Hydro

While no hydro potential studies have been conducted within Kitasoo/Xai'Xais Territory, there is likely significant potential. In 2002, BC Hydro conducted a potential study for the Bella Coola Valley and concluded that many of the streams in the region were ideal for run-of-the-river electricity generation. Resultantly, many rivers in the valley have energy generation water licences tied to them. Areas that were previously uneconomical to develop due to distance to the transmission grid have been developed through project clustering. Given the proximity of the northern bounds of Kitasoo/Xai'Xais Territory to Kitamat, which is attached to the transmission grid, project clustering may be an economical option for some parts of our territory.

11.1.4.2 Management Principles

Goal: Alternative energy is developed and managed in a manner that is precautionary, and only once all information required to make a relatively risk free decision is available.

Objective: Develop a sustainable run of the river hydro-electricity sector in Kitasoo/Xai'Xais Territory.

Strategy: Ensure water rights do not infringe on Kitasoo/Xai'Xais rights and use of any water or water bodies in our Territory.

Strategy: Review streams in Kitasoo/Xai'Xais Territory for hydro potential and environmental, social, and cultural importance to Kitasoo/Xai'Xais.

Strategy: Approach the Province about Kitasoo/Xai'Xais ownership for all water licences and associated run of the river tenures. Kitasoo/Xai'Xais would then sub-lease these tenures to developers.

Strategy: Negotiate impact-benefit agreements with proponents, which ensure the operation is sustainably developed, and Kitasoo/Xai'Xais realize benefits from development in our territory.

Strategy: Permit impact benefit agreements to include joint venture provisions, where the Kitasoo/Xai'Xais feel that such an agreement would be in the best interest of the Nation and the resources in our Territory.

Strategy: Send letters to the Province of BC and all existing water rights holders in Kitasoo/Xai'Xais Territory, notifying them that water rights were granted without consultation with the Nations and of the requirement of an impact benefit agreement with the Nations before any type of development occurs.

Strategy: Create an alternative energy management policy for the effective management of energy resources in Kitasoo/Xai'Xais Territory. Policy should include a monitoring, auditing and enforcement component, which would be supported by the Guardian Watchmen program.

Strategy: Conduct a comprehensive inventory that considers environmental, social, commercial and cultural parameters, for all potential hydro sites in Kitasoo/Xai'Xais Territory. Inventory should consider direction from applicable Land Use Plans and Marine Spatial Plans.

Strategy: Identify and designate fresh water protected areas (e.g. medicinal or healing waters, hot springs, salmon bearing streams, domestic drinking water etc.)

Strategy: Research what impacts and benefits have been for other Nations with run of the river hydro projects in their territory.

Strategy: Explore the feasibility of Kitasoo/Xai'Xais ownership of any transmission line connecting the Central Coast to the Provincial transmission grid.

Strategy: Research the extent of power line construction that would be required if the Central Coast was developed for run of the river and the environmental impacts of power lines on wildlife and fish (when lines run under water).

Objective: Exercise a pre-cautionary approach to energy development for new and un-proven technologies.

Strategy: Oppose wind, tidal and wave energy in Kitasoo/Xai'Xais Territory until there is enough information to ensure we are comfortable that the environmental, social and cultural impacts will not out-weigh the economic benefits.

11.1.5 Shipping and transport

11.1.5.1 Background

Numerous industrial marine development proposals are being pursued within the PNCIMA area of British Columbia. Several new terminal and marine transportation projects for North Coast ports in Prince Rupert, Kitimat and Stewart are at various levels of development. Of particular concern is that several of these projects include the transport of hydrocarbons in tankers. Implementation has started for some projects including increased cruise and coal ship traffic and initial container port expansion in Prince Rupert, and condensate import into Kitimat.

In aggregate, the marine transportation proposals would substantially increase shipping traffic throughout BC and particularly in the confined approach waters to the North Coast ports. If just the furthest advanced of these projects are approved, annual traffic within the next 5-10 years could include up to 1400 deep-sea vessels including tankers, and bulk cargo, container, and cruise ships. This is a 2-3 fold increase over current shipping traffic. While all of the ports in the Central Coast are small 'remote ports' and none of the new development is proposed on the Central Coast it will significantly increase the amount of marine traffic in the area, thereby increasing the frequency and severity of accidents and associated spills.

At the same time, small commercial and transient vessels continue to travel our territorial waters. The resulting release of sewage, grey and bilge water, and garbage continue to be of serious concern to the Kitasoo/Xai'Xais. Improved regulation and better monitoring and enforcement are needed to ensure these visitors do not harm our marine resources.

11.1.5.2 Management Principles

Goal: The efficient and safe transport of marine vessels in Kitasoo/Xai'Xais waters that does not impact our natural resources:

Objective: Minimize and mitigate the impact of liquid waste and garbage from marine transportation on natural resources in Kitasoo/Xai'Xais Territory through the continued moratorium on petroleum tankers, spatial management, and better regulation for use and disposal of harmful substances and bilge water.

Strategy: Prohibit oil tankers and ships carrying condensate from passing through Kitasoo/Xai'Xais Territory.

Strategy: Require transcontinental container ships (7000 TEC or larger) to travel 100nm offshore, when travelling through Kitasoo/Xai'Xais Territory.

Strategy: Ensure all ships travelling in Kitasoo/Xai'Xais Territory (Canadian and foreign vessels) to abide by Transport Canada's safety regulations and inspection requirements.

Strategy: Require the release of untreated sewage to occur at least 15 miles off of the 20 meter depth contour.

Strategy: Require ships carrying ballast water to use a continuous ballast water exchange system or exchange ballast water 100nm off shore.

Strategy: Improve monitoring of bilge water release, to reduce incidents of oily bilge water entering our Territory.

Strategy: Require all commercial vessels that are able to sleep more than 30 people to treat all sewage before release and use only biodegradable cleaning products.

Strategy: Require all vessels to be equipped with and use a sewage-holding tank by 2012.

Strategy: Support the establishment of sewage pump stations throughout the Central Coast by 2015.

Strategy: To help account for all sewage discharge, require all ships to keep a log of sewage discharge times and rates.

Strategy: Require all garbage to be off loaded at designated dump sites.

Strategy: Establish oil disposal facilities throughout the Central Coast.

Strategy: Require shipyards and all lodges etc. to contain and properly dispose of any waste resulting from work on ship hulls.

Strategy: Prohibit the use of tri-butyl tin paints.

Strategy: Research whale migrations routes and establish seasonal ship closures and/or speed limits along known whale migration routes.

Strategy: Prohibit the development of deep sea ports in Kitasoo/Xai'Xais Territory.

Objective: Where spills occur, be able to respond quickly and effectively, with a focus on protecting FSC resources.

Strategy: Require the company/responsible individual to clean-up any spilled harmful substance in Kitasoo/Xai'Xais' waters at their expense. Clean up should be to the satisfaction of the Kitasoo/Xai'Xais.

Strategy: Require companies operating oil tankers and condensate ships to put up bods that are immediately available for clean-up and recovery efforts in the event of a spill

Strategy: Acquire oil spill response equipment to be housed in Klemtu.

Strategy: Register Klemtu with BC Ministry of Environment for oil spill cleanup.

Strategy: Empower the existing Central Coast First Nation emergency response teams to assist with the containment and clean-up all oils spills.

Strategy: Create a coordinated oil spill response plan between the Province, Coast Guard and Central Coast communities and First Nations.

Strategy: Enhance emergency planning and preparedness capacity to address the impacts of potential hydrocarbon spills.

Strategy: Enhance traditional knowledge data base to allow the information to be used to develop timely and effective oil spill response plans.

11.1.6 Salmon

11.1.6.1 Background

The relationship between salmon and the Kitasoo/Xai'Xais people cannot be overstated. For over 11,000 years our culture, social structures, and economy have been based on the

abundance of salmon on the Central Coast. The invention of the fish trap 6000 years ago allowed our people to harvest vast amounts of fish with little effort, resulting in a culturally and materially wealthy society. Our fishery was always terminal and selective. Rights and ownership over fishing areas and times ensured that we provided for everyone while the resource remained abundant.

The arrival of the cannery economy in the late 1880's took management and control of the fishery out of the First Nations' hands. Those who had been sustainably managing the fishery for over 10,000 years were pushed out of the commercial fishery.

Today, salmon are no less important to our people. Yet, we have stood witness to greed and poor management for 150 years. The result is a fishery in crisis. Salmon runs are at historical lows, commercial fisherman cannot make enough in a single year to pay their expenses, the commercial recreational fishery has been forced to focus on other more reliable species, and we cannot get enough salmon to meet our FSC needs. We believe we need to return management of the salmon fishery to the Kitasoo/Xai'Xais people. We successfully managed the salmon for 10,000 years, and given the opportunity we could do so again.

The section below provides a strategy for returning salmon to sustainable numbers. Because of salmon's importance in the sport fishery and to the Kitasoo/Xai'Xais people, salmon management is also touched on in the sport fishery and FSC sections of the marine plan.

11.1.6.2 Management principles

Goal: Salmon stocks are managed to ensure that ecosystem services and socio-economic requirements are met by the resource.

Objective: Ensure compliance with international treaties results in decreased interception of Kitasoo/Xai'Xais salmon stocks.

Strategy: Work closely with FN representation on the Pacific Salmon Commission to ensure Kitasoo/Xai'Xais concerns are voiced and Alaskan interception of salmon bound for BC are dramatically decreased.

Strategy: Work to include more Central Coast species than just Chinook in the Pacific Salmon Treaty agreement.

Strategy: Begin a dialogue with BC and US First Nations to reach Aboriginal agreements on acceptable levels of salmon interception.

Objective: Improve salmon management through pace-based management, and precise and timely monitoring that results in closures which respond to in season stock numbers.

Strategy: Create a DFO- Kitasoo/Xai'Xais area based working group that meets regularly during the in-season to make decisions about the fishery openings and closures.

Strategy: Conduct more in-stream hydraulic sampling to determine spawning success.

Strategy: Conduct more accurate and precise monitoring of out migrating salmon fry.

Strategy: Measure local stocks throughout the season to determine individual stock estimates.

Strategy: Increase the number and frequency of stream walks occurring in the Central Coast.

Objective: Decrease commercial fishing effort.

Strategy: Reduce the number of commercial fishing licences by 50%. Reevaluate after 4 years to determine whether the changes result in an economically sustainable fishery

Strategy: Avoid interception by moving salmon fishing areas back into inlets, and targeting specific runs at sustainable levels.

Strategy: Set up an area-based quota system, which reflects the health of salmon stocks in each system.

Strategy: Incrementally, create an owner operator system for commercial fishing licenses over a 15 year period.

Objective: Expand hatchery operations to increase the production of coho, sockeye and chum salmon.

Strategy: Conduct a feasibility study and cost estimates to identify and establish additional salmon hatcheries in our Territory.

Strategy: Establish protocol agreements and/or MOUs for technical and financial support from the province, DFO, commercial fishermen and sport fishing lodges for hatchery development and maintenance.

Strategy: Where possible, through the use of satellite hatchery boxes, restore salmon stocks in systems where salmon runs have been extirpated (e.g. mussel inlet).

Strategy: Monitor the effectiveness of enhancement efforts and modify strategies based on findings.

Strategy: Explore feasibility of ocean ranching in Kitasoo/Xai'Xais Territory and if deemed feasible, create a strategy for its use in reducing pressure on FSC resources.

Objective: Reduce catch numbers in the marine-based recreational fishery, managing it for the long-term sustainability of salmon stocks in Kitasoo/Xai'Xais Territory.

Strategy: Eliminate catch and release for all species of salmon. All fish caught must be retained except as noted in the conditions of the licence (no discarding/high-grading) and included in the daily limit.

Strategy: Review and adjust all species bag limits to ensure a sustainable total allowable catch in Kitasoo/Xai'Xais Territory is not exceeded.

Strategy: Establish licence-based annual recreational fishing bag limits for all species

Strategy: Enforce restrictions requiring the use of barbless hooks.

Strategy: Introduce restriction limiting the number of rods for fishermen to one per person.

Strategy: Prohibit sport fishing at the mouths of rivers in Kitasoo/Xai'Xais Territory.

Objective: Reduce catch numbers in the fresh water based recreational fishery, managing it for the long-term sustainability of salmon stocks in Kitasoo/Xai'Xais Territory.

Strategy: Eliminate catch and release for all species of salmon. All fish caught must be retained (no discarding/high grading) and included in the daily limit.

Strategy: Determine the number of rod days each system is capable of supporting and limit at a sustainable level.

Strategy: Require rod days to be owned by the Kitasoo/Xai'Xais Nation and leased to sport lodges and angling guides.

Strategy: Set total allowable catches for each river system.

Strategy: Require a Kitasoo/Xai'Xais guide to be present to educate recreational anglers, monitor catches and protect against habitat destruction.

Objective: Restore critical salmon spawning habitats

Strategy: Create a multi-party (DFO, Province, Kitasoo/Xai'Xais and stakeholders) working group to clarify roles and implement the rehabilitation of habitat.

Strategy: Significantly increase the budget for habitat and rehabilitation.

Strategy: Identify which systems require rehabilitation most immediately.

Objective: Minimize impacts on salmon habitat by prohibiting logging and logging activities next to salmon bearing streams and in critical estuaries.

Strategy: Work with all forest companies to develop strategies for local operations to minimize impacts.

Strategy: Prohibit dumping or booming to occur in critical food fish areas and estuaries.

Strategy: Closely monitor watershed logging practices to ensure logging activities are not negatively impacting salmon bearing streams and associated estuaries and clam beds.

Strategy: Require forest companies that do not follow forestry practices and negatively impact salmon bearing streams to compensate Kitasoo/Xai'Xais Nation for damages.

Strategy: Require all forestry plans for logging in Kitasoo/Xai'Xais Territory to be approved by Kitasoo/Xai'Xais Nation.

Objective: Reduce problem seal populations that are affecting juvenile salmon stocks

Strategy: Identify critical or sensitive salmon runs that may require special a seal cull.

Strategy: Monitor and assess the impacts of seal predation on local salmon stocks.

Strategy: Where necessary develop a culling program that will target problem or habituated seals.

Strategy: Encourage community consumption of seal ie. seal grease and meat.

Strategy: Investigate feasibility of commercial seal products such as seal oil.

11.1.7 Commercial fishing

11.1.7.1 Background

The commercial fishing industry has defined the coast since the 1870s²⁰. While the number of species that are harvested has expanded significantly (table 11.1) salmon, the first commercially exploited species, is still important to the PNCIMA economy. In 2005, the landed value of wild salmon in BC was \$33 million. This compares to \$31 million for herring, \$122 million for shellfish, and \$157 million for groundfish²¹. In Kitasoo/Xai'Xais Territory alone, the projected 2007 landed commercial catch value was estimated at \$5.2 million²².

Commercial fishing is still an important employer in PNCIMA: 16% of commercial fishing employment in the province occurred on the North Coast²³ in 2002²⁴. Of the total employment in the region, 7.7% was in the fishing and fish processing sectors²⁵. However, many commercial species are in decline²⁶ and through buy-back programs and consolidation²⁷ of licences commercial fishing is playing a smaller role in local PNCIMA community economies²⁸. In fact, there has been a 17% decline in industry employment since 1996²⁹.

The Kitasoo/Xai'Xais feel that commercial fishing should play an important role in their economic well-being. The goals, objectives and strategies below provide a blueprint for making fisheries more sustainable. Section 13.2.1 spells out the economic role the Kitasoo/Xai'Xais believe they should play in the fishery.

Table 11.1: Marine species commercially harvested within Kitasoo/Xai'Xais Traditional Territory.

11.1.7.2 Management Principles

Co-jurisdiction agreements with the DFO will be negotiated to ensure that the Kitasoo/Xai'Xais people have equal jurisdiction and authority over the management of fishery resources in our territory. Through revenue sharing agreements with government and resource users the Kitasoo/Xai'Xais will undertake studies to determine the effectiveness of current and proposed management regimes at sustaining populations of commercially important species and improving human well-being on the Central Coast. A common theme throughout the sections below is to move away from highly industrialized and competitive fisheries to locally based, diversified small boat fisheries.

The sections below provide management direction for some commercial species. If existing or proposed management practices are not effective at sustaining natural resources they will be re-evaluated and appropriate measures will be taken.

11.1.7.2.1 Halibut

Goal: Immediate and long-term FSC access is secured through sustainable management of Halibut resources.

Objective: Improve certainty of Halibut catch in Kitasoo/Xai'Xais Territory and eliminate competition from commercial and recreational fisheries in key FSC areas.

Strategy: Conduct local studies to determine stock status and characteristics in Kitasoo/Xai'Xais Territory.

Strategy: Reduce commercial TAC to reflect declining stock numbers and greater FSC needs.

Strategy: Protect important halibut areas from the commercial and recreational fisheries through the establishment of the Kitasoo/Xai'Xais Exclusive Use Areas.

Strategy: Streamline the dual licence program, through decreased complexity and increased flexibility, which allows local commercial halibut fishermen to catch halibut for FSC purposes.

Strategy: Support DFO's integrated ground fish pilot program, which establishes mechanisms for intersectoral trading of ground fish species quota to account for non-directed catch in each of the commercial sectors...

Strategy: Cease the practice of carrying over any underage into the following year's commercial fishery.

Strategy: Require any overages to be deducted from the following year's total allowable catch.

Strategy: Any revenue/penalties from overages should go to the Kitasoo/Xai'Xais to support our Guardian Watchmen program and other resource stewardship initiatives.

Strategy: Require halibut fishermen to employ Kitasoo/Xai'Xais on-board monitors or have cameras. If cameras are chosen and fishermen are charged with three camera malfunctions, on-board monitors will be required. If an infraction is proven than a single infraction will require an on-board monitor.

Strategy: Confiscate licences of fishermen caught poaching and give to the Central Coast Commercial Fisheries Authority, which will distribute them among Central Coast First Nations. The Kitasoo/Xai'Xais will have right of first refusal for licences confiscated in our Territory.

Strategy: Prevent temporary quota transfer between commercial and commercial-recreational fisheries, which have a more localized and intense impact on stocks in Kitasoo/Xai'Xais Territory.

Strategy: Incrementally, create an owner operator system for commercial fishing licenses over a 15-year period.

11.1.7.2.2 Ground fish

Goal: Ecosystems and FCS resources are protected from the destructive practices of the ground fishery in Kitasoo/Xai'Xais Territory.

Objective: Ensure decisions in the ground fish fishery are based on sound science and traditional ecological knowledge, and are precautionary in nature.

Strategy: Increase the amount of research conducted by First Nations to identify important juvenile areas, stock numbers etc.

Strategy: Create mechanisms for incorporating TEK into decision making without releasing sensitive information.

Objective: Secure immediate and long-term FSC access through the development of Kitasoo/Xai'Xais Exclusive Use Areas and reduced catch.

Strategy: Require any overages to be deducted from the following year's total allowable catch.

Strategy: Any revenues/penalties from overages should go to the Kitasoo/Xai'Xais Nation to support our Guardian Watchmen programs and other resource stewardship initiatives.

Strategy: Prohibit the practice of carrying over any underage into the following year's commercial fishery.

Strategy: Streamline the dual licence program, through decreased complexity and increased flexibility, which allows local commercial groundfish fishermen to catch groundfish for FSC purposes.

Strategy: Require ground fish fishermen to employ Kitasoo/Xai'Xais monitors or have cameras on-board. If cameras are chosen and fishermen are charged with three camera malfunctions, on-board monitors will be required. If an infraction is proven than a single infraction will require an on-board monitor.

Strategy: Establish seasonal closures for rockfish during key spawning times.

Strategy: Change rockfish conservation areas to Kitasoo/Xai'Xais Exclusive Use Areas and ensure size of and monitoring around these areas is sufficient in protecting important rockfish habitat.

Strategy: Close additional areas important for FSC ground fishing to the commercial and recreational fisheries. These exclusive use areas should be sufficiently large to provide for Kitasoo/Xai'Xais present and future needs as well as resource conservation.

Strategy: Confiscate licences of fishermen caught poaching and give to the Central Coast Commercial Fisheries Authority, which will distribute them among Central Coast First Nations. The Kitasoo/Xai'Xais will have right of first refusal for licences confiscated in our Territory.

Strategy: Create an owner operator system for commercial fishing licenses over a 15-year period.

Strategy: Support DFO's Integrated Ground fish Pilot, which establishes mechanisms for intersectoral trading of ground fish species quota to account for non-directed catch in each of the commercial sectors.

Strategy: Explore additional rebuilding measures for depleted groundfish stocks

Objective: Prohibit modes of ground fishing that cause negative impacts to ecosystem health

Strategy: Due to the destructive and unselective nature of the drag fishery no benthic trawling will be permitted in Kitasoo/Xai'Xais Territory unless studies indicate an environmentally sustainable fishery is possible.

Strategy: Support and monitor the mid-water trawl hake fishery. If by-catch becomes an issue close the fishery in Kitasoo/Xai'Xais Territory.

Strategy: Prohibit the use of joint ventures to process hake off-shore.

11.1.7.2.3 Intertidal bivalve

Goal: Sustainable intertidal bivalve fisheries that contribute to the local economy and provide ready access for food, social and ceremonial purposes.

Objective: Establish Kitasoo/Xai'Xais as full partners in commercial intertidal fisheries in our territory.

Strategy: Inventory beaches in Kitasoo/Xai'Xais Territory to determine sustainable harvest levels and set quota.

Strategy: Any licences for intertidal bivalve fisheries in Kitasoo/Xai'Xais Territory should be held by the Kitasoo/Xai'Xais Nation.

Strategy: Seek out a business partner to help support our involvement in the intertidal bivalve fishery.

Objective: Develop a sustainable commercial intertidal bivalve fishery, which does not infringe on Kitasoo/Xai'Xais access to bivalves for FSC purposes.

Strategy: Protect intertidal bivalves through the establishment of Kitasoo/Xai'Xais Exclusive Use Areas.

Strategy: Develop commercial fishery rules and regulations under a joint-management agreement between DFO and Kitasoo/Xai'Xais Nation.

Strategy: Ensure all beaches in Kitasoo/Xai'Xais territory are harvested to maximize productivity of intertidal bivalve beaches.

Strategy: Prohibit benthic dredging for bivalve in Kitasoo/Xai'Xais Territory Objective: Protect clam beaches from external pressures that would make bivalves inedible.

Strategy: Prohibit foreshore development directly above clam beaches.

Strategy: Prohibit the disposal of batteries and other toxic chemicals in the marine area.

Strategy: Prohibit log booming or hand logging around clam beaches.

11.1.7.2.4 Geoduck

Goal: A sustainable geoduck fishery that does not negatively impact other species and contributes to the local economy.

Objective: Eliminate poaching and ecological damage associated with the geoduck fishery through improved monitoring, inspection and penalties.

Strategy: Improve documentation, through local ecological knowledge and other datasets, of where geoduck beds are in the territory.

Strategy: Improve communication with DFO, harvesters, and Kitasoo/Xai'Xais, about when and where harvesters are in Kitasoo/Xai'Xais Territory.

Strategy: Create a checklist for signs of ecological impacts, high grading and poaching which Guardian Watchmen can use to monitor the fishery.

Strategy: Include individuals with diver certification who can do pre and post fishery dive inspections in Guardian Watchmen staff.

Strategy: Post fishery inspections should include investigating for evidence of high grading, and illegal fishing practices (e.g. harvesting in eelgrass beds and trenching).

Strategy: Require on-grounds Kitasoo/Xai'Xais monitors during geoduck fishery openings in Kitasoo/Xai'Xais Territory.

Strategy: Improve dock side validation to include investigation of high grading and abalone poaching.

Strategy: Confiscate licences of divers caught poaching and give to the Central Coast Commercial Fisheries Authority, which will distribute them among the Central Coast First Nations. The Kitasoo/Xai'Xais will have right of first refusal for licences confiscated in our Territory

Objective: Increase Kitasoo/Xai'Xais participation in the geoduck fishery through changes to licence management.

Strategy: Assess the appropriateness of stat area size for setting sustainable geoduck quotas. Reduce the size of management areas if they are inappropriate.

Strategy: Increase geoduck quota to reflect all biomass, recruitment, and a higher sustainable exploitation rate. This increased quota should be allocated as First Nation licences.

Strategy: Support a coordinated effort among First Nations to oppose the current management policy amortizing geoduck beds once 50% of the virgin biomass has been harvested.

Strategy: Prohibit stacking of licences for this high value species to encourage greater participation in the fishery.

Strategy: If quota is not increased, require involuntary retirement of licences to allow for greater First Nations participation.

Strategy: Separate the horse clams from the geoduck licence and transfer horse clam licences to the Kitasoo/Xai'Xais Nation.

Strategy: Require any overages to be deducted from the following year's total allowable catch.

Strategy: Any revenues/penalties from overages should go to the Kitasoo/Xai'Xais Nation to support our Guardian Watchmen program and other resource stewardship initiatives.

Strategy: Prohibit the practice of carrying over any underage into the following year's commercial fishery.

Strategy: Create an owner operator system for commercial fishing licenses over a 15-year period.

Strategy: Any Kitasoo/Xai'Xais geoduck surveys should not be provided to DFO as they have been used in the past to expand the commercial fishery without any benefit to the Kitasoo/Xai'Xais Nation.

11.1.7.2.5 Red and green sea urchin

Goal: The sea urchin fishery is managed to ensure the sustainability of all stocks.

Objective: Reduce poaching and illegal fishing practices through improved monitoring and changes in licence management.

Strategy: Require all dive fisheries to implement the same monitoring regulations as the geoduck fishery including Kitasoo/Xai'Xais on-grounds monitors and improved dockside monitoring.

Strategy: Increase DFO enforcement and Kitasoo/Xai'Xais Guardian Watchmen patrols during sea urchin fishery closures. This should include random boat checks.

Strategy: Confiscate licences of fishermen caught poaching and give to the Central Coast Commercial Fisheries Authority, which will distribute them among Central Coast First Nations. The Kitasoo/Xai'Xais will have right of first refusal for licences confiscated in our Territory.

Objective: Manage urchin resources in a manner that creates Kitasoo/Xai'Xais employment and secured access to FSC resources.

Strategy: Assess the appropriateness of stat area size for setting sustainable urchin quotas. Reduce the size of management areas if they are inappropriate.

Strategy: Require any overages to be deducted from the following year's total allowable catch.

Strategy: Require any revenues/penalties from overages to go to the Kitasoo/Xai'Xais Nation to support our Guardian Watchmen program and other resource stewardship initiatives.

Strategy: Prohibit the practice of carrying over any underage into the following year's commercial fishery.

Strategy: Create an owner operator system for commercial fishing licenses over a 15-year period

Strategy: Streamline the dual licence program, through decreased complexity and increased flexibility, which allows local commercial urchin fishermen to catch urchin for FSC purposes.

11.1.7.2.6 Sea cucumber

Goal: The sea cucumber fishery is managed to ensure the sustainability of all stocks.

Objective: Reduce poaching and illegal fishing practices through improved monitoring and changes in licence management.

Strategy: Confiscate licences of fishermen caught poaching and give to the Central Coast Commercial Fisheries Authority, which will distribute them among Central Coast First Nations. The Kitasoo/Xai'Xais will have right of first refusal for licences confiscated in our Territory.

Strategy: Require all dive fisheries to implement the same monitoring regulations as the geoduck fishery including Kitasoo/Xai'Xais on-grounds monitors and improved dockside monitoring.

Strategy: Increase DFO enforcement and Kitasoo/Xai'Xais Guardian Watchmen patrols during sea cucumber fishery closures. This should include random boat checks.

Objective: Manage sea cucumber resources in a manner that creates Kitasoo/Xai'Xais employment and secure access to FSC resources.

Strategy: Improve scientific understanding of sea cucumber on the Central Coast by increasing fisheries research conducted by First Nations.

Strategy: Assess the appropriateness of stat area size for setting sustainable sea cucumber quotas. Reduce the size of management areas if they are inappropriate.

Strategy: Maintain the precautionary approach to the management of the sea cucumber fishery. Exploit 25% of the harvestable areas in Kitasoo/Xai'Xais Territory at a 4.2% exploitation rate. An additional 25% of harvestable areas in Kitasoo/Xai'Xais Territory should be exploited based on scientific survey and a joint agreement between Kitasoo/Xai'Xai and DFO. 50% of the harvestable area in Kitasoo/Xai'Xais Territory will be closed permanently to the harvest of sea cucumbers.

Strategy: Require any overages to be deducted from the following year's total allowable catch.

Strategy: Any revenues/penalties from overages should go to the Kitasoo/Xai'Xais to support our Guardian Watchmen programs and other resource stewardship initiatives.

Strategy: Prohibit the practice of carrying over any underage into the following year's commercial fishery.

Strategy: Create an owner operator system for commercial fishing licenses over a 15-year period.

Strategy: Streamline the dual licence program, through decreased complexity and increased flexibility, which allows local commercial sea cucumber fishermen to catch sea cucumber for FSC purposes.

11.1.7.2.7 Crab

Goal: Immediate and long-term FSC access is secured through sustainable management of Dungeness crab resources.

Objective: Reduce competition for crab from commercial fisheries on the Central Coast by halting commercial access to crab on the Central Coast.

Strategy: Split Area B into two management areas and manage Central Coast area as a pilot.

Strategy: Halt commercial fisheries in Areas 6, 7, 8, and 9 of Area B.

Strategy: Incrementally establish a Kitasoo/Xai'Xais small vessel commercial fishery that would target local stocks and supply local markets including commercial tourism operations.

Objective: Reduce competition for crab from commercial recreational fisheries on the Central Coast by halting commercial recreational access to crab on the Central Coast

Strategy: Split Area B into two management areas and manage Central Coast area as a pilot.

Strategy: Halt commercial recreational fisheries in Areas 6, 7, 8, and 9 of Area B by lodge owners, operators and guests.

Strategy: Supply crab to Central Coast sport lodges through a Kitasoo/Xai'Xais small vessel commercial fishery.

Objective: Reduce competition for crab from transient recreational fisheries on the Central Coast by reducing allowable harvesting areas.

Strategy: Temporarily limit transient recreational fishing in Areas 6, 7, 8, and 9 of Area B to specific moorage areas.

Strategy: Monitor stocks to determine when they have rebuilt to a level where they can support a viable FSC fishery.

Strategy: Monitor stocks to determine the extent of the fishing pressure exerted by transient recreational fisheries and the impacts of fishing by transient recreational fishermen.

Strategy: Re-introduce transient recreational crab fishing in a controlled and precautionary manner.

Strategy: Continue monitoring stocks to assess stress of increased the transient recreational crab fishery. Adjust fishing areas as appropriate.

11.1.7.2.8 Prawns

Goal: A sustainable prawn by trap fishery that contributes to the local economy and provide suitable access for FSC purposes.

Objective: Improve information collection for the prawn fishery.

Strategy: Collect improved catch and report data for the prawn fishery.

Strategy: Continue to conduct Kitasoo fisheries program prawn surveys.

Strategy: Create area-based openings and licenses, which better reflect local stock status

Strategy: Maintain prawn size to 33mm and large mesh size. Recreational fisheries should abide by the same mesh and prawn size regulations as the commercial prawn fishery.

Strategy: Maintain current non-quota licence-based fishery

Strategy: Monitor prawn fishery closures during spawning times to ensure they are being followed.

Strategy: Improve on-grounds monitoring to reduce the number of spawning females that are retained.

Objective: Manage prawns in a manner that reflects local stock characteristics and secures access to FSC resources.

Strategy: Confiscate licences of fishermen caught poaching and give to the Central Coast Commercial Fisheries Authority, which will distribute them

among Central Coast First Nations. The Kitasoo/Xai'Xais will have right of first refusal for licences confiscated in our Territory

Strategy: Identify and designate important Kitasoo/Xai'Xais Exclusive Use Areas for prawns.

Strategy: If Kitasoo/Xai'Xais Exclusive Use Areas are not sufficient to protect prawns, increase spawner index to 15% and closely monitor fishery.

Strategy: Incrementally, create an owner operator system for commercial fishing licenses over a 15- year period.

Strategy: Streamline the dual licence program, through decreased complexity and increased flexibility, which allows local commercial urchin fishermen to catch urchin for FSC purposes.

Strategy: Require prawn fishermen to employ Wuikinuxv monitors or have cameras on-board. If cameras are chosen and fishermen are charged with three camera malfunctions, on-board monitors will be required. If an infraction is proven than a single infraction will require an on-board monitor.

11.1.7.2.9 Herring

Goal: The herring fishery is managed to ensure a sustainable FSC and commercial fishery.

Objective: Decrease competition for the herring resource, ensuring sustainable numbers for the FSC fishery in Kitasoo/Xai'Xais Territory.

Strategy: Implement a precautionary approach that recognizes the importance of herring as a food source to many other marine species.

Strategy: Close all herring fisheries in Kitasoo/Xai'Xais Territory until stocks have rebounded. Healthy stocks would be indicated by a continuous spawn from Higgins Lagoon to Wilby Point to Meyers Pass and the mouth of Thistle.

Strategy: Once stock numbers are healthy again, re-open the herring SOK fishery. Once sustainable numbers for this fishery are determined, open the other herring fisheries in a precautionary fashion.

Strategy Remove limits to access to herring for FSC purposes. The current 3-5% does not adequately consider potlatches, trading and bartering, other ceremonial events, and a growing Kitasoo/Xai'Xais population.

Strategy: Create a food fish permitting system to better track the FSC fishery.

Strategy: Re-establish a traditional harvest of seals and sea lions in Kitasoo Bay to decrease predation on herring. Harvest of seals and sea lions should not occur during the herring spawn.

Strategy: Prohibit the establishment of drop zones and booming in herring spawn areas.

Strategy: Streamline the dual licence program, through decreased complexity and increased flexibility, which allows local commercial herring fishermen to catch herring for FSC purposes.

Objective: Ensure management of the herring fishery embraces a precautionary approach that supports community well-being.

Strategy: Improve stock assessments in Kitasoo/Xai'Xais Territory by better involving the Kitasoo/Xai'Xais, by independently assessing areas 7, 8 and 9, and by increasing the amount of in-season monitoring.

Strategy: Expand science program in Central Coast on local herring stock characteristics.

Strategy: Increase fisheries cutoffs for the seine and gillnet fisheries from 17,600t to 37,600t. Maintain 17,600t cutoff for SOK fishery.

Strategy: Reduce the exploitation rate for Central Coast herring to 10% Strategy: Require any overages to be deducted from the following year's total allowable catch.

Strategy: Any revenues/penalties from overages should go to the Kitasoo/Xai'Xais to support our Guardian Watchmen programs and other resource stewardship initiatives.

Strategy: Prohibit the practice of carrying over any underage into the following year's commercial fishery. Strategy: Create an owner operator requirement for commercial fishing licenses.

Strategy: Create an owner operator system for commercial fishing licenses over a 15-year period.

Strategy: Improve the co-management arrangement between DFO, Heiltsuk and Kitasoo. Should include consensus decision making and a co-jurisdictional framework.

11.1.7.2.10 Shrimp

Goal: The shrimp trawl fishery does not negatively impact the health and abundance of Central Coast eulachon.

Objective: Eliminate by-catch issues.

Strategy: Continue the trawl closure for Queen Charlotte Sound until eulachon spawning numbers return to historical levels

Strategy: Place a moratorium on the shrimp trawl fishery in Kitasoo/Xai'Xais Territory.

Strategy: Monitor the impacts of these closure on eulachon populations and adjust closures as new information becomes available.

11.1.8 Eulachon

11.1.8.1 Background

Prior to European contact a vast network of trails used by generations of First Nations existed throughout BC, "this trail system was the life blood of the native culture and economy"³⁰. The grease trade from the coast to the interior was so important that the trails connecting the communities were known as "grease trails." Integral to this network and Kitasoo/Xai'Xais society was the eulachon.

A pelagic fish, the eulachon returned in large numbers every spring to rivers of the Central Coast. It was the first fish to return after the winter and as a result was often called the "salvation fish"³¹.

Eulachon was an important component of the Kitasoo/Xai'Xais diet, and was traded with neighbouring Nations as a valuable food stuff.

Causes of eulachon decline

The drastic decline of the Central Coast eulachon populations in the 1990s occurred during the most significant shrimp trawl activity in Queen Charlotte Sound. The impact of the bycatch was amplified as it occurred in the offshore areas inhabited by Central Coast eulachon, which is one of the smaller eulachon populations.

When multiple regions reported eulachon declines and the amount of by-catch was made public, industry and DFO created a new shrimp management plan to address the issue of eulachon by-catch. Another major influence in the development of the by-catch reduction device regulations was DFO's new Pacific Selective Fishing Policy released in 1999, which stated:

 All Pacific fisheries, in which by-catch is an issue, will meet specified standards of selectivity. In fisheries where selective harvesting standards are not met, and by-catches remain a constraint to achievement of conservation objectives fishing opportunities will be curtailed³².

Although the BC shrimp trawl industry has claimed to have reduced eulachon by-catch by 80% over the period from 2000-2001³³, the issue of collateral damage has not been addressed. Collateral damage is the damage and mortality of escaping and discarded organisms caused by towed gear³⁴. If the majority of discarded or escaped eulachon do not survive evasion of the net, capture by trawl gear, or the sorting used by-catch reduction devices, it is of little importance that the amount of by-catch has been reduced. This is an area that still requires further research.

Queen Charlotte Sound has been closed to shrimp trawl fishing since 2000 and the overall effort has remained low with only 70 out of 245 licensed vessels active in the 2006/07 season³⁵. Yet eulachon fail to return in fishable numbers to the Bella Coola and Wannock Rivers. While the amount of eulachon returning to these rivers is small, the numbers measured in offshore marine surveys is significantly larger, indicating that additional factors may be preventing their recovery. While predation, forestry, and urbanization have all been investigated for their impacts on eulachon, the most convincing evidence points to climate change.

Pelagic fish along the North Pacific Coast have been suggested as good indicators for climate change, as the environment pelagic fish inhabit and their life history, seem to be directly related to atmospheric and oceanographic variability³⁶. And as eulachon are a northern, cold-water pelagic species, and appear to be quite sensitive to small environmental changes, they have also been suggested as an indicator species³⁷. Moody's findings concluded that sea surface temperature is correlated with declines in eulachon populations, and may be preventing the return of eulachon to Central Coast waters.

Today, the Kitasoo/Xai'Xais are still waiting in anticipation for the return of the eulachon. It has been over ten years since the last eulachon fishery occurred on the Central Coast and the impact of the collapsed run can still be felt today. This section outlines the strategies we believe will help bring this vital resource back.

11.1.8.2 Management principles

Goal: Healthy eulachon populations have been restored on the Central Coast, allowing for a thriving FSC fishery to take place.

Objective: Adopt the precautionary principle and limits all *possible* impacts on eulachon numbers.

Strategy: Ban logging near eulachon rivers.

Strategy: Place a moratorium on all benthic trawl fisheries.

Strategy: Investigate the impact of predation from seals and sea lions on eulachon populations, and if justified cull problem seals and sea lions.

Strategy: Create a Kitasoo/Xai'Xais management plan for eulachon FSC harvest.

Strategy: Re-enforce traditional laws around stream use during spawning season, such as not hunting around rivers during spawning season.

Strategy: Place a moratorium on non-First Nations catching eulachon

Objective: Support the development of a hatchery and transplant program that helps restore eulachon numbers to historical levels.

Strategy: Support the work of the Nuxalk to establish a eulachon transplant and hatchery program.

11.1.9 Aquaculture

11.1.9.1 Background

The aquaculture industry in Klemtu is has become the foundation of the Kitasoo/Xai'Xais economy. The Kitasoo/Xai'Xais plan to continue the management and development of aquaculture in Kitasoo/Xai'Xais Territory in a sustainable manner.

Currently, the aquaculture industry, through four grow out facilities and a processing plant, provides 50% of the jobs in Klemtu. Based on the Kitasoo economic model total aquaculture employment numbers are expected to increase, while at the same time becoming relatively less important to the community, as they diversify into other industries. The Kitasoo/Xai'Xais people, like all other First Nations, have concerns about the aquaculture industry. Therefore, the objective of the Kitasoo/Xai'Xais is to develop the aquaculture industry slowly and carefully monitor the environmental impacts in and around the aquafarms to better understand the potential impacts of aquaculture on the environment. In addition to an intensive monitoring program, the Kitasoo/Xai'Xais people will continue to participate in Fisheries and Oceans' Atlantic Salmon Watch Program, which has been designed to monitor the influence of Atlantic salmon escapement on wild salmon populations.

Klemtu recently expanded its operation to a total of six sites, which allows two sites to fallow while four are active. The Kitasoo/Xai'Xais hope to increase the number of sites to eight, which will allow four sites to fallow, while the other four are active. However, there are no plans to expand the number of active sites. Furthermore, there will be no expansion of salmonid aquaculture in the Kitasoo/Xai'Xais Territory until studies determine a sustainable level of salmon aquaculture within the territory.

The Kitasoo/Xai'Xais people are interested in other forms of aquaculture and are participating in the Central and North Coast Shellfish Aquaculture Business Plan strategy. As Kitasoo/Xai'Xais capacity increases we hope to expand our aquaculture business into other species of finfish, bivalves, and abalone.

11.1.9.2 Management Principles

Goal: Minimize and mitigate the negative impacts of aquaculture on the Central Coast.

Objective: Reduce the negative aquaculture impacts to the local marine environment through increased monitoring and enforcement, better siting, more stringent policies, and improved communication.

Strategy: Maintain the number of Kitasoo/Xai'Xais owned and operated salmon aquaculture sites at six to allow for four active sites and two fallowed sites.

Strategy: Increase enforcement to ensure that existing aquaculture sites are in compliance with provincial and federal regulation.

Strategy: Review and develop aquaculture siting policies and Best Practices to ensure Kitasoo/Xai'Xais values and interests are represented.

Strategy: Explore the environmental advantages and economics of land based and marine based closed containment aquaculture.

Strategy: Identify and avoid farm placements on major smolt migration routes.

Strategy: Require the use of safety nets during brailing to prevent escapement.

Strategy: Keep bird nets on year round to avoid fish from escapement through jumping out of pen.

Strategy: Require visual dive inspections of the farm site for breaches in containment structures before fish are introduced.

Strategy: Coordinate sea lice treatment at a regional level to ensure all aquaculture sites are treated simultaneously.

Strategy: Treat for sea lice prior to smolt migration times.

Strategy: Require sites to be fallowed for a minimum of 14 months.

Strategy: Improve communication requirements between Marine Harvest and community to ensure preventative measures are taken and Marine Harvest is aware of community concerns.

Objective: Continue to support the growth of the Coastal First Nation shellfish aquaculture economic development initiative.

Strategy: Identify areas with high potential for shellfish aquaculture and set aside for future shellfish aquaculture in Kitasoo/Xai'Xais Territory.

Strategy: Challenge geoduck association's position on geoduck aquaculture and explore as a possible aquaculture species for Kitasoo/Xai'Xais.

Strategy: Require all non-native cultured aquaculture species to be triploid to prevent potential introduction into the wild.

Strategy: Periodically evaluate the impacts of oyster aquaculture on the Central Coast.

Objective: Improve information collection and monitoring of aquaculture industry, thereby increasing compliance with provincial and federal regulations.

Strategy: Sign information sharing protocol agreements with all aquaculture stakeholders to access previous research and collaboratively develop and participate in ongoing monitoring strategies.

Strategy: Conduct a review of existing aquaculture literature with a focus on environmental impacts and ecologically and economically sustainable operations.

Strategy: Expand environmental assessments, which occur on Kitasoo/Xai'Xais operated sites to any other sites developed in Kitasoo/Xai'Xais Territory.

Strategy: Require improved information collection and access to monitoring records of aquaculture industry thereby increasing compliance with regulations.

Strategy: Require accurate and timely record taking and public release of escapement numbers regardless of size. Information should be sent to the Kitasoo/Xai'Xais Nation.

Strategy: Reinvigorate the Atlantic salmon watch program, and improve access to the commercial landing information.

Strategy: Give guardian Watchmen the powers to conduct independent monitoring of aquaculture sites.

Strategy: Empower Nations to capture or designate another party to capture any escaped farmed fish. All capture costs would be incurred by the farm operations.

Strategy: Enforce fines for companies that are found to be in non-compliance with regulations and reporting requirements.

11.1.10 Recreation and Tourism

11.1.10.1 Background

Defining what constitutes marine tourism and recreation is difficult. In general, this sector includes marine based activities of both tourists and local recreationalists. Sport fishing is the predominant form of tourism/recreation in the our territory; however, wildlife viewing, travelling by cruise ship³⁸, sea kayaking, diving, recreational boating and sailing also play an important role in the tourism/recreation mix. The majority of outfits are small to medium sized businesses.

Marine tourism in our territory had projected revenues of \$5.9 million for 2008³⁹; however, many reports have indicated that there is still great potential for industry growth⁴⁰. The increased global interest in the Spirit Bear represents a unique opportunity to brand the area as a world-class eco-tourism destination and tap the growth potential of the industry.

The Kitasoo/Xai'Xais have successfully ran a wildlife viewing operation since 1996. This business has become an important employer in our community. The Kitasoo/Xai'Xais believe tourism holds significant potential in our territory and we will work toward expanding this business in the future. The marine plan supports the 2009 Klemtu Tourism Strategic Plan.

11.1.10.2 Management Principles

Goal: Use of cultural and ecological resources important to tourism are managed to ensure that ecosystem services and socio-economic requirements are met by the resource.

Objective: Ensure tourism and recreation activities minimize or avoid negative impacts on wildlife and natural areas, through more strategic management and planning and better monitoring and education.

Strategy: Build on the Kitasoo/Xai'Xais Strategic Tourism Plan to outline management guidelines for tourism in Kitasoo/Xai'Xais Territory and an economic plan for Kitasoo/Xai'Xais based tourism operations.

Strategy: Establish wildlife viewing protocols for key species such as bears, whales, wolves, salmon, etc. – modify existing guidelines where these exist.

Strategy: Work with government, relevant industry associations, conservation organizations, researchers, and community members to develop appropriate wildlife policies.

Strategy: Determine acceptable uses and appropriate visitation times or use of sensitive wildlife habitat areas. Where appropriate limit or forbid motorized or helicopter access. Seasonal regulations may be appropriate.

Strategy: Prohibit anchorages and tourism in sacred areas.

Strategy: Require a Kitasoo/Xai'Xais guide when entering culturally sensitive areas.

Strategy: Develop mandatory requirements for all commercial tourism and recreation operators to report fish catches and wildlife observations to assist in Kitasoo/Xai'Xais planning.

Strategy: Require operators to follow environmental protocols.

Strategy: Protect sensitive ecosystems through joint-management agreements with other government organizations.

Strategy: Create a monitoring strategy that best utilizes limited resources and has Guardian Watchmen spending longer periods of time in high use areas such as mussel inlet to increase presence.

Strategy: Have Guardian Watchmen monitor, educate, record and report all environmentally damaging activities in the territory.

Strategy: Create communication materials that Guardian Watchmen can hand-out to visitors to Kitasoo/Xai'Xais Territory.

Objective: Ensure the Central Coast First Nations have greater control over the tenuring process and the management of tourism in our Territory.

Strategy: Include Kitasoo/Xai'Xais general public in tourism planning and management activities.

Strategy: Ensure tourism tenures in Kitasoo/Xai'Xais Territory include provisions for joint ventures and/or revenue sharing with our Nation.

Strategy: Ensure all new tenures and renewals are held by the Kitasoo/Xai'Xais, who will in-turn sub-tenure rights to tourism operators.

Strategy: Ensure Kitasoo/Xai'Xais protocol agreements and relevant tenuring processes work harmoniously to manage resources in Kitasoo/Xai'Xais Territory. Require provincial tenuring processes to meet the needs of the Kitasoo/Xai'Xais tourism protocol agreements

Strategy: Include Kitasoo/Xai'Xais tourism knowledge holders in any other industry planning initiatives that may impact tourism.

Strategy: Continue to work with BC Parks to create management strategies that limit the impacts of tourism on the ecosystem and bears in the new designated conservancies.

11.1.11 Commercial Recreational Fishery

11.1.11.1 Background

The rivers in Kitasoo/Xai'Xais Territory once supported an abundance of salmon resources. It is this abundance of salmon that have attracted recreational and commercial sport fishermen into Kitasoo/Xai'Xais Territory. It is estimated that lodges on the Central Coast take the majority of the returning stocks of Coho and Chinook salmon and DFO numbers suggest the sport fishery takes more than the aboriginal food fishery and commercial fishery combined for these two species. This extensive fishing pressure coupled with mortality associated with sport fishery catch and release practices have resulted in significant declines in local salmon stocks. To compound matters commercial fishing lodges tend to be concentrated in certain areas resulting in localized over-fishing.

With salmon populations depleted, sport fisheries are targeting other species including ground fish and shellfish and these populations are now starting to show signs of excessive fishing pressure. As a result Kitasoo/Xai'Xais have grave concerns about the long-term sustainability of the resources and the impacts declining resources will have on the cultural well-being of our people.

The number of transient recreational fishermen coming to our area has increased dramatically in recent years as well. As the Central Coast increases in popularity as a tourist destination, we will continue to see increases in recreational boaters. The extent of fisheries harvest and impacts through pollution to local resources is virtually unknown. However, anecdotal information suggests that the harvest of fish and shellfish resources is significant. Due to lack of enforcement in these remote regions it is speculated that many of these transient vessels exceed their harvest limits.

The Kitasoo/Xai'Xais are concerned with the lack of monitoring and enforcement in these fisheries, the impacts of localized over-fishing, competition with First Nation fish harvesters, and the pollution impacts from lodges and recreational boaters. The objectives and strategies below provide direction toward a more sustainable recreational fishery.

11.1.11.2 Management Principles

Goal: A healthy and sustainable fisheries resource that is able to support all fishing opportunities in the territory.

Objective: Establish Kitasoo/Xai'Xais Exclusive Use Areas that protect fisheries resources and increase the reproductive potential of fish stocks

Strategy: Create Kitasoo/Xai'Xais Exclusive Use Areas, which prohibit recreational and sport fishing, to protect critical ground fish habitat.

Strategy: Create Kitasoo/Xai'Xais Exclusive Use Areas to protect critical shellfish habitat and resources.

Strategy: Develop management plans for marine conservancies, habitat protection areas and marine sanctuaries.

Strategy: Monitor the effectiveness of Kitasoo/Xai'Xais Exclusive Use Areas, at restoring vertebrate and invertebrate populations. Where necessary modify areas to restore and enhance fish stocks.

Objective: Ensure Kitasoo/Xai'Xais' rights to resources for food, social and ceremonial purposes are not obstructed by sport fishing activities.

Strategy: Ban all sport fishing within 500m of Kitasoo/Xai'Xais reserve boundaries.

Strategy: Ban fishing in culturally sensitive areas such as grave and petroglyph sites

Objective: Limit the total amount of recreational fishing pressure placed on fisheries resources within Kitasoo/Xai'Xais Territory to a sustainable level, based on a carrying capacity study for the area.

Strategy: Establish a moratorium on the number and size of lodges, including floating lodges, or limit the number of rod days available to each lodge until carrying capacity of Kitasoo/Xai'Xais Territory is determined.

Strategy: Determine the carrying capacity of Kitasoo/Xai'Xais Territory to support a sustainable recreational fishery.

Strategy: Based on carrying capacity, establish management strategies to limit the impact of sport fishing in Kitasoo/Xai'Xais Territory.

Strategy: Monitor the effectiveness of management strategies imposed on commercial operators to determine effectiveness.

Strategy: Require transient lodge operators to report to the Kitasoo/Xai'Xais when they are operating in the Kitasoo/Xai'Xais Territory.

Objective: Manage the recreational fishery to ensure the long-term sustainability of non-anadromous fish stocks in Kitasoo/Xai'Xais Territory.

Strategy: Eliminate catch and release for all species of non-anadromous fish. All fish caught must be retained except as noted in the conditions of the

licence (no discarding/high-grading) and included in the daily limit per species.

Strategy: Reduce localized over fishing by eliminating the ability of commercial sport fish operations to purchase halibut quota from commercial quota allocations.

Strategy: Set total allowable catches for ground fish resources in Kitasoo/Xai'Xais Territory at the territorial and the statistical sub-area level.

Strategy: Impose season closures on rockfish, lingcod and halibut during critical spawning periods.

Strategy: Enforce a 48 inch maximum size limit for halibut in the recreational fishery

Strategy: Review and adjust all species bag limits to ensure a sustainable total allowable catch in Kitasoo/Xai'Xais Territory is not exceeded.

Strategy: Establish licence-based annual recreational fishing bag limits for all species.

Strategy: Require sport fishermen to purchase individual licences or tags for each species harvested.

Strategy: Require all recreational fishermen to record and report effort and catch, size, and date of species harvested.

Strategy: Deny fishing permits for the next year if fishermen fail to report catch numbers.

Objective: Manage the recreational fishery to ensure the long-term sustainability of shellfish stocks in Kitasoo/Xai'Xais Territory.

Strategy: Review and adjust shellfish bag limits to ensure a sustainable total allowable catch in Kitasoo/Xai'Xais Territory is not exceeded.

Strategy: Establish and implement a total allowable catch for all shellfish species to prevent localized over fishing by commercial operators.

Goal: The environmental impacts the recreational fisheries have on the marine and fresh water environments in Kitasoo/Xai'Xais Territory are reduced, mitigated, or eliminated.

Objective: Reduce the impacts of marine pollution from transient vessels on fisheries resources within Kitasoo/Xai'Xais Territory.

Strategy: Close critical food fishing areas to anchoring or mooring during peak harvest seasons.

Strategy: Prohibit pumping of raw sewage into critical marine habitats or cultural fishing areas.

Strategy: Create educational pamphlets and develop signage that identifies appropriate behaviour or codes of conduct within Kitasoo/Xai'Xais Territory.

Objective: Reduce the impacts of marine pollution from recreational foreshore developments on fisheries resources within Kitasoo/Xai'Xais Territory.

Strategy: Using Kitasoo/Xai'Xais traditional knowledge and values, develop siting policy for marine based commercial sport fishing lodges that protects the ecosystem and natural resources.

Strategy: Ensure land based commercial lodges have the necessary sewage treatment facilities to ensure raw sewage is not being pumped into critical marine habitats or cultural fishing areas.

Strategy: Require lodges to have the appropriate petroleum product storage facility and oil spill response equipment.

Strategy: Require garbage to be removed from lodge sites and disposed of at permitted dump sites. Failure to do so should result in a fine.

11.1.12 Food, Social and Ceremonial

11.1.12.1 Background

Historically, the Kitasoo/Xai'Xais Nation was highly dependent on the marine resources for food and trade purposes. Typically all year was spent procuring and preserving food items including; salmon, halibut, black cod, rockfish and lingcod, herring eggs, seal, eulachon, clams, cockles, seaweed, and abalone. In early March, the Kitasoo/Xai'Xais people went to herring camps in order to catch and dry halibut before the arrival of the herring. When the herring spawn began it lasted for at least three weeks and during this time the people collected spawn by placing trees and kelp in the water column to act as a spawning substrate for the herring. The herring spawn was then preserved by drying or salting. The entire process of harvesting and preserving halibut and herring eggs lasted for approximately 6 weeks. During this time, rockfish, sea cucumbers, chitons, crabs, abalone, and sea urchins were harvested to supplement the diet of halibut and herring eggs.

In mid-April, immediately after the harvest of herring, families spent one month in seaweed camps in order to collect and dry seaweed. During this time abalone were harvested and preserved for future use. The arrival of the salmon prompted the movement of the people away from the seaweed camps into the rivers. The harvest of salmon began in mid-June and lasted until October. During this time, the Kitasoo/Xai'Xais people travelled throughout the territory in pursuit of different salmon species. Salmon were smoked, salted, or dried in order to preserve them for the winter. After the harvest of salmon in October fishermen collected cockles and crabs. Due to what is known today as red tide, the Kitasoo/Xai'Xais people traditionally did not start harvesting clams until November and stopped harvesting clams when the herring spawned.

This annual cycle of harvesting and preservation ensured there was enough food for survival, and sufficient surplus for trade and ceremonial purposes. If families in the village were unable to meet food requirements surplus foods were given to these people first, only then were the surpluses traded with neighbouring Nations such as the Heiltsuk, Haisla, and Tsimshian. This harvest of resources and subsequent trade supported the economy of the time and was an integral part of the Kitasoo/Xai'Xais culture. However, in modern times, political pressure, and changes in governmental policy has greatly restricted the trade component of the Kitasoo/Xai'Xais culture. This cycle of harvest and preservation exists today; however, due to declining resources it is becoming more and more difficult to harvest enough food. Coupled with rising costs of fuel, it is now unviable for many Kitasoo/Xai'Xais people to food fish. The objectives and strategies below provide direction on improving our access to marine species for food, social and ceremonial purposes.

11.1.12.2 Management Principles

Goal: The Kitasoo/Xai'Xais have access to abundant FSC resources.

Objective: Respect and uphold the "Doctrine of Priority" through the establishment of Kitasoo/Xai'Xais exclusive use areas where Kitasoo/Xai'Xais' FSC uses take precedence over all other uses of the resource.

Strategy: Through public consultation and information gathered through traditional use and traditional ecological knowledge studies identify all important Kitasoo/Xai'Xais harvesting areas.

Strategy: Calculate Kitasoo/Xai'Xais nutritional requirements to ensure identified areas are adequately large to ensure conservation measures and FSC interests are met now and into the future.

Strategy: Implement Kitasoo/Xai'Xais exclusive use areas by integrating special management measures into existing federal and provincial management plans.

Strategy: Monitor the effectiveness of Kitasoo/Xai'Xais exclusive use areas at enhancing resources and providing increased opportunities and access for Kitasoo/Xai'Xais fishermen.

Strategy: Based on monitoring results, adaptively manage exclusive use areas to ensure conservation and FSC goals are being achieved

Objective: Support the use of Kitasoo/Xai'Xais language and traditional knowledge in the management of FSC resources.

Strategy: Ensure Kitasoo/Xai'Xais names are established and adopted by the community for food fish areas and other areas of cultural importance to the Kitasoo/Xai'Xais people.

Strategy: Change selected non-Kitasoo/Xai'Xais place names to their Kitasoo/Xai'Xais name.

Strategy: Build cabins at traditional harvesting camps throughout the territory.

Objective: Remove barriers to traditional foods access and storage

Strategy: Identify individuals in the community that do not have the means to fish for food (elders, single parents etc.).

Strategy: Create a community fund to pay the expenses for running the Alexis Jane to harvest food fish.

Strategy: Establish a community-based program that will harvest food fish for members of the community that cannot do so themselves.

Strategy: Encourage more donations by fishermen to support local community food bank programs

Strategy: Work with other nations to secure food resources that are locally abundant in their territories (i.e. Exchange/Trade and Barter Nation to Nation protocol).

Strategy: Utilize food distribution software to ensure people are receiving food fish resources.

Strategy: Work with youth groups to process food fish resources and distribute to elders and community members in need.

Objective: Halt or mitigate the impacts of forestry on the food fishery through monitoring, prohibiting booming and dumping in critical areas, and restoration of impacted areas

Strategy: Work with Forestry Department to develop strategies that minimize the impacts of local operations.

Strategy: No dumping or booming should occur in critical food fish areas including clam beds and crab areas.

Strategy: Conduct environmental assessments on previous log handling sites that were situated in critical food fish areas to determine if remediation is required.

Strategy: Closely monitor watershed logging practices to ensure logging activities are not negatively impacting salmon bearing streams and associated estuaries and clam beds.

11.1.13 Abalone

11.1.13.1 Background

Northern abalone have always been an important component of the Kitasoo/Xai'Xais diet and economy. The Kitasoo/Xai'Xais traditionally picked abalone in the intertidal zone. This insured that there was always sufficient brood stock to support a healthy abalone population. However, the advent of SCUBA diving and subsequent ballooning of the commercial fishery in the 1970s led to a 75% decline in Northern Abalone population numbers between 1977 and 1984. Despite significant measures, including closing the fishery in 1990, the population numbers continue to decline. The Kitasoo/Xai'Xais are very alarmed by the continued decline of such a culturally important species. We believe that concerted efforts need to be put in place to reduce the impacts of poaching and increasing brood stock.

11.1.13.2 Management principles

Goal: A healthy Northern abalone population, which allows for the harvest of abalone for food, social and ceremonial purposes.

Objective: Reduce stresses on Northern abalone which are preventing their recovery.

Strategy: Increase dockside and at-sea monitoring for dive fisheries.

Strategy: Increase monitoring of important abalone areas during dive fishery closures.

Strategy: Explore the feasibility of Abalone aquaculture, to decrease the black market for wild Northern abalone.

Strategy: Increase fines and penalties for poachers, to offset the attraction to North abalone poaching.

Objective: Increase restoration efforts to improve the recovery of abalone.

Strategy: Start a pilot program to aggregate and propagate abalone (similar to work being done in Metlakatla).

Strategy: Identify historical and current habitat areas for abalone.

Strategy: Close areas important to abalone recovery to the dive fishery

Strategy: Monitor and adapt and expand program as required.

Objective: Introduce a trial abalone FSC intertidal harvest in Kitasoo/Xai'Xais Territory.

Strategy: Identify areas in our Territory that could support an intertidal FSC harvest.

Strategy: Determine sustainable harvest levels.

Strategy: Create a monitoring program to monitor impact on abalone populations and adapt harvest levels/areas as appropriate.

Strategy: Create a community supported harvest strategy, which outlines who and how much abalone can be harvested.



12 MARINE USE DESIGNATIONS

Existing, new and emerging marine industries and activities are competing for coastal and ocean space, producing varying levels of impacts that may infringe on other users and increase the potential for conflicts. As concerns are raised about cumulative impacts and overlapping areas of incompatible uses, recognition is growing that the current sector-by-sector approach to marine resource management is not working. A more integrated and comprehensive approach is needed to effectively manage all activities and uses in a way that ensures ecosystem health and the well-being of coastal communities.

Marine spatial planning (MSP) is the modern term for describing a place-based approach to management that mirrors our traditional management systems. First Nations family and clan relationships hold strong connections to place, and specific locations had primary purposes like seaweed picking or salmon fishing. This old way offers new solutions to achieving sustainable management of our marine environment by providing a means to implement ecosystem-based management and decision-making.

As such, in addition to defining general management direction, the Kitasoo/Xai'Xais are taking a spatial planning approach to manage marine use activities and reduce conflict. Spatial planning is:

 "The process of analyzing and allocating parts of three-dimensional marine spaces (ecosystems) to specific uses, to achieve ecological, economic, and social objectives that are usually specified through a political process"⁴¹

More simply, spatial planning designates specific areas to certain uses or objectives, while prohibiting others with the goal of sustainably managing ocean use.

Goal of the Kitasoo/Xai'Xais Spatial Plan:

 A marine environment where the ecological integrity of important habitats is restored or maintained, access to and protection of cultural and FSC resources for the Kitasoo/Xai'Xais people is ensured, and a sustainable economy, which benefits local people, is created.

The Kitasoo/Xai'Xais MUPC took the following steps to create the spatial component of their marine use plan:

1. Data collection

Creating the 'right' zones in the 'right' spot requires good information. Fortunately, there is wealth of knowledge around the marine use planning committee table and in the community that helped inform the spatial component of the marine use plan. We have targeted that information through three studies:

- Traditional ecological knowledge (TEK) study
- Community needs study
- Socioeconomic study

The TEK study identified areas that are ecologically important and areas which are important for food, social and ceremonial (FSC) harvesting. The community needs study helped calculate how much of each species is needed to sustain FSC uses of species today and into the future. Combined these studies helped the Kitasoo/Xai'Xais MUPC identify areas important to FSC and determine how large those areas should be to provide for the Kitasoo/Xai'Xais FSC needs.

The socioeconomic study provided information on the current industries in our territory as well as those industries that are likely to shape the coast in the future. Combined with employment information and data on which industries align with our values and interests, the territory was zoned to help promote certain industrial uses while limiting those that do not align with Kitasoo/Xai'Xais values.

2. Identify uses and create a compatibility matrix

For spatial planning to be holistic it must consider all current and future uses and plan for the sustainable incorporation of each use. To better understand use conflicts, a draft matrix, which outlines compatible marine activities, was created. This has been done for the most prominent uses in the PNCIMA.

3. Create zone types and identify zone objectives

A compatibility matrix helps identify uses that:

- Are able to coexist without changes to management practices,
- · Require changes in management practices to improve compatibility, or
- Require spatial / temporal separation.

For spatial planning, this information was used to help identify how many and which zones should be created to reduce conflict and realize the broader ecological, traditional and economic planning goals and objectives identified by the Kitasoo/Xai'Xais MUPC. Specifically, where activities were identified as having a HIGH impact on other uses, further analysis on the types and sources of conflict was conducted. Where spatial separation was seen as the most effective management tool, zones were created to achieve this end. Zones were also created to protect and enhance values, including economic values that were deemed important by the Kitasoo/Xai'Xais MUPC.

4. Identify allowable activities for each zone based on zone objective

The zone objectives guide what types of activities are allowed in a given zone. Together with the compatibility matrix this information helps create a list of allowable activities for each zone (Table 11.1). As guided by the Kitasoo marine use plan vision, the goal is to create a suite of zones, which help create a marine environment where the ecological integrity of important habitats is restored or maintained, access to and protection of cultural sites and

FSC resources for the Kitasoo/Xai'Xais people is ensured, and a sustainable economy, which benefits local people, is created.

5. Assign zones to particular areas of territory

Using the information collected in step 1, with additional information from DFO science and BCMCA, the Kitasoo/Xai'Xais MUPC created the first draft zoning plan through a workshop style process. Community and council input, and further spatial plan refinement helped create the final Kitasoo/Xai'Xais zoning plan.

12.1 Marine Sanctuary

Rationale:

Certain areas are so sensitive to human impacts and/or so important to
ecological processes (e.g. salmon spawning beds, eelgrass beds) that they
should be provided with a significant level of protection.

The objectives of the Marine Sanctuary Zone are:

- (a) to provide for the protection of the natural integrity and values of areas of the Kitasoo/Xai'Xais Territory, generally free from extractive and potentially damaging activities; and
- (b) subject to the objective mentioned in paragraph (a), to provide opportunities for:
 - (i) limited-impact scientific research to be undertaken in relatively undisturbed areas.
 - (ii) non-extractive Kitasoo/Xai'Xais First Nation cultural use.

Uses that do not require permits

o Non-extractive Kitasoo/Xai'Xais First Nation cultural use.

Uses that require a permit

 Limited-impact scientific research to be undertaken in relatively undisturbed areas.

12.2 Marine Conservancy Areas

Rationale:

- Section 35 of the Constitution of Canada recognizes First Nations rights to fish and hunt for food. Under the Sparrow decision, next to conservation, this right to access resources for Food, Social and Ceremonial purposes is to supersede all other uses of the resource.
- Significant conflict between First Nation food harvesters and other user groups including sport and commercial fisheries has been documented in each community.

- First Nation food fisheries cannot compete with the high tech equipment and boats used in the other fisheries.
- First Nations more traditional forms of harvest have significantly less impact on species populations and habitats. As such, these areas also act as important areas for species rehabilitation and preservation.

The objectives of the Marine Conservancy zone are:

- (a) to provide for the protection of the natural integrity and values of areas of the Kitasoo/Xai'Xais Territory, generally free from potentially damaging activities; and
- (b) subject to the objective mentioned in paragraph (a), to provide opportunities for:
 - (i) exclusive access to marine resource extraction for Food, Social and Ceremonial purposes by members of the Kitasoo/Xai'Xais First Nation.
 - (ii) opportunities for non-extractive tourism and quiet appreciation and enjoyment of the area.
 - (iii) scientific research to be undertaken in relatively undisturbed areas.

Uses that do not require permits

- Non-commercial, non-extractive recreational use.
- Non-extractive Kitasoo/Xai'Xais First Nation cultural use.
- o Limited-impact scientific research

Uses that require a permit

- Non-extractive commercial tourism
- Scientific research other than limited impact research (to be defined later)
- FSC catch requirements determined on a community to community basis by the community.

12.3 Habitat protection areas

Rationale:

 Certain habitat types (e.g. sponge reefs, eelgrass beds), which provide important ecosystem services or habitat, should be protected from potentially damaging human uses.

The objectives of the Habitat Protection Zone are:

- (a) to provide for the protection of areas of the Kitasoo/Xai'Xais Territory through the protection and management of sensitive habitats, generally free from potentially damaging activities; and
- (b) subject to the objective mentioned in paragraph (a), to provide opportunities for:

- (i) those activities listed in paragraph (b) of the community exclusive use zone
- (ii) commercial and recreational fishing activities that have limited negative impacts on habitat
- (iii) non-extractive commercial activities that have limited negative impacts on habitat

Uses that do not require permits

- Non-commercial, non-extractive recreational use.
- Kitasoo/Xai'Xais First Nation cultural use.

Uses that require a permit

- o Limited-impact scientific research
- Non-extractive commercial tourism
- o Commercial recreational and fishing activities
- Scientific research other than limited impact research (to be defined later)
- FSC catch requirements determined on a community to community basis by the community

12.4 Aquaculture management areas

Rationale:

- Aquaculture is an important economic sector in PNCIMA, which requires defined space and specific conditions to operate.
- Aquaculture cannot occur in the same physical space as other user groups such as alternative energy because it requires exclusive access to a finite amount of operational area.
- Identifying space for the industry can ease permitting requirements and encourage economic development.

The objectives of the Aquaculture Management Zone are:

- (a) to secure space suitable for aquaculture from competing uses; and
- (b) subject to the objective mentioned in paragraph (a), allow for compatible uses that do not interfere with aquaculture activities including:
 - (i) those activities listed in paragraph (b) of the community exclusive use zone
 - (ii) commercial and recreational fishing activities that have limited negative impacts on habitat
 - (iii) non-extractive commercial activities

Uses that do not require permits

- o Non-commercial, non-extractive recreational use
- Kitasoo/Xai'Xais First Nation cultural use
- Non-extractive commercial tourism
- Scientific research other than limited impact research (to be defined later)

Uses that require a permit

- Commercial and recreational fishing activities
- FSC catch requirements determined on a community to community basis by the community

12.5 Transportation corridors

Rationale:

- The safe and efficient movement of marine transportation requires transportation corridors free of other 'fixed' user groups.
- For the most part, transportation corridors have already been designated in the PNCIMA, and the consideration of these corridors is important when identifying zone locations.

The objective of Transportation Corridors is to make provision for the navigation of ships and ensure marine transportation is not competing for required space.

Uses that do not require permits

o To be determined

Uses that require a permit

- To be determined
- FSC catch requirements determined on a community to community basis by the community

12.6 Alternative energy areas

Rationale:

- Alternative energy has the potential to become an important economic sector in PNCIMA and requires defined space and specific conditions to operate.
- Alternative energy cannot occur in the same space as other 'fixed' user groups such as aquaculture and log booming sites.
- Identifying space for the industry can ease permitting requirements and encourage economic development.

• Identifying space helps ensure that the industry has access to resources once technology and demand allow its expansion into the region.

The objective of the Alternative Energy Zone is to secure space suitable for alternative energy generation from competing uses, while allowing for compatible uses. Energy tenuring will likely result in further use restrictions for small, defined areas.

Uses that do not require permits

- o Non-commercial, non-extractive recreational use.
- o Kitasoo/Xai'Xais First Nation cultural use.
- Non-extractive commercial tourism
- Scientific research other than limited impact research (to be defined later)

Uses that require a permit

- o To be determined
- FSC catch requirements determined on a community to community basis by the community.

12.7 Adaptive management zones

Rationale:

- It is important to ensure that space exists for all reasonable uses.
- A significant number of activities do not have spatial conflicts.
- Significant area will be suitable for a wide number of uses.
- Significant area will not meet the requirements of the other six zones.

The objective of the Adaptive Management Zone is to provide opportunities for reasonable use, which do not unduly compromise the surrounding ecosystems.

Uses that do not require permits

- Non-commercial, non-extractive recreational use
- Kitasoo First Nation cultural use
- Non-extractive commercial tourism
- Scientific research
- To be determined

Uses that require a permit

- To be determined
- FSC catch requirements determined on a community basis by the community

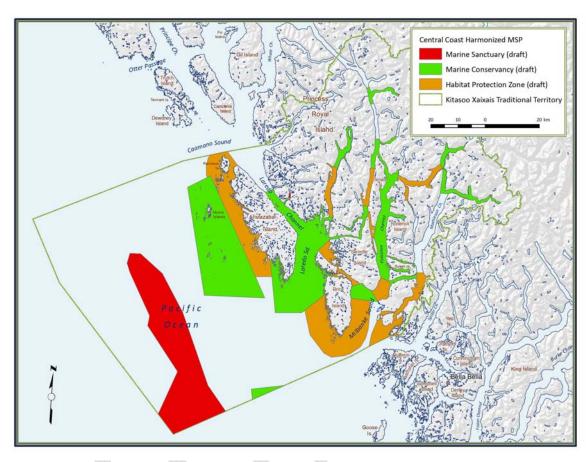
Table 12.1: Zoning Matrix for Kitasoo/Xai'Xais Territory, which identifies allowable activities in each zone.

				Enhanced Management Areas				
	>			Enhanced Management Areas				
Human Use	Marine Sanctuary (No Take Areas)	Marine Conservancy zone	Habitat Protection zone	Aquaculture management zone	Alternative Energy zone	Transportation corridors	General Use Zone	
Traditional Fisheries								
Cultural activities	✓	✓	✓	✓	✓	✓	✓	
Traditional use of marine		✓	✓ (1	✓	✓	✓	
resources all species								
Commercial Fisheries - Finfish								
Salmon - Net fisheries (all			\checkmark	✓	1	✓	✓	
species)				A				
Salmon - Troll fisheries (all			1	1	✓	✓	✓	
species)								
Herring – Net fisheries			✓	1	✓	✓	✓	
Herring – Spawn on kelp		\checkmark	✓	✓	✓	✓	✓	
Groundfish - Long line			1	✓	✓	✓	✓	
fisheries (all species)								
Groundfish - Hand line		W.	1	*	✓	✓	✓	
fisheries (all species)								
Groundfish – Trap fisheries	46		~	✓	✓	✓	✓	
(black cod)								
Groundfish - Benthic trawl								
Groundfish - Mid-water trawl)			√	√	~	~	~	
Commercial Fisheries -								
Invertebrate								
Prawn/Shrimp – Long line			✓	✓	✓	✓	✓	
trap	1							
Shrimp – Benthic trawl								
(beam and otter trawls)								
King crab – Trap			✓	✓	✓	✓	✓	
Dungeness Crab – Trap			✓	✓	✓	✓	✓	
fishery								
Urchins – Dive fishery (all			✓	✓	✓	✓	✓	
species)								
Sea cucumber – Dive fishery			✓	✓	✓	✓	✓	
Geoduck - Dive fishery			✓	✓	✓	✓	✓	
Other species – Dive fishery			✓	✓	✓	✓	✓	
Recreational Fisheries								
Finfish - Commercial			\checkmark	✓	✓	✓	✓	

				Enhanced Management Areas				
Human Use	Marine Sanctuary (No Take Areas)	Marine Conservancy zone	Habitat Protection zone	Aquaculture management zone	Alternative Energy zone	Transportation corridors	General Use Zone	
recreational fishing								
Finfish - Non-guided			✓	✓	✓	✓	✓	
recreational fishing								
Shellfish – Commercial rec.			✓	✓	✓	✓	✓	
fishing								
Shellfish – Non-guided rec.			✓	1	✓	✓	✓	
fishing			4					
Aquaculture								
Finfish Aquaculture	ļ			√			√	
Shellfish Aquaculture			√	√			√	
Algaculture			~	√			√	
Other aquaculture				√	4		✓	
Ecotourism/Recreational								
Activities		×	1					
Wildlife viewing	✓ ✓	V	√	V	√	√	√	
Kayaking		V		√	√	V	√	
Camping	✓	V	✓	✓	√		√	
Diving		~	Y	✓	✓		√	
Marine Transportation			K			√	√	
Cargo ships		_				∨	•	
Oil tankers			1	√		∨	✓	
Cruise ships		1	✓	∨		∨	∨	
Ferries		V	∨	∨	√	∨	∨	
Fishing Vessel Traffic		∨	∨	∨	V	∨	∨	
Recreational boating	4	Y	V	V	V	•	•	
Transportation infrastructure developments								
CONTRACT CON				√			√	
Docks (public/private) Marinas and breakwaters				· ✓			√	
Fuel Stations				· ✓			√	
Anchorages			√				√	
Alternative energy								
Hydro electric					√		√	
ROR	 				√		√	
Wind generation	 				√		√	
Tidal generation					√ ·		<i>√</i>	
Wave generation	1				√ ·		<i>√</i>	
Power transmission lines	 				√		√	
Non-renewable Energy								
Seismic Survey								
Scisiffic Survey	I .	1	l		l	i .		

					Enhanced Management Areas			
Human Use	Marine Sanctuary (No Take Areas)	Marine	Conservancy zone	Habitat Protection zone	Aquaculture management zone	Alternative Energy zone	Transportation corridors	General Use Zone
Drilling and oil platforms								
Pipelines								
Mining								
Mining and related								✓
development								
Foreshore development/other than logging								
Industrial developments			4					✓
Logging related								
Log booming								✓
Log sorts					4			✓
Near shore timber						,		✓
extraction								
Education								
Research	√	✓		✓	✓	✓	✓	✓
Educations and outreach	✓	\checkmark		V	✓	✓	✓	✓
Monitoring	✓	✓		1	✓	✓	✓	✓





13 COMMUNITY ECONOMIC STRATEGY

13.1 Background

Kitasoo/Xai'Xais Territory supports a host of marine sectors including: tourism, transportation, commercial fisheries, run-of-the-river hydro, and aquaculture. However, the area also presents unique challenges, including long distances to market and a small workforce.

Our people believe that a high priority should be placed on economic development related to the marine sectors. We have always been ocean people and we continue to seek wellbeing from the ocean. Significant wealth is realized from our resources. Unfortunately, in many cases, we do not play a role in, nor gain any benefit from, the exploitation of our resources. In the commercial fisheries alone, the 2007 landed commercial catch value taken from Kitasoo/Xai'Xais Territory was estimated at \$5.2 million⁴². Fisheries, such as geoduck and urchin realize significant landings in our territory, while we are shut out of the fishery. Similarly, marine tourism in our territory has projected revenues of \$5.9 million for 2008 with little benefit for our people. We maintain that it should be our people who benefit from our resources.

Despite this, the Kitasoo/Xai'Xais have realized many successes in the area of economic development. We employ our people in commercial fisheries, fish processing, logging, aquaculture, public services and tourism. However, there is still much work to do. Unemployment is still high and our population is growing.

One of the major requirements for the long-term health and resiliency of a community is the creation of local employment opportunities across a number of sectors. The goals, objectives and strategies below provide a blue print for creating sustainable jobs for our people. They take into consideration the carrying capacity of the ecosystems in our territory and recognize our Nations skills and assets. In some instances, we seek to create our own business and opportunities. In other cases, we will work with partners and businesses in our territory to benefit all partners. Times are only given for some of our economic goals. Others are left open, and development will depend on market forces and community capacity.

13.2 Economic Goals, Objectives and Strategies

13.2.1 Fisheries

13.2.1.1 Wild harvest

The Kitasoo/Xai'Xais assert that fisheries resources are a part of our aboriginal heritage, never surrendered; the waters are ours by traditional right and usage. However, final determinations regarding the portion of the ocean's wealth to be enjoyed by the

Kitasoo/Xai'Xais await the outcome of treaty negotiations – which are slow and expensive. We maintain that we have rights and title over 100% of the fisheries in our territory. Until we have signed a treaty settlement, we believe the government of Canada must implement interim measures as a show of good faith. As is consistent with our position in the past, interim measures should equate to a majority of all commercial fisheries in our territory, phased in over a 5-year period.

Goal: Commercial fisheries are once again a major contributor to the Kitasoo/Xai'Xais' economy and well-being.

Objective: Increase Kitasoo/Xai'Xais ownership and operation of licences to ensure an economically viable portion of the licences in our Territory, for fisheries that we believe are sustainable, are owned and operated by the Kitasoo/Xai'Xais.

Strategy: Require DFO to transfer 65% of salmon licences in Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais.

Strategy: Require DFO to transfer 51% of the commercial Halibut quota in Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais.

Strategy: Require DFO to transfer 51% of the commercial urchin fishery that comes out of Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais.

Strategy: Require DFO to transfer 51% of the commercial sea cucumber fishery in Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais people.

Strategy: Require DFO to transfer 51% of all hook and line fisheries quota in Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais.

Strategy: DFO transfers 51% of all prawn by trap licences in Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais.

Strategy: Require DFO to increase the quota or require an involuntary transfer of 51% of all geoduck quota in Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais.

Strategy: Require DFO to transfer 51% of black cod quota in Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais.

Strategy: Require DFO to transfer 51% of the Dog fish fishery in Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais.

Strategy: Require DFO to transfer 51% of the Lingcod in Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais.

Strategy: Require DFO to transfer 51% of pilchard (California sardine) fishery in Kitasoo/Xai/Xais Territory to the Kitasoo/Xai/Xais.

Strategy: Require DFO to allocate 100% of all new fisheries fishery in Kitasoo/Xai'Xais Territory to the Kitasoo/Xai'Xais.

Strategy: Modify scientific permits to allow the Kitasoo/Xai'Xais, when conducting studies that require harvesting, to use catch for FSC or commercial purposes.

Strategy: Require scientific permits in Kitasoo/Xai'Xais Territory to be approved by the Kitasoo/Xai'Xais Nation and require permit holders to employ Kitasoo/Xai'Xais staff.

Objective: Restructure fisheries licence regulations to result in increased local licence ownership and improved Kitasoo/Xai'Xais well-being.

Strategy: Licences transferred to the Kitasoo/Xai'Xais are specific to the Kitasoo/Xai'Xais Territory.

Strategy: Licences transferred to the Kitasoo/Xai'Xais are communally owned by the Nation, and where possible fished by Kitasoo/Xai'Xais members.

Strategy: Allow Nation-to-Nation protocols to commercially fish in another's Territory under a territorial commercial licensing system.

Objective: Purchase Kitasoo/Xai'Xais boats and equipment required to operate in the commercial fisheries of interest.

Strategy: Based on the licences and quota acquired, asses boats and equipment needs.

Strategy: Require DFO to include funding for boats and equipment in any licence transfer programs.

Objective: Improve Kitasoo/Xai'Xais participation in intertidal bivalve fisheries.

Strategy: Require DFO to ensure that 100% of clam licences in Kitasoo/Xai'Xais Territory are held by Kitasoo/Xai'Xais.

Strategy: Conduct a market demand and feasibility study for little neck and butter clam fishery.

Strategy: If opportunities exist, create business plan for a butter clam fishery including identifying suitable sites and establishing potential partnerships.

Strategy: Secure government support and funding for economic development opportunities.

13.2.1.2 Traditional

Goal: Sustainable use of traditional resources, which support economic development.

Objective: Create employment opportunities for Kitasoo/Xai'Xais people by using traditional resources.

Strategy: Develop smoking plant for the processing and sale of wild Kitasoo/Xai'Xais salmon.

Strategy: Run village tours that raise awareness of the Kitasoo/Xai'Xais use and connection to the natural resources. I.e. tours of traditional smoke house and associated legends and stories.

Strategy: Raise awareness of the unique nature and processing of Kitasoo/Xai'Xais caught products.

Strategy: Develop and market specialty teas using Kitasoo/Xai'Xais traditional plants and algae.

Objective: Increase and encourage trade amongst Kitasoo/Xai'Xais people and other First Nations.

Strategy: Develop on-reserve retail outlets for Kitasoo/Xai'Xais specialty food/fish products.

Strategy: Establish a restaurant that specializes in Kitasoo/Xai'Xais traditional foods.

Strategy: Re-establish trading partnerships with other First Nations for seaweed, herring roe on kelp, intertidal bivalves and other resources.

13.2.1.3 Recreational

Goal: Kitasoo/Xai'Xais economic development is supported by the development of a sustainable recreational fishery in Kitasoo/Xai'Xais Territory.

Objective: Develop a Kitasoo/Xai'Xais owned and operated commercial recreational fishing enterprise.

Strategy: Create a strategic business plan for a commercial recreational fishing business.

Strategy: Identify and hire an individual with the applicable background to successfully start up and grow a commercial recreational fishing business.

Strategy: Identify and train Kitasoo/Xai'Xais members interested in working in all aspects of the business including: guides, boat operators and service staff.

Strategy: Utilize Spirit Bear Lodge as a base for a Kitasoo/Xai'Xais sport fishing operation.

Objective: Establish protocol agreements with all of the commercial recreational fishing operations in Kitasoo/Xai'Xais Territory, which provide employment opportunities for Kitasoo/Xai'Xais people.

Strategy: Require commercial operators to work with the Kitasoo/Xai'Xais to train and employ Kitasoo/Xai'Xais people at their lodge.

Strategy: Establish small-scale commercial shellfish fishery for crabs and prawns to sell to commercial sport fishing lodges.

Strategy: Work with commercial sport fishing lodges to promote community run cultural or eco-tours.

13.2.2 Aquaculture and Mariculture

Goal: Kitasoo/Xai'Xais continue to realize growth in the aquaculture industry.

Objective: Establish a Kitasoo/Xai'Xais owned and operated kelp aquaculture business in Kitasoo/Xai'Xais Territory.

Strategy: Conduct a market demand and feasibility study.

Strategy: If opportunities exist, create business plan for kelp aquaculture including identifying suitable sites for the culture of algae, setting up pilot kelp culture operations, and establishing potential partnerships.

Strategy: Secure government support and funding for economic development opportunities.

Objective: Establish a Kitasoo/Xai'Xais owned and operated sea cucumber aquaculture business in Kitasoo/Xai'Xais Territory.

Strategy: Conduct a market demand and feasibility study.

Strategy: If opportunities exist, create business plan for sea cucumber aquaculture including identifying suitable sites for the culture of sea

cucumber, setting up pilot sea cucumber culture operations, and establishing potential partnerships.

Strategy: Secure government support and funding for economic development opportunities.

Objective: A Kitasoo/Xai'Xais owned and operated black cod aquaculture business in Kitasoo/Xai'Xais Territory.

Strategy: Conduct a market demand and feasibility study.

Strategy: If opportunities exist, create business plan for black cod aquaculture including identifying suitable sites for the culture of black cod, setting up pilot black cod culture operations, and establishing potential partnerships.

Strategy: Secure government support and funding for economic development opportunities.

Objective: Continue to participate in the Central and North Coast Shellfish Aquaculture Business Plan strategy.

Strategy: Monitor and maintain trial grow-out experiments.

Strategy: Identify other suitable deep-water sites.

Strategy: Follow existing shellfish aquaculture business plan, and where necessary modify.

Strategy: Support work of the Shellfish Development Corporation as outlined in business plan.

Objective: Pursue viable economic opportunities for shellfish species such as manila clam, cockle, geoduck, oyster, abalone, and goose barnacle.

Strategy: Continue to monitor and develop pilot culture sites.

Strategy: Conduct or review existing market demand and feasibility studies.

Strategy: Identify suitable aquaculture sites.

Strategy: Develop a business plan for further shellfish aquaculture.

Strategy: Develop governance structure to manage shellfish business.

Strategy: Continue to develop community shellfish co-op.

Objective: Develop a shellfish hatchery to support the Central and North Coast Shellfish Aquaculture industry.

Strategy: Conduct market demand and feasibility study.

Strategy: If opportunities exist, develop a business plan including location of hatchery.

Strategy: Secure government support and funding for development.

13.2.3 Seafood processing

Goal: A Kitasoo/Xai'Xais owned and operated seafood processing plant which creates full time, year-round employment to Kitasoo/Xai'Xais

Strategy: Become more involved in the marketing and sale of Kitasoo/Xai'Xais seafood products.

Objective: Increase processing capability at Kitasoo/Xai'Xais fish plant to accommodate new aquaculture opportunities.

Strategy: Identify and obtain capital to increase freezing and processing space at fish plant.

Strategy: Increase freezing capacity and processing space to process aquaculture product.

13.2.4 Tourism

Goal: Sustainable economic opportunities exist as a result of increased tourism-based employment.

Objective: Over the short term develop products and services to establish a foundation for Klemtu's tourism business.

Strategy: Create a mooring pennants site in Clothes Bay to increase visitors to Klemtu.

Strategy: Upgrade the marina.

Strategy: Partner with other tourism operators in the territory to offer cultural tours of Klemtu and Kitasoo cultural sites.

Strategy: Create a gift shop at the tourism office to sell local arts and crafts.

Strategy: Renovate the tourism office to create a more professional and pleasing introduction to Klemtu.

Strategy: Complete Spirit Bear Lodge, create a business plan and hire a professional cook and manager.

Strategy: Recruit qualified managers and develop a detailed business plan.

Objective: Over the medium and long term develop products and services to create an economically sustainable tourism business.

Strategy: Expand Spirit Bear Lodge to include the second wing.

Strategy: Begin targeting corporate retreats.

Strategy: Construct a campsite in town to target a market of consumer not serviced by Spirit Bear Lodge.

Strategy: Repatriate Kitasoo artefacts and expand the Klemtu museum.

Strategy: Build a third wilderness cabin at Conoona.

Strategy: Create a full-service marina in Northern portion of territory. Possibly at Swanson Bay.

Objective: Expand *Spirit Bear Adventures Ltd* through investment in marketing and product development.

Strategy: Create new website and rebrand under Spirit Bear Adventures.

Strategy: Place more focus on advertising, through website, Association membership, tradeshows, trade magazines, and travel writer familiarization tours

Strategy: Capitalize on market recognition of other tourism operators in area through partnerships and cross-marketing.

Objective: Increase tourism visitation through partnerships with experienced tourism operators that will add value to existing operations.

Strategy: Identify and partner with experienced kayaking business.

Strategy: Research transportation alternatives to BC Ferries and Pacific Coastal, which both limit the growth opportunities of Klemtu's tourism business.

Strategy: Identify and partner with experienced transportation business.

Strategy: Create partnerships with pocket cruises to offer guided village tours.

Strategy: Partner with local residents to provide day-trip fishing opportunities.

Strategy: Partner with a scuba diving guide to provide guests with scuba diving opportunities.

Objective: Create a safe experience for guests.

Strategy: Create an annual maintenance schedule for existing wilderness cabins to ensure they are up kept in an appropriate manner for tourism operations.

Strategy: Create a risk management plan that covers policies reducing the likelihood of an incident and in case of an accident: response procedures, roles and responsibilities and a communication strategy.

13.2.5 Marine transportation, shipping and ports and harbours

Goal: The Kitasoo/Xai'Xais are active partners in the marine transportation and shipping sector in our Territory.

Objective: Increase Kitasoo/Xai'Xais' participation in the transportation and shipping sector.

Strategy: Develop grey water/sewage and garbage dumping fees for designated sites in our Territory.

Strategy: Require our Nation to hold all port and harbour tenures, allowing us to assess each port development on a project-by-project basis.

13.2.6 Alternative energy

Goal: Only those technologies that the Kitasoo/Xai'Xais feel are sustainable are supported and developed in Kitasoo/Xai'Xais Territory.

Objective: Support the development of sustainable run of the river hydroelectric sector in Kitasoo/Xai'Xais Territory.

Strategy: Negotiate impact-benefit agreements with proponents, which ensure the operation is sustainably developed, and Kitasoo/Xai'Xais realize benefits from development in our territory.

Strategy: Explore the feasibility of the Kitasoo/Xai'Xais' entering a partnership with the Province and industry to build a transmission line from the Central Coast to the transmission grid.

Strategy: Negotiate the ownership of carbon credits that may result from projects in our Territory.



14 CAPACITY BUILDING

14.1 Background

The Kitasoo/Xai'Xais will not be able to reach our authority, resource management, and economic goals without significantly increasing our institutional, human and capital capacity. Specifically, the creation of institutions to govern resource use in our territory, capital to employ management staff and fund management and research activities, and education of community members to fill marine-related positions from governance and management to deck hands and Guardian Watchmen. The goals, objectives and strategies below provide a blueprint for increasing capacity in our community.

14.2 Capacity Goals, Objectives and Strategies

Goal: Kitasoo/Xai'Xais traditional uses of the marine environment for cultural and spiritual practices and learning has been reaffirmed and rejuvenated.

Objective: Increase awareness about Kitasoo/Xai'Xais resource values through Kitasoo/Xai'Xais language and culture.

Strategy: Develop curriculum for Kitasoo/Xai'Xais students that reestablishes connections with the natural environment.

Strategy: Establish rediscovery camps that promote cultural awareness.

Strategy: Conduct youth elder mentorship programs through elders field trips.

Strategy: Develop video documentaries highlighting Kitasoo/Xai'Xais connections with the natural environment.

Objective: Educate visitors about the significance of Kitasoo/Xai'Xais cultural resources and the importance of protecting them.

Strategy: Use various media to educate the general public about the importance of Kitasoo/Xai'Xais cultural resources and provide guidelines for appropriate behaviour to respect and protect these resources.

Strategy: Require (through protocol agreements or tenure requirements) sport lodge staff to take a role in educating their staff and clients about respecting Kitasoo/Xai'Xais resources and culture.

Strategy: Create internship program in DFO to allow Kitasoo/Xai'Xais to learn more about science and conservation officer positions and DFO to learn more about Kitasoo/Xai'Xais cultural laws.

Strategy: Use informative signs to communicate the cultural significance of cultural resource sites.

Strategy: Provide information through the development of pamphlets, guidebooks, websites etc. to all visitors on the history and cultural values of the Kitasoo/Xai'Xais people.

Goal: Kitasoo/Xai'Xais political and institutional structures relating to resource management in our territory are sufficiently financed to allow for the (a) on-going involvement in the decision-making process and (b) creation of a long-term Kitasoo/Xai'Xais monitoring and enforcement program.

Objective: Secure funding from all businesses and operators, recreational fishermen, and federal and provincial government agencies active in the marine portion of Kitasoo/Xai'Xais Territory.

Strategy: Develop protocol agreements with commercial operators (or establish as part of tenure/licence contracts) that include a "sustainability fee" for on-going monitoring, management, and enhancement of natural resources in Kitasoo/Xai'Xais Territory.

Strategy: Develop long-term joint-management agreements with Provincial and Federal government ministries to support management, monitoring, and enforcement efforts.

Strategy: Ensure that joint-management agreements include a resource revenue sharing component.

Goal: Kitasoo/Xai'Xais members will have the skills and capacity to engage in all marine sectors of the economy.

Objective: Ensure Kitasoo/Xai'Xais members have access to education needed for marine employment in all sectors of the marine economy.

Strategy: Create programs and educational material to increase awareness among youth about marine related employment opportunities.

Strategy: Identify specific needs and develop training courses for Kitasoo/Xai'Xais individuals interested in working in the marine economy.

Strategy: Establish mentorship program with experienced fishermen and elders to pass on marine-related skills.

Strategy: Establish secondment opportunities, internship programs and work placements with other First Nations, government agencies, and industry.

Strategy: Sign agreements with government and business to provide funding for Kitasoo/Xai'Xais to attend educational institutions.

Objective: Ensure Kitasoo/Xai'Xais members have access to employment in all sectors of the marine economy.

Strategy: Develop and sign protocol agreements with businesses in all sectors of the marine economy active in Kitasoo/Xai'Xais Territory, which provide employment opportunities for Kitasoo/Xai'Xais members. These opportunities should be available across all areas including management.

Objective: Establish a Kitasoo/Xai'Xais natural resource centre to manage our marine natural resources.

Strategy: Train Kitasoo/Xai'Xais members in scientific and traditional methods to manage and enhance resources.

Strategy: Train Guardian Watchmen to monitor and enforce policies and strategies outlined in the Kitasoo/Xai'Xais marine use plan.

Strategy: Establish an integrated natural resource centre to integrate Kitasoo/Xai'Xais management of our marine territory.

Strategy: Explore the strengths and weaknesses of designating the Integrated Resource Management Department as a non-profit society to facilitate the financing and management of the organization.

Objective: Ensure Guardian Watchmen have the personnel, equipment and infrastructure needed to effectively monitor our territory.

Strategy: Expand the Guardian Watchmen program to 3 enforcement vessels and personnel ensuring an adequate presence on the water year round.

Strategy: Identify transportation, communications, safety, and monitoring and recording equipment needs to properly police Kitasoo/Xai'Xais Territory.

Strategy: Establish Guardian Watchmen cabins in Canoona River and West Coast of Aristazable Island to monitor areas and collect conservancy user fees.

Strategy: Train and give Kitasoo/Xai'Xais tourism guides, monitoring and enforcement powers.

15 PLAN IMPLEMENTATION, MONITORING AND AMENDMENT

15.1 Implementation

The Kitasoo/Xai'Xais people take responsibility for and an interest in all resources in our territory. However, for Federal and Provincial governments marine jurisdiction is a complex issue. We will use this plan to engage all levels of government in creating positive change in our marine territory. At the same time, we recognize that government may not be willing to address some of the issues in our plan. As such, we will also engage industry, environmental organizations and other third parties to implement our plan. Mechanisms for realizing plan implementation include:

- Securing joint-management agreements with government to give the Kitasoo/Xai'Xais Nation jurisdiction and government authority over our marine environment and its resources, which enable revenue and benefit sharing, and provide for equitable Kitasoo/Xai'Xais participation in economic development and capacity building;
- Acquiring specific resource tenures and licences through government negotiation, existing programs, and market buy-back;
- Developing partnerships with industry, environmental organizations and other third parties through memorandums of understanding, and impact-benefit or joint venture agreements;
- Affirming Aboriginal rights and title to our lands and resources through treaty, litigation and other means, as appropriate.

Ideally, the vast majority of the goals and objectives in this plan will be achieved through direct negotiation with Provincial and Federal governments. This will require the same spirit of cooperation and mutual respect that occurred during the land use planning negotiations. It will also require an open-mind and willingness to move toward a more sustainable and equitable future for our marine territory and people.

15.1.1 Policy development and management

Implementation of our plan will require legislative, policy and management plan changes by the Provincial and Federal governments. The condition of our marine resources and communities are a testament to the failure of the current policy regime. We understand that real change cannot occur without changes at all level of resource management. Such changes cannot occur over night. The Kitasoo/Xai'Xais will work with the Federal and Provincial governments to create these changes over the life of the plan.

15.2 Monitoring and Research

Monitoring the environmental, social, cultural and economic conditions in Kitasoo/Xai'xais Territory is integral to understanding how well plan implementation is achieving its goals. Utilizing indicators for monitoring provides a succinct and standardized form of information collection, exchange and comparison. Successful implementation of the Kitasoo/Xai'Xais Integrated Marine Use Plan will be supported by two types of indicators: performance and state.

Performance indicators will monitor the Nation's progress toward the targets outlined in the plan's objectives. The Central Coast Indigenous Resource Alliance technical team will develop performance indicators to ensure that plan objectives are being achieved. Where appropriate and taking into consideration other planning processes, budgeting and capacity, timelines will be developed for achieving key objectives.

Recognizing that achieving the plan's goals and objectives is only a worthwhile exercise if the plan also achieves its ultimate vision the Kitasoo/Xai'Xais will work with other Nations and sub-regions to select and monitor a suite of biological and socioeconomic state indicators that will measure our progress toward our vision. State indicators monitor the health of key environmental, social, cultural and economic elements (e.g. habitat condition). Creating a baseline and monitoring key environmental and socioeconomic conditions over time will allow us to assess the success of the Kitasoo/Xai'Xais Integrated Marine Use Plan in achieving its vision.

Ideally, all planning partners will work together to collect data that is comprehensive, comparable between Nations and sub-regions, and scientifically sound. Working with the Guardian Watchmen Network, DFO science and other parties will be integral to developing and robust monitoring program.

15.3 Adaptive management

Increased research and monitoring in Kitasoo/Xai'Xais Territory will improve our understanding of the region and the impacts of human use on our environment and human well-being. As our knowledge increases, we expect this plan will evolve to reflect our better understanding. Where science or new traditional knowledge suggests different strategies or more precautionary management approaches for achieving our vision we will be responsive.

To maintain relevance, the plan should be reviewed and revised every 5 years. However, where information indicates more immediate amendments are required, our Nation will work together with other Nations to come to a consensus on a new direction.

ENDNOTES

ⁱ Ehler C & F. Douvere. 2006. Pp. 13. *Visions for a sea change*. <online http://ioc3.unesco.org/icam/images/stories//SEA%20CHANGE%20VISION%20.pdf. joint

ed 21October2008.>

² Indian and Northern Affairs Canada. 2009. Kitasoo First Nation Detail. <online http://pse5-esd5.ainc-inac.gc.ca/FNP/Main/Search/FNMain.aspx?BAND_NUMBER=540/=e. Accessed 10November 2009.>

³Scott, D. 2002. Kitasoo/Xaixais Traditional Use. EnCompass Consultants Inc.

⁴ Kitasoo/Xai'Xais Nation 2000: 1. Kitasoo/Xaixais Land Use Plan.

⁵ Garfield 1979 from Scott, D. 2002. *Kitasoo/Xaixais Traditional Use*. Encompass Consultants Inc

⁶ Olsen 1955 from Scott, D. 2002. *Kitasoo/Xaixais Traditional Use*. Encompass Consultants Inc

⁷ Kitasoo/Xai'Xais Nation 2002: 19. Draft Kitasoo/Xai'Xais Marine Resource Strategy.

⁸ Ference Weiker and Company 2009. Social and economic assessment and analysis of First Nation communities and territorial natural resources for integrated marine use planning in the pacific north coast integrated management area. Turning Point Initiative. Vancouver, BC. Vancouver, BC.

⁹ Scott, D. 2002. Kitasoo/Xaixais Traditional Use. Encompass Consultants Inc

¹⁰ Ference Weiker and Company 2009. Social and economic assessment and analysis of First Nation communities and territorial natural resources for integrated marine use planning in the pacific north coast integrated management area. Turning Point Initiative. Vancouver, BC.

¹¹ Ibid.

¹² MAL. 2009. *Legislation and Regulation*. <Online: http://www.agf.gov.bc.ca/clad/land prog services/leg reg.html; accessed 30 May 2009.>

¹³ (1) Grumbine RE 1994. What is ecosystem management? Conservation Biology 8(1):27-38. (2) Holt, RF 2001. An ecosystem-based management framework for the North Coast LRMP. Background report for the North Coast LRMP.

¹⁴ (1) Jones, R and T-L Williams-Davidson. 2000. Applying Haida Ethics in Today's Fishery. In: Coward, H, R Ommer and T Pitcher, eds. <u>Just Fish: Ethics and Canadian Marine Fisheries</u>. Institute of Social and Economic Research, Memorial University of Newfoundland: St John's, NF. pp 100-114. (2) Deur, D and N Turner, eds. 2005. <u>Keeping It Living: Traditions of Plant Use and Cultivation on the Northwest Coast</u> of North America. University of Washington Press: Seattle and UBC Press: Vancouver. 384 pp.

¹⁵ Royal Society of Canada 2004 from Vance E. and Associates 2004. Ecosystem Overview of BC's Central and North Coast and Queen Charlotte Islands: Human systems component. Department of Fisheries and Oceans

¹⁶ Offshore Oil and Gas Research Group. 2004. A review of the offshore oil and gas development in British Columbia. Burnaby BC: Simon Fraser University.

¹⁷¹⁷ BC Hydro. 2007. From http://www.bchydro.com/environment/greenpower/greenpower1754.html, accessed March 22, 2007

¹⁸ BC Hydro green & alternative energy division green energy study for British Columbia phase 2: mainland 2002. p.27. Accessed April 20, 2007 from: http://www.bchydro.com/rx_files/environment/environment3927.pdf

¹⁹ Ministry of Energy, Mines, and Petroleum Resources. 2007. *Ocean Energy*. <Online: http://www.em.gov.bc.ca/AlternativeEnergy/ocean energy/default.htm; accessed 22 March 2007.>

²⁰ Ecotrust Canada. 2001. North of Caution: A journey through the conservation economy on the northwest coast of British Columbia. Vancouver, BC: Ecotrust Canada.

²¹ Gislason. G.S. 2007. Economic contribution of the Ocean sector in BC. A report for the Oceans Coordinating Committee.

²² Ference Weiker and Company 2009. Social and economic assessment and analysis of First Nation communities and territorial natural resources for integrated marine use planning in the pacific north coast integrated management area. Turning Point Initiative. Vancouver, BC.

²³ Numbers that refer to the North Coast include Haida Gwaii/Queen Charlotte Islands plus the Mainland north of Vancouver Island i.e., the Rivers Inlet - Bella Bella - Bella Coola area plus the Prince Rupert and surrounding area (taken from Gislason 2007)

²⁴ Gislason. G.S. 2007. Economic contribution of the Ocean sector in BC. A report for the Oceans Coordinating Committee.

²⁵ Vance E. and Associates 2004. Ecosystem Overview of BC's Central and North Coast and Queen Charlotte Islands: Human systems component. Department of Fisheries and Oceans.

²⁶ Tank, S. 2006. State of the Catch. David Suzuki Foundation. Vancouver, BC.

²⁷ EcoTrust Canada. 2004. Catch-22: Conservation, communities and the Privatization of BC Fisheries. EcoTrust Canada. Vancouver, BC.

²⁸ Gislason. G.S. 2007. Economic contribution of the Ocean sector in BC. A report for the Oceans Coordinating Committee.

²⁹ Vance E. and Associates 2004. Ecosystem Overview of BC's Central and North Coast and Queen Charlotte Islands: Human systems component. Department of Fisheries and Oceans.

³⁰ Birchwater, S.1993. Ulkatcho stories of the grease trail, Anahim lake – Bella Coola – Quesnel, told by Ulkatcho and Nuxalk elders. Spartan Printing, Quesnel, British Columbia.

³¹ Harrington R. 1967. Eulachon and the grease trails of British Columbia. *Canadian Geogrpaic Journal.* January: 28-31

³² Department of Fisheries and Oceans. 1999. A policy for selective fishing in Canada's Pacific fisheries. A new direction: the third in a series of papers from Fisheries and Oceans Canada. May. P 34.

³³ Clayton W.L. 2002. Improvement in bycatch reduction through reconfiguration of BRD's in the BC Shrimp-by-trawl industry (reducing the environmental impacts of fishing activity). Pacific Coast Shimpers' Cooperative Association. Victoria, BC. P. 59.

³⁴ Broadhurst, M. K., Suuronen, P. & Hulme, A. 2006. Estimating collateral mortality from towed fishing gear. Fish and Fisheries 7: 180-218.

³⁵ Department of Fisheries and Oceans Canada. 2007. Pacific region integrated fisheries management plan- eulachon April 1, 2007 to March 31, 2008. 22 p.

³⁶ Klyashtorin, L. B. 1997. Global climate cycles and Pacific forage fish stock fluctuations. *In* forage fishes in marine ecosystems, pages 545-557. Proceedings of the Wakefield fisheries symposium, Alaska Sea Grant College Program 97-01. Fairbanks, University of Alaska; Benson, A. J., McFarlane, G. A., Allen, S. E. & Dower, J. F. 2002. Changes in Pacific hake (*Merluccius productus*) migration patterns and juvenile growth related to the 1989 regime shift. *Canadian Journal of Fisheries Aquatic Science* 59: 1969-1979; Agostini, V. N., Francis, R. C., Hollowed, A. B., Pierce, S. D., Wilson, C. & Hendrix, A. N. 2006. The relationship between Pacific hake (*Merluccius productus*) distribution and poleward subsurface flow in the California Current system. *Canadian Journal of Fisheries Aquatic Science* 63: 2648-2659.

³⁷ Hay, D. E. 1995. The mysterious eulachon. *The Westcoast Fisherman*, Vancouver, BC. March.

³⁸ While the cruise ship industry is important to BC, with the exception of Prince Rupert, cruise ships do not stop in the PNCIMA. However, this does not prevent them from having significant environmental impacts on the area. A 2003 report (Haggarty et al.) concluded that a number of environmental impacts result from cruise ship travel through PNCIMA, including black and grey water waste discharge, oil spills, air emissions and the release of hazardous materials.

³⁹ Ference Weiker and Company 2009. Social and economic assessment and analysis of First Nation communities and territorial natural resources for integrated marine use planning in the pacific north coast integrated management area. Turning Point Initiative. Vancouver, BC.

⁴⁰ Gislason. G.S. 2007. *Economic contribution of the Ocean sector in BC.* A report for the Oceans Coordinating Committee., KPL 2004, CIT 2004

⁴¹ Ehler C & F. Douvere. 2006. Pp. 13. Visions for a sea change. <online http://ioc3.unesco.org/icam/images/stories//SEA%20CHANGE%20VISION%20.pdf. Accessed 21October2008.>

⁴² Ference Weiker and Company 2009. Social and economic assessment and analysis of First Nation communities and territorial natural resources for integrated marine use planning in the pacific north coast integrated management area. Turning Point Initiative. Vancouver, BC.