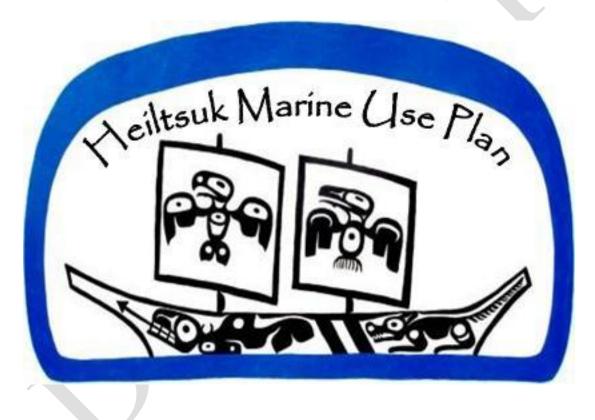
HEILTSUK

INTEGRATED MARINE USE PLAN



December 2011



TABLE OF CONTENTS

T	able	of Contents	•••••••	ii
L	ist of	tables and Figures		vii
		· ·		
1	Н			
	1.1	Principles		2
2	Pu	irpose and scope of document		4
	2.1	Purpose of Document		∠
	2.2	Scope of Document		
3	Pla	an Area and Description		5
	3.1	Overview of Heiltsuk Territory		5
	3.1	1.1 Description of Territory	·	5
	3.1	1.2 Description of Community	·	5
4	Co	ommunity Planning Process		9
	4.1	Community Planning Framewo	ork	9
	4.1	1.1 Developing the MUP comr	mittee	9
	4.1	1.2 Communications strategy		9
	4.2	Developing the community man	rine vision	11
	4.3	Data gap identification and re	esolution	11
	4.4	Defining management direction	1	12
	4.4	4.1 Prioritizing of issues		12

	4.4.	2 Component planning	12
	4.4.	Zoning and prescriptive planning	13
	4.5	Conflict resolution/approval process	13
	4.6	Integration with other planning processes	13
5	Pla	nning and Management Principles	15
	5.1	Relationship with Federal and Provincial governments	15
	5.2	Relationships with neighbouring First Nations communities	16
	5.3	Relationships with other coastal communities and industry	16
6	Laı	nd and Resource Values	17
	6.1	Terrestrial activities	17
7	Key	y Issues	18
	7.1	Co-Jurisdiction/Shared decision making	18
	7.2	Territorial-based economic development	18
	7.3	Government revenue sharing	18
	7.4	Impact-benefit agreements	18
	7.5	Stock restoration and rehabilitation	19
	7.6	Priority access to FSC	19
	7.7	Bottom trawling	19
	7.8	Oil and gas	19
	7.9	Monitoring and enforcement	20
	7.10	Recognition of trade	20
8		mate Change	
9	Mo	nitoring and enforcement	
	9.1	Background	23
	9.2	Monitoring and enforcement goals, objectives and strategies	23

10	Mari	ne Resource Management	.29
1	0.1 F	Resource conservation and use	.29
	10.1.	Land and coastal tenures	.29
	10.1.	2 Bulk water export	.30
	10.1.	C	
	10.1.	83	
	10.1.	5 Shipping and transport	.35
	10.1.	5 Salmon	.37
	10.1.		
	10.1.	B Herring	.53
	10.1.	9 Eulachon	.56
	10.1.	10 Aquaculture	.57
	10.1.	11 Recreation and tourism	.61
	10.1.	12 Commercial recreational fishery	.64
	10.1.	13 Food, Social and Ceremonial	.68
	10.1.	14 Abalone	.72
11	Mari	ne Use Designations	.74
1	1.1 N	Marine Sanctuary	.76
1	1.2 N	Marine Conservancy areas	.77
1	1.3 H	labitat protection areas	.78
1	1.4 A	Aquaculture management areas	.78
1	1.5 Т	ransportation corridors	.79
1	1.6 A	Alternative energy areas	.80
1	1.7 A	Adaptive management zones	.80
12	Com	munity Economic Strategy	.86

12.1 B	ackground	86
12.2 E	conomic goals, objectives and strategies	86
12.2.1	Fisheries	86
12.2.2	2 Aquaculture and mariculture	90
12.2.3	Seafood processing	92
12.2.4	4 Tourism	93
12.2.5	Marine transportation and shipping	94
12.2.6	6 Energy projects	95
12.2.7		95
13 Capa	city Building	96
13.1 B	ackground	96
13.2 C	Capacity goals, objectives and strategies	96
14 Plan i	implementation, monitoring and amendment	100
14.1 Ir	mplementation	100
14.1.1	Policy development and management	100
14.2 N	Monitoring and research	101
14.3 A	daptive management	101
Endnotes.		102

LIST OF TABLES AND FIGURES

Figure 1: Heiltsuk Territory and marine plan extent	xii
Figure 4.1: Marine Plan Components	10
Table 10.1: Marine species commercially harvested within Heiltsuk Territory	4
Table 12.1: Zoning Matrix for Heiltsuk Territory, which identifies allowable	
activities in each zone.	82
Figure 12.1 Heiltsuk Nation Spatial Marine Zoning Plan.	85

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 east-west 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 Heiltsuk generations. The Heiltsuk 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 slected 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.

Gvi'ilas: Broadly defined, Gvi'ilas means that Heiltsuk people derive their strength from their Territory by following specific laws that govern how they use natural resources. It is the basis of Heiltsuk respect for and reverence of nature and serves as a foundation for many customary laws.

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

Heiltsuk: Refers to the descendants of the *Wuyalitxv*, *Qvuqvayaitxv*, *Yisdaitxv*, and *Xaixais* tribal groups and now known as the Heiltsuk Nation. The Heiltsuk are governed by the Heiltsuk Tribal Council and the Hemas Council. Heiltsuk translates as "the people" or "to speaks and act correctly".

Heiltsuk Land Use Plan: A strategic document to guide initiatives in resource management, conservation and economic development, and express the Heiltsuk's Aboriginal title and rights from the Heiltsuk perspective. It is a "living document" that will evolve over time to incorporate the results of ongoing work in traditional use studies and other information-gathering initiatives. It provides a shared vision and plan of action for how the Heiltsuk will make decisions on future land and resource uses for communal purposes. Published in 2005.

Heiltsuk Territory: Heiltsuk Territory includes 16,800 km² of land on the Central Coast, and extends out into the nearshore and offshore areas as far as the international waters limit. The boundaries of Heiltsuk Territory are determined by the territories of the give Heiltsuk tribal groups, who together, make up the Heiltsuk Nation. Heiltsuk Territory boundaries are based upon Heiltsuk oral history research. This research continues and, should new data justify it, the Heiltsuk may emend the Territory boundaries as required.

Hemas: Hereditary chiefs of the Heiltsuk Nation.

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.
- **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.¹
- **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

HCEC Heiltsuk Cultural Education Centre

HDI Human Development Index

HTC Heiltsuk Tribal Council

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

RCMP Royal Canadian Mounted Police

SCUBA Self Contained Underwater Breathing Apparatus

SOK Spawn on Kelp

TAC Total Allowable Catch

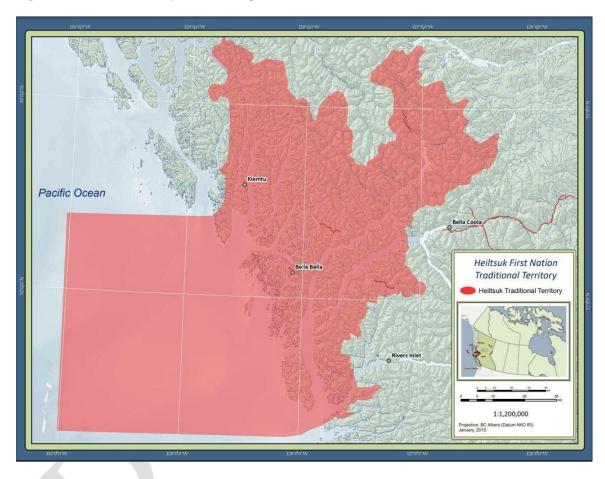
TEK Traditional Ecological Knowledge

TUS Traditional Use Study

WISC Waglisla Integrated Studies Centre

PLAN AREA MAP

Figure 1: Heiltsuk Territory and marine plan extent



1 HEILTSUK MARINE VISION

We are the Heiltsuk Nation. Out Territory encompasses 16, 658 square kilometers of land as well as extensive nearshore and offshore waters in an area that has only recently come to be known as the Central Coast of BC. Our territorial boundaries are defined by six Heiltsuk tribal groups and extend out into national waters. According to our *nuyem* or oral tradition, we have had a relationship with these rich and productive lands and waters for countless generations. This is our rightful place in the world. Almost a century ago, Bob Anderson speaking on behalf of our Nation to a Royal Commission on Indian Affairs affirmed unequivocally our inalienable and timeless title and rights:

"We are the natives of this country and we want all the land we can get. We feel we own the whole of this country, every bit of it, and we ought to have something to say about it. The government has not bought any land from us so far as we know and we are simply lending this land to the government. We own it all. We will never change our mind in that respect, and after we are dead our children will hold the same ideas. It does not matter how long the Government takes to determine the question, we will remain the same in our ideas about this matter. The British Columbia Government is selling the land all around us, and we do not know but they might sell it all, even including these Reserves, in time. We consider that the Government is stealing that land from us, and we also understand that it is unlawful for the Government to take this Land" – Bob Anderson

We affirm *Gvi'ilas*, the laws of our ancestors as the paramount principle to guide all resource use and environmental management. According to Chief Moses Humchitt, *Gvi'ilas* refers to our "power" or authority over all matters that affect our lives. It is a complex and comprehensive system of laws that embodies values, beliefs, teachings, principles, practices, and consequences. Inherent in this is the understanding that all things are connected and that unity is important to maintain.

Gvi'ilas has been described as the ethos of our people: "Gvi'ilas not only governed our relationship and responsibilities to land and resources, but also social relationships and obligations with respect to lands and resources. For example, take a little and leave a lot; dispersed and varied resource harvesting obligations to share and support family and community; obligations to care for the resource; seeing all aspects of harvesting, from the taking of the resources to the methods used, as a gift of the Creator."

Furthermore, *Gvi'ilas* governs our relationships with both the temporal and spiritual worlds: "Relationships with and use of natural resources were rooted in a value system that ensured sustainability and respect. It was believed that all living matter had a

spiritual essence that was respected, and interconnectedness was understood. Each family was given responsibility over specific land and water bases. Sustainable use and management was enforced by certain practices and teachings. Plants were gathered in a specific way. The first salmon caught was blessed with ritual ceremony that acknowledged its sacrifice and need to give sustenance to our people. Communication with the spirit of the land, sea and its life forms was common through respect and prayer.

This system upheld by the *Hemas* in consultation with the people, allowed our people to grow, evolve and flourish for thousands of years. Traditionally, *Gvi'ilas* laws were orally articulated and agreed upon. They were reviewed, reaffirmed, and amended annually. The Heiltsuk Nation has never ceased to affirm our ownership and jurisdiction over all our seas, lands and resources.

Today, through the Heiltsuk Marine Use Plan we assert *Gvi'ilas* and state our vision for our Territory:

Since time immemorial, we, the Heiltsuk people have managed all of our Territory with respect and reverence for the life it sustains, using knowledge of all marine and land resources passed down for generations. We have maintained a healthy and functioning environment while meeting our social and economic needs over hundred of generations.

Our vision for this area remains unchanged. We will continue to balance our needs with sustaining the land and resources that support us. We will continue to manage all Heiltsuk seas, lands and resources according to customary laws, traditional knowledge and *nuyem* (oral tradition) handed down by our ancestors, with consideration of the most current available scientific information.

Since time immemorial we have governed ourselves, and have managed our resources upon which we depend. This plan is a tool for continued governance of our Territory.

1.1 Principles

Gvi'ilas will serve as the paramount management principle for managing resources in Heiltsuk Territory. We endorse the general principles of ecosystem-based management (EBM). In addition, all land use planning and resource management in Heiltsuk Territory will be guided by the following principles, listed in order of priority:

1) Ensure conservation of natural and cultural resources

Conservation of natural and cultural resources is the highest priority of the Heiltsuk 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 Heiltsuk priority access to resources for cultural and sustenance use

Maintaining Heiltsuk access to all areas of the Territory is essential for cultural and sustenance purposes. The rights and opportunities of Heiltsuk 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 Heiltsuk commercial and recreational use of resources

Heiltsuk economic development and diversification is required to create both employment and entrepreneurial opportunities. Heiltsuk recreational uses of the land and water also are important to the well-being of the membership.

4) Enable appropriate non-Heiltsuk commercial and recreational use of resources

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

2 PURPOSE AND SCOPE OF DOCUMENT

2.1 Purpose of Document

The Heiltsuk Marine Use Plan is a strategic document to guide marine resource management in our 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 Heiltsuk 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 Heiltsuk people. We will realize the goals and objectives of this document through government-to-government negotiation, partnerships with industry, cooperation with other First Nations, and direct action.

3 PLAN AREA AND DESCRIPTION

3.1 Overview of Heiltsuk Territory

3.1.1 Description of Territory

Most Heiltsuk people live in the community of Bella Bella (Indian Reserve #1), located on Campbell Island on the Central Coast of BC. Heiltsuk people came together on the southeast side of Campbell Island (McLaughlin Bay) around 1833 with the arrival of the Hudson's Bay Company trading post. During the 1890s, the village was moved to its present location in Bella Bella, also called Waglisla².

The Heiltsuk Nation has 23 reserves in their Territory totalling over 1,300 ha³. While the Nation has been restricted to these reserves since the imposition of the Indian reserve system in Canada, Heiltsuk people have continuously occupied and used their Territory for centuries. The geography of the Territory is described in the Heiltsuk Land Use Plan:

Heiltsuk Territory falls within the coastal temperate rainforest zone of British Columbia's Central Coast. The Territory is known for its old growth forests, productive salmon systems, and diverse land and marine ecosystems. It has attracted increasing media attention under the name 'Great Bear Rainforest' as people from around the world have sought to protect this area from the industrial resource extraction and development patterns found elsewhere in the province⁴.

The western part of the Territory is generally characterized by coastal islands, peninsulas, low elevation terrain, and slow growing forests dominated by cedar, hemlock, spruce, and fir. In contrast, the eastern Territory has higher elevations, deep fiords, U-shape valleys, and some very productive forests in large river valleys⁵. In total, the land and marine Territory is over 36,000 km².⁶

3.1.2 Description of Community

3.1.2.1 History, Culture and Change

Archaeological evidence indicates that many of the Heiltsuk cultural features present when the first Europeans came to the Americas were developed before 1000 B.C.⁷. The Heiltsuk were able mariners, ecologists and artists. Aspects of material culture include plank houses, ceremonial art, canoes, cedar bark technology, spinning, many different kinds of woodworking tools, the bow and arrow, and a considerable variety of wood and

fibre artefacts⁸. From intricate masks and jewellery to 75-foot war canoes and ceremonial boxes, Heiltsuk artefacts are centre pieces in natural museums the world over⁹.

At the time of contact, the Heiltsuk peoples had well-developed hunting, fishing, and gathering technologies, including multiple techniques for preserving perishable foodstuffs¹⁰. They also had sophisticated systems of land ownership and resource management, and maintained extensive networks of sharing, redistribution, and trading relationships that united the Heiltsuk groups and other Coastal First Nations. Dramatic ceremonial systems, art forms and oral traditions kept cultural, economic, and environmental knowledge alive and in constant review and practice.

Pressure from missionaries, government, and hospital staff was applied to the Heiltsuk to abandon their traditional beliefs and practices, forcing many of these practices underground¹¹. The Federal government from the late nineteenth century until 1951 outlawed the Potlatch, an institution involving public feasting and display and public witnessing of business¹².

Despite these forces acting upon the Heiltsuk, there remains today a Heiltsuk Nation that is striving to retain its lands and culture. During this century, the Heiltsuk have maintained close ties to their land, marine environment and resources. The language and potlatch system survived and traditional foods continue to be harvested and preserved from the land and waters. These foods contribute significantly to the contemporary diet and local economy.

While or traditions and practices still survive, over the last 50 years access to marine foods and use of marine resources in cultural events has changed significantly. The Heiltsuk believe this is due to a lack of marine vessels locally, people's lack of interest in traditional harvesting, and mismanagement of the resources¹³. There is an overwhelming desire by the Heiltsuk to improve their access to marine resources, and increase their role and presence in their marine territory again.

3.1.2.2 Population

3.1.2.2.1 Historic Population

Historically, over 10,000 Heiltsuk people lived in over 55 villages on the Central Coast, but by the early 1800s the population had severely declined. The arrival of European settlers and others in the 19th century introduced disease and epidemics, devastating the population from 1,500 in 1833 to 188 in 1839. However, the population rebounded until the 1960s when Heiltsuk people began migrating from Bella Bella to the Lower Mainland due to poor employment and business opportunities, housing shortages and overcrowding, and poor educational opportunities. By the late 1990s, the population of the Heiltsuk Nation had grown to almost 2,000 members with about 40% of people living off-reserve¹⁴.

3.1.2.2.2 Current Population

Between 1997 and 2005, the Heiltsuk Nation grew by 136 members or by approximately 7%. This growth is somewhat slower than BC as a whole (7.75%) but faster than 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 0.85% per year. However, while overall population has increased over the past eight years, growth rates differ among on-reserve and off-reserve populations.

The on-reserve population increased by about 4.6% between 1997 and 2005, while off-reserve population increased by almost 10%. In 2005, the Heiltsuk Nation was split between 1,179 on-reserve individuals (55%) and 951 off-reserve individuals (45%). This ratio between on-reserve and off-reserve members has remained relatively unchanged since 1997. The ratio also differs substantially from provincial averages, as about 43% of registered Indians live on-reserve and 57% live off-reserve¹⁵.

3.1.2.2.3 Population Projections (2005-2055)

By applying the Statistics Canada average annual growth rate of 1.8%, the Heiltsuk onreserve population would increase to approximately 3,330 over the next 25 years and to about 5,200 by 2055. These estimates should not be viewed as a detailed analysis but rather as a general projection for planning purposes. Recent trends indicate that the Heiltsuk population is growing by about 0.85% per year, somewhat slower than the Statistics Canada projection of 1.8%.

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 40% of Heiltsuk were employed fulltime ¹⁶, and 62% of the community had some type of employment. By comparison 64% of British Columbians are employed.

Marine sector employment still remains an important contributor to the Heiltsuk 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, 19% of the Heiltsuk's total income comes from the marine sector¹⁷. This work occurs predominantly in the areas of commercial fishing and fish processing. Over 85% of the Heiltsuk 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 Heiltsuk Nation indicates that average incomes for families and individuals are significantly lower than for the rest of BC. In a local survey, Heiltsuk reported an average annual income of \$19,000¹⁸; well below the provincial average of \$31,544 (2001). In addition, Heiltsuk Nation members living in Bella Bella receive more of their income from government transfer payments than other communities on the Central Coast and in BC. In 2001, Heiltsuk people received 21.9% 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 registered Indians: the human development index (HDI) and the First Nations community well-being index (CWB). Bella Bella's CWB of .73 is within the provincial average of First Nation communities (.70) and well below BC's non-First Nation average (.85). However, Bella Bella fares as well or better than the other First Nation communities on the Central Coast in and all sub-components of community well-being.

3.1.2.4 Education

Bella Bella Community School is ran by a First Nations elected school board with responsibility for education from nursery-grade 12 as well as post secondary education financial and moral support. The Community School has an approximate attendance of 310 students¹⁹. Heiltsuk culture is incorporated into classroom teaching and students receive daily instruction in Heiltsuk Language²⁰.

Heiltsuk College provides post-secondary programs and job skills training initiatives, while Waglisla Integrated Studies Centre (WISC) provides adult secondary learning opportunities²¹. Each year, about 100 students are enrolled into a variety of instructed classes, seminars and workshops. Course curriculum includes basic literacy/fundamentals to Grade 12 levels, university and college entrance program, and university-transfer courses, Hailzaqv language courses, and capacity training courses such as leadership, first aid, computer skills, life skills, and other training.

Education levels continue to be a significant barrier to employment for the Heiltsuk. 43% of Heiltsuk respondents indicated that they have only completed some high school. A further 23% have completed high school, while only 14% have completed 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/employees²².

4 COMMUNITY PLANNING PROCESS

4.1 Community Planning Framework

4.1.1 Developing the MUP committee

In 2007, the Heiltsuk marine use planning committee (MUPC) and technical working group were formed to direct the development of the Heiltsuk Marine Use Plan (MUP). A broad cross section of elders, hereditary chiefs, elected counsellors, commercial fish harvesters, youth and representatives from related Heiltsuk 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

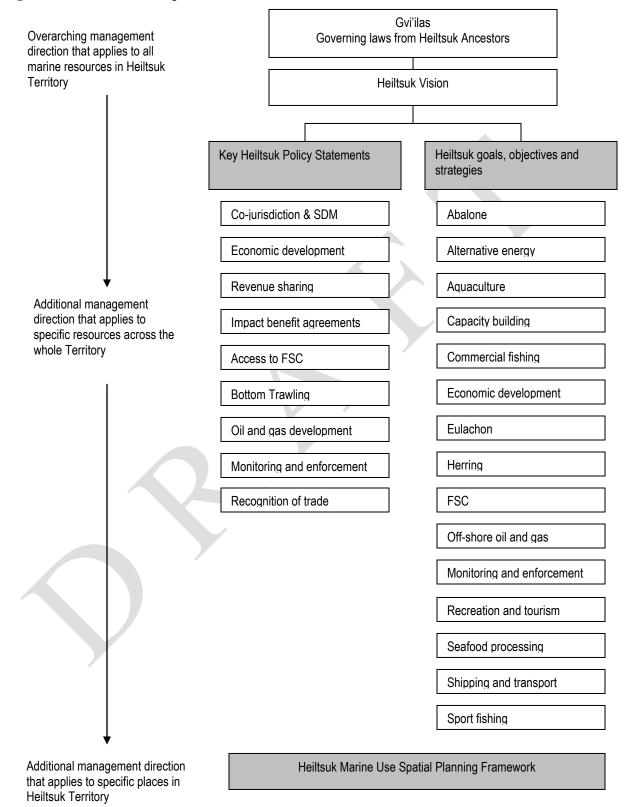
Creating a community plan requires a strong communication strategy with other Heiltsuk departments and agencies and Heiltsuk members. Community input was integral to the successful completion of this plan. To achieve a high level of input, a variety of communication strategies were used. Studies were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

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

In addition, all marine use planning products were approved by the marine use planning committee, elected council and Heiltsuk 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
- An open door policy and readily available planning materials.

Figure 4.1: Marine Plan Components



4.2 Developing the community marine vision

The Heiltsuk created a comprehensive resource vision, guided by their traditional laws and values, for their land use plan. As Heiltsuk, we recognize the interdependence of all natural resources, and do not distinguish between their marine and land resources. The vision created for their land use plan embodies the values of the Heiltsuk and was adopted by the present Heiltsuk MUPC 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 Heiltsuk Marine Use Plan has been collected formally or at the right scale. The Heiltsuk Marine Use Planning Committee identified 4 significant data gaps:

- Socio-economic data: Demographic information about the Heiltsuk population, community skills and capacity and marine related economic aspirations of the community.
- Industry data: Characteristics and potential of various marine industries in Heiltsuk 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 marine-related 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 food, social and ceremonial (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 (Figure 4.1 outlines the components of the Heiltsuk MUP). Still, there are many issues that are of immediate concern to the Heiltsuk 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 8 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 Heiltsuk 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 issues, goals, objectives and strategies 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 Heiltsuk peoples' marine resources.

4.4.3 Zoning and prescriptive planning

A technical discussion paper based on the best available science and outlining the various options for spatial management was presented to the Heiltsuk MUPC in early 2009. Based on experiences in other jurisdictions, the land use planning process on BC's coast and the issues discussed at the Heiltsuk MUPC table, and feedback from international experts seven zones were chosen for the Heiltsuk's marine Territory. They are detailed in section 11 of the plan.

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, ecologically important and sensitive areas, important commercial fishing grounds, and the potential size FSC exclusive use areas would need to be to provide for Heiltsuk 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 BCMCA outputs.

The Heiltsuk MUPC 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 and the final zoning strategy presented in Figure 12.1 was created.

4.5 Conflict resolution/approval process

The Heiltsuk 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 Heiltsuk Tribal Council to adopt the plan in its entirety.

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. This includes:

- Heiltsuk Integrated Land Use Plan
- Heiltsuk 15-year Economic Development Plan

- Heiltsuk Traditional Use Study
- HEDC strategic plan
- Gladstone Reconciliation
- BC Capacity Initiative / Heiltsuk GIS Planning Project 09/10
- The Heiltsuk Nation Health Strategy

All draft marine use planning products were cross-referenced with existing planning documents to ensure the plans complimented each other. The Heiltsuk MUPC 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 wellbeing in Heiltsuk Territory.

5 PLANNING AND MANAGEMENT PRINCIPLES

5.1 Relationship with Federal and Provincial governments

For plan development and 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;
- 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.

5.2 Relationships with neighbouring First Nations communities

We recognize that for the development and implementation of the Heiltsuk MUP to be successful, the Heiltsuk must work closely with other First Nations. The Heiltsuk 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.

5.3 Relationships with other coastal communities and industry

Non-First Nation communities have been present in our Territory since the establishment of the Hudson Bay Company's Fort McLoughlin in the 1830s. The Heiltsuk Nation recognizes that the residents of the coastal communities in our Territory 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.

6 LAND AND RESOURCE VALUES

6.1 Terrestrial activities

The Heiltsuk ratified a comprehensive land use plan in 2005. Where appropriate, the Heiltsuk incorporated land use planning outcomes into the final Heiltsuk MUP. The Heiltsuk recognize the interconnectedness of the marine and terrestrial ecosystems and have positioned marine Heiltsuk Exclusive Use Areas adjacent to terrestrial conservancies. The Heiltsuk 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 Heiltsuk conservation management objectives.

The Heiltsuk are working closely with the Province of BC to develop conservancy management plans for conservancies in the Heiltsuk 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 Heiltsuk 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 Act²³. 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 have capitalized on other regulatory opportunities including the Fisheries Act, Oceans Act, Canada Marine Act, Navigatable Waters Act, and Transportation Act.

7 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 Heiltsuk. We expect to work with government and industry to address these issues as soon as possible.

7.1 Co-Jurisdiction/Shared decision making

The Heiltsuk 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 Heiltsuk 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 Heiltsuk Nation.

7.2 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 Heiltsuk Territory was over \$14 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.

7.3 Government revenue sharing

The Heiltsuk 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.

7.4 Impact-benefit agreements

The status quo of no accountability to, or relationship with, the Heiltsuk 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 Heiltsuk Territory must be accompanied by an IBA with the Heiltsuk Nation.

The Heiltsuk 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.

7.5 Stock restoration and rehabilitation

The health of many of the fish stocks in our Territory are a pressing concern to the Heiltsuk 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 Heiltsuk expect government to work with us.

7.6 Priority access to FSC

Harvest of resources from our Territory is an important part of the contemporary and ongoing activities of the Heiltsuk 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 Heiltsuk 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 Heiltsuk 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.

7.7 Bottom trawling

The unselective and destructive nature of bottom trawling is inconsistent with Gvi'ilas and ecosystem based management. Bottom trawling should be prohibited throughout Heiltsuk Territory.

7.8 Oil and gas

Reliance upon the marine environment is a fundamental and defining factor of Heiltsuk 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 Heiltsuk Nation does not support oil and gas exploration or development in our Territory.

7.9 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 Heiltsuk are able to directly enforce our plans, laws, polices and guidelines.

7.10 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 Heiltsuk.

8 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:

- 1. 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.

9 MONITORING AND ENFORCEMENT

9.1 Background

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

Successful implementation of Heiltsuk planning requires that the Heiltsuk are able to directly enforce our 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 Heiltsuk have a clear understanding of what is occurring within our Territory. This further contributes to the need for the Heiltsuk to increase our capacity and ability to assert control over resources and decision-making related to resource management.

Monitoring and enforcement of resource use in Heiltsuk Territory requires staff, training, agreed upon authority, transportation, facilities, equipment and capital. It is highly preferable to have Heiltsuk personnel in monitoring and enforcement positions, as they bring cultural and local knowledge to the positions, have more credibility with the community, and are likely to have lower turnover rates. A major component of our increased role in monitoring and enforcement of laws and regulations in our Territory is an expanded Guardian & Watchmen program.

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

9.2 Monitoring and enforcement goals, objectives and strategies

Goal: Exercise Heiltsuk monitoring and enforcement authority over all marine activities within Heiltsuk Territory.

Objective: Under a co-jurisdictional relationship, 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 Heiltsuk policies, culture

and institutions as well as Heiltsuk monitoring and enforcement personnel and programs.

Strategy: Require Heiltsuk fisheries staff to conduct all DFO observing and monitoring in Heiltsuk Territory.

Strategy: Establish memorandums of understanding between the Heiltsuk Nation and applicable Federal and Provincial agencies, to negotiate jurisdictional roles, and monitoring and enforcement authority and responsibilities. Any arrangement should include full enforcement powers for Heiltsuk Guardian Watchmen.

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

Objective: Exercise Heiltsuk monitoring and enforcement authority over the recreational fisheries within Heiltsuk Territory.

Strategy: Develop Heiltsuk heritage laws, regulations, guidelines and/or protocols to guide monitoring and enforcement of the recreational fishery.

Strategy: Collaboratively develop monitoring and enforcement strategies with federal and provincial agencies by identifying jurisdictional roles, authorities and responsibilities.

Strategy: Establish resource use and protocol agreements, which include recreational fisheries monitoring and enforcement provisions, with commercial sport fishing operators in Heiltsuk Territory.

Strategy: Establish Heiltsuk authority to review, approve and/or veto recreational fisheries licenses and tenures.

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

Strategy: Develop publication that outline Heiltsuk recreational fisheries policies. Information should be places in the annual sport fishing guide.

Objective: Exercise Heiltsuk monitoring and enforcement authority over the commercial fisheries within Heiltsuk Territory.

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

Strategy: Establish resource use and protocol agreements, which include commercial fisheries monitoring and enforcement provisions, with commercial fish licence holders in Heiltsuk Territory.

Strategy: Establish Heiltsuk authority to review, approve and/or veto commercial fisheries licenses. Review process will focus on preventing fishermen who repeatedly break rules and regulations.

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 Heiltsuk monitoring and enforcement authority over Food, Social and Ceremonial marine resources within Heiltsuk Territory.

Strategy: Create a food fish committee of elders, Hemas, Heiltsuk fisheries staff, and Heiltsuk Tribal Council members to manage the local food fishery. The committee should be empowered to create regulation and write policy on food fishing in Heiltsuk Territory.

Strategy: Food fish committee to write a comprehensive Heiltsuk food fish policy that reflects Gvilas.

Strategy: Establish a community engagement process to ensure all community voices are represented in food fish policy.

Strategy: Monitor and ensure compliance to Heiltsuk food fish policy.

Strategy: Create and maintain signs identifying existing boundaries and allowable fishing areas. The Guardian Watchmen should maintain signs, and ensure compliance by Heiltsuk members

Strategy: Develop a policy for non-band members' harvest based on Heiltsuk Customary Laws.

Strategy: Develop a policy on the selling and trading of food fish based on Heiltsuk Customary Laws.

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

Strategy: Food fish committee should make all in-season management decisions for FSC fishery in Heiltsuk Territory.

Strategy: Enforce food fishing boundaries around salmon bearing streams.

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.

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 each Nation's Territory.

Objective: Exercise Heiltsuk monitoring and enforcement authority over non-fishing marine resources within Heiltsuk Territory.

Strategy: Develop sector specific resource management policies for non-fishing marine resources in Heiltsuk Territory.

Strategy: Expand monitoring and enforcement to include non-fishing marine resources policies.

Strategy: Establish resource use and protocol agreements, which include monitoring and enforcement provisions, with non-fishing marine resource users in Heiltsuk Territory.

Strategy: Work with the Provincial government to legislate all companies working in our territory to hold a Heiltsuk tenure or protocol in order to operate.

Goal: A professional, strong and respected Heiltsuk Guardian Watchmen Program with full enforcement powers.

Objective: Ensure Heiltsuk monitoring and enforcement personnel are recognized and respected by the general public and commercial operators within Heiltsuk Territory.

Strategy: Create and coordinate uniforms and vessel designations for the Guardian Watchmen Network that identify Guardian Watchmen in Heiltsuk Territory. Strategy: Develop information and educational materials including brochures, signs, and a website that identify Heiltsuk Territory, the Guardian Watchmen program, Heiltsuk monitoring and enforcement jurisdiction over our Territory, and our laws and regulations.

Strategy: Establish a floating information centre in Hakai Pass and distribute information through this venue.

Strategy: Ensure information is available at information centres at the Bella Bella, Port Hardy and Vancouver airports and local fuel stations.

Strategy: Inform marine users of Heiltsuk monitoring and enforcement policies by increasing monitoring and enforcement personnel presence in field.

Strategy: Include requirements in tenure management plans that marine operators must provide information to clients and staff on Heiltsuk culture, and monitoring and enforcement programs and authority.

Strategy: Establish exchange programs for monitoring and enforcement personnel to improve relationship building, as well as training and familiarization between Heiltsuk and non-Heiltsuk agencies.

Strategy: Work with commercial lodges to raise public awareness about monitoring programs and the importance of catch monitoring to inform ongoing management and decision-making.

Objective: Raise awareness and respect within the community for local Heiltsuk monitoring and enforcement programs and personnel.

Strategy: Develop information products and curriculum that raise community awareness about the Heiltsuk monitoring and enforcement program and inform people of Heiltsuk policies and jurisdiction over Heiltsuk Territory.

Strategy: Have food fish committee present Heiltsuk policies and perspectives on monitoring and enforcement policies and programs to community members.

Strategy: Require Heiltsuk Tribal Council to make all food fish policies law.

Objective: Establish a community network of Heiltsuk, which work with the Guardian Watchmen to monitor Heiltsuk Territory.

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

Strategy: Create a communication protocol for reporting observed infractions

Strategy: Ensure the community network is open to all members of the community as well as industry working in our 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 Regional Monitoring Strategy.

Strategy: Ensure resource personnel and Guardian Watchmen collect and enter monitoring data into Guardian Watchmen Network database and provide feedback to Guardian Watchmen Network.

Strategy: Identify additional monitoring and indicator needs and communicate to Guardian Watchmen Network and other collaborative research and monitoring networks. All monitoring and indicator work should follow the principles of scientific rigour

Strategy: Utilize data to inform management of our 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 Heiltsuk marine entities, including Heiltsuk fisheries program, salmon enhancement program, marine planning committee, land use planning committee, Heiltsuk forest products committee, Koeye camp, 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.

10 MARINE RESOURCE MANAGEMENT

10.1 Resource conservation and use

The Heiltsuk 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 recognizes that conventional resource management does not consider broader ecosystem dynamics and is 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 Heiltsuk 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.²⁵ The principles and practice of what western scientists and resource planners now call EBM are integral to the resource management principles outlined below.

10.1.1 Land and coastal tenures

In December 2009, The Heiltsuk 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 Heiltsuk 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 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 Heiltsuk Territory:

Goal: Tenured operations in Heiltsuk Territory are sustainably managed.

Objective: Ensure waste from tenured operations in Heiltsuk 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 Heiltsuk Nation.

Strategy: Require garbage on tenured site 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 costs of pollution.

Objective: Improve Heiltsuk's control over operator's adherence to tenure, licence and permit provisions.

Strategy: Require Heiltsuk 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 Heiltsuk Territory. The Heiltsuk would then sub-lease these tenures to developers, operators, and industry.

10.1.2 Bulk water export

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

10.1.3 Off-shore oil and gas

10.1.3.1 Background

The Heiltsuk Tribal Council has been opposed to offshore petroleum, natural gas exploration and development and tanker traffic since the 1970s.

Our Nation is concerned about the considerable potential for adverse effects on marine and inter-tidal resources. Concerns include: damage to marine organisms from petrochemical residues; seismic testing impacts on fish and marine mammals; and the potential for oil spills, which would affect vast sea and shoreline areas and the marine and

inter-tidal ecosystems critical to Heiltsuk subsistence and commercial activities. The Cascadia Subduction Zone on the western perimeter of Heiltsuk Territory increases the likelihood of such occurrences. Finally, significant employment and manufacturing benefits are not expected to accrue to the Heiltsuk from offshore oil and gas.

10.1.3.2 Management principles

The Heiltsuk Tribal Council position on offshore oil and gas development, and tanker traffic in the Territory is summarized in the following four principles:

- The Heiltsuk Nation has Aboriginal title and jurisdiction in Heiltsuk Territory.
- Reliance upon the marine environment is a fundamental and defining factor of our culture, identity and economy. The potential harm posed by offshore oil and gas exploration or development is real and significant threat to our way of life. We have serious concerns regarding the safety and advisability of engaging in offshore oil and gas exploration and development.
- We do not support oil and gas exploration or development within our Territory.
- We do not support tanker traffic in our Territory

10.1.4 Alternative energy

10.1.4.1 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 areas²⁶. 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 Heiltsuk present and past use, and our spiritual values.

There are also 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 Heiltsuk Territory include: Wind energy, tidal and wave energy, and run-of-the-river hydro. Each of these prospects is briefly described below.

10.1.4.1.1 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. 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 infeasible Advances in policy, technology and project design improve the likelihood that wind power generation will occur within Heiltsuk Territory in the near future.

10.1.4.1.2 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 date²⁸.

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.

The emerging opportunity for the British Columbia maritime economy as a driver for innovation and economic diversification (2006) predicts that development of commercial levels of wave and tidal energy could begin as early as 2010. However, the report also cautions that significant enablers in the areas of capital assistance, regulatory

streamlining, infrastructure development and market development will be needed to realize the potential of the ocean energy sector.

10.1.4.1.3 Run-of-the-river hydro

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. Once a company or group of companies attaches the Bella Coola Valley to the transmission grid, hydro development will likely develop extremely quickly throughout the Central Coast.

10.1.4.2Management principles

Goal: The alternative energy sector is developed and managed in a sustainable manner, which maintains the natural environment for next generations.

Objective: Ensure the siting, construction and operation of hydro sites minimize or avoid negative impacts on wildlife, cultural sites and natural areas.

Strategy: All tenures and water rights will be granted to the Heiltsuk Nation, who will in turn sub-lease them to the developer.

Strategy: Water rights should not infringe on Heiltsuk rights and use of any water or water bodies in our Territory.

Strategy: Require the development of any hyrdo project in Heiltsuk Territory to include an impact benefit agreement between the developer and the Heiltsuk Nation.

Strategy: Impact benefit agreements may include joint venture provisions, where the Heiltsuk Nation feels that such an agreement would be in the best interest of the Nation and the resources in our Territory.

Strategy: Send letters to all existing water rights holders in Heiltsuk Territory, notifying them of the requirement of an impact benefit agreement with the Heiltsuk Nation before any type of development occurs. Notify Province that letters will be sent to licence holders.

Strategy: Establish a fresh water and hydro joint-management board to work with government and other agencies toward the sustainable development and management of hydro resources in Heiltsuk Territory.

Strategy: Conduct a comprehensive inventory that considers environmental, commercial, social and cultural parameters, for all potential Hydro sites in Heiltsuk Territory. Inventory should consider direction from the Heiltsuk Land Use Plan and the Heiltsuk Marine Spatial Plan.

Strategy: Create a water management policy for the effective management of freshwater resources in Heiltsuk Territory.

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

Strategy: Determine biophysical capability of high potential hydro sites.

Strategy: Identify ecological impacts of hydro development and develop strategies for mitigation.

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

Strategy: Develop monitoring, auditing and enforcement policy, which would be supported by the Guardian Watchmen program.

Strategy: Conduct a Heiltsuk social, cultural and environmental assessment, which looks at the impacts of transmission lines that would be required to support alternative energy generation in our Territory.

Strategy: Explore the feasibility of Heiltsuk ownership of any transmission line connecting the Central Coast to the Provincial transmission grid.

Objective: Ensure the siting, construction and operation of wind, tidal and wave energy activities minimize or avoid negative impacts on wildlife, cultural sites and natural areas.

Strategy: Require the development of any alternative energy project in Heiltsuk Territory to include an impact benefit agreement between the developer and the Heiltsuk Nation.

Strategy: Impact benefit agreements may include joint venture provisions, where the Heiltsuk Nation feels that such an agreement would be in the best interest of the Nation and the resources in our Territory.

Strategy: All alternative energy tenures will be granted to the Heiltsuk Nation, who will in turn sub-lease them to the developer.

Strategy: Send letters to all existing tenure holders in Heiltsuk Territory, notifying them of the requirement of an impact benefit agreement with the Heiltsuk Nation before any type of energy development occurs.

Strategy: Conduct a comprehensive inventory of all potential alternative energy sites in Heiltsuk Territory.

Strategy: Create an alternative energy management policy for the effective management of marine energy resources in Heiltsuk Territory.

Strategy: Identify and protect important cultural and harvesting areas from alternative energy development.

Strategy: Identify ecological impacts of alternative energy development and develop strategies for mitigation.

Strategy: Develop monitoring, auditing and enforcement policy, which would be supported by the Guardian Watchmen program.

10.1.5 Shipping and transport

10.1.5.1Background

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 Heiltsuk. Improved regulation and better monitoring and enforcement are needed to ensure these visitors do not harm our marine resources.

10.1.5.2Management principles

Goal: The efficient and safe transport of marine vessels in Heiltsuk waters that does not impact our natural resources:

Objective: Minimize and mitigate the impact of marine transportation on natural resources in Heiltsuk Territory through the continued moratorium on petroleum tankers, better regulation for use and disposal of harmful substances and bilge water, and decreased speeds around sensitive sites.

Strategy: Continue to support the moratorium on oil, condesate and gas tankers on BC's coast.

Strategy: Prohibit deep sea port development in Heiltsuk Territory
Strategy: Require transcontinental container ships (7000 TEC or larger) to
travel 100nm offshore, when travelling through Heiltsuk Territory.
Strategy: Ensure all ships travelling in Heiltsuk Territory (Canadian and
foreign vessels) to abide by Transport Canada's safety regulations and
inspection requirements.

Strategy: Require either continuous ballast water exchange system on all ships or ballast water discharge 100nm from the 20 meter depth contour.

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

Strategy: Improve the monitoring and enforcement of the release of bilge water contaminated with oil.

Strategy: Require all commercial vessels that include sleeping accommodation for 30 or more people to treat all sewage using Advanced Wastewater Treatment technology before release.

Strategy: Require all commercial vessels that include sleeping accommodation for 30 or more people to 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: Require company/individual responsible for a hydrocarbon spill to compensate Heiltsuk Nation, if spills occur in, or impact, Heiltsuk Territory. Compensation should cover the cost of clean-up, any loss of food access, and additional management requirements.

Strategy: Establish oil disposal facilities in Heiltsuk Territory.

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

Strategy: Enforce the international ban on the use of tri-butyl tin paints.

Strategy: Classify Bella Bella as a harbour from Napier Point to Dryad Point, requiring all vessels to reduce speed to 8 knots when travelling Lama Passage. Speed limits should be broadcast regularly on marine weather station.

Strategy: Require tugboats to shorten tows when coming through narrow channels.

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

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 Heiltsuk waters at their expense. Clean up should be to the satisfaction of the Heiltsuk Nation.

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

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

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

Strategy: Register community with BC Ministry of Environment for oil spill clean-up.

Strategy: Empower the existing Heiltsuk emergency response team to assist with the containment and clean-up all oils spills.

Strategy: Coordinate Heiltsuk oil spill response efforts with other oil spill response teams (shearwater, coast guard).

Strategy: Through the expansion and use of the TUS database, identify areas of top priority for protection in the case of a spill. The strategy should provide readily available information for creating oil spill response plans.

10.1.6 **Salmon**

10.1.6.1 Background

The relationship between salmon and the Heiltsuk 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 over 6000 years ago allowed our people to harvest vast amounts of fish with little effort. Our ability to harvest and preserve salmon efficiently led to wealth, status and an elaborate economic system based on balanced reciprocity. The result was the creation of a complex and advanced civilization over 6000 years ago – around the same time the pyramids were being constructed in Egypt. 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 fishery was not one of open access: there existed entitlements, prohibitions, and sanctions, which regulated where harvesting occurred, how and when salmon were harvested, and by whom have been based on the control of the provided of the control of the provided for everyone while the resource remained abundant. The fishery was not one of open access: there existed entitlements, prohibitions, and sanctions, which regulated where harvesting occurred, how and when salmon were harvested, and by whom

However, 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 11,000 years were pushed out of the commercial fishery. Under pressure from the canneries, the Dominion of Canada outlawed First Nations' fishing technology, created a false division between First Nations' food and commercial catch to limit First Nations' catch, required First Nations to apply for a permit to commercial fish and to receive permission to catch fish for food.

Initially the salmon industry was open to any citizen of Canada. Licences were not limited in number or tonnage. However, by the 1960's the Canadian government began to recognize that certain runs were becoming strained. This led to the Davis plan.

The Davis Plan (1969-1973) limited the number of licences available. Any vessel that had caught more than 10,000 pounds of salmon in 1967 or 1968 was granted a licence. The scheme set in motion licence pyramiding that consolidated many small vessel licences into the large modern seine fleet.

These policies disproportionately impacted First Nation fishermen, who tended to fish close to home on smaller boats, fish multiple species on a seasonal basis, and use some of their catch for sustenance purposes. As a result, many individuals didn't qualify for licences, and many of those that did could not meet new vessel standards³².

Over time improved technological efficiencies led to further pressure on the fishery and a derby-style race for the fish. In 1996, the federal government tried to further decrease the fishing power of the salmon fleet through the Mifflin Plan.

The Mifflin Plan, also known as the Pacific Fisheries Restructuring Program (1996-2000), removed more than half of the vessels from the salmon fishery through a voluntary buy-back program. The Mifflin plan also introduced salmon areas, gear licensing, and licence stacking.

Given the status of salmon stocks and the inability of small boats to compete with the large efficient boats fishing multiple licences, First Nations were left with little choice but to sell their licences. The end result of licence stacking was competitive exclusion of small boat fleet that existed in Bella Bella. Licence stacking reduced the number of boats and people fishing, while concentrating licences in the hands of corporations and the wealthy.

Salmon was not only important economically, it has also always been the mainstay of our traditional diet. A 1986 archaeological study found that 100% of the protein from 14 human remains unearthed at Namu was of marine origin³³. Today, nutritionists and scientists recognize salmon as a super food: high in omega 3 fatty acids, protein, vitamin D, selenium, and B vitamins, while low in saturated fat and calories. For millennia, we have understood the importance of salmon to our health. However, a lack of access to salmon has compromised our health and well-being.

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.

Perhaps more critical, the decline of salmon populations and a lack of FSC and commercial access for our people has contributed to a community in crisis. The health of

salmon and of the Heiltsuk Nation cannot be separated. The decline of the salmon fishery has led to wide unemployment, a loss of components of our culture, and a decline in independence and self-worth.

We believe we need to return management of the salmon fishery to the Heiltsuk 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 Heiltsuk people, salmon management is also touched on in the sport fishery and FSC sections of the marine plan.

10.1.6.2Management principles

Goal: Salmon stocks and habitat 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 Heiltsuk salmon stocks.

Strategy: Work closely with First Nation representation on the Pacific Salmon Commission to ensure Heiltsuk concerns are acted upon.

Strategy: Work to include more Central Coast salmon species than only 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 place-based science and precise and timely monitoring.

Strategy: Obtain funding to support the ecological baseline work being conducted from Koeye.

Strategy: Create a DFO-Heiltsuk working group that meets regularly during the in-season to make decisions about commercial and recreational fishery openings and closures Strategy: Heiltsuk (with DFO support) conduct more accurate and precise monitoring to estimate out migrating salmon fry.

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

Strategy: Increase the number an frequency of stream walks occurring in Heiltsuk Territory.

Strategy: Heiltsuk (with DFO support) measure local stocks throughout the season to determine individual stock estimates.

Objective: Reduce commercial fishing effort to reflect a sustainable harvest of the resource.

Strategy: Reduce the number of non-First Nations commercial fishing licences by 50%. Re-evaluate after 4 years to determine whether the changes result in an economically sustainable fishery

Strategy: Create an owner operator system for commercial fishing licenses.

Strategy: Avoid interception by moving salmon fishing areas back into inlets and targeting specific runs at sustainable levels. This must occur simultaneously along the entire coast.

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

Objective: Reduce marine based recreational fishing pressure to sustainable levels based upon the results of a carrying capacity study.

Strategy: Put a cap on the number of lodges and limit the number of rod days available to each lodge until carrying capacity of Heiltsuk Territory is determined.

Strategy: Determine the carrying capacity of Heiltsuk Territory to support a sustainable recreational fishery.

Strategy: Based on carrying capacity, establish management strategies to limit the impact of sport fishing in Heiltsuk Territory.

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

Strategy: Include day-based closures on a weekly basis for the commercial recreational fishery to allow salmon stocks to pass.

Strategy: Establish weekly closures for all major sockeye systems in Heiltsuk Territory.

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

Strategy: Enforce restrictions requiring the use of barbless hooks.

Strategy: Prohibit sport fishing at the mouths of rivers in Heiltsuk Territory.

Strategy: Eliminate catch and release for all species of salmon, including stealhead. 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 Heiltsuk Territory is not exceeded.

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

Objective: Reduce fresh water based recreational fishing pressure to sustainable levels based upon the results of carrying capacity study.

Strategy: Eliminate catch and release for all species of salmon, including steelhead. 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: Determine the number of rod days each system is capable of supporting.

Strategy: Set total allowable catches for each river system.

Strategy: Limit the number or rod days allowed for each river system.

Strategy: Rod days would be owned by the Heiltsuk Nation and leased to sport lodges and angling guides.

Strategy: Require a Heiltsuk guide to be present to educate recreational anglers and protect against habitat destruction.

Strategy: Establish weekly closures for all major sockeye systems in Heiltsuk Territory.

Objective: Establish remote hatchery operations to increase the production of Sockeye, Chinook, and Coho salmon by XX%.

Strategy: Double the capacity of the hatchery at McLoughlin Bay.

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

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

Strategy: Where possible, through the use of satellite hatchery boxes, rehabilitate salmon stocks in systems where run health is a concern . (e.g. Kwatna both systems, Kimsquit, Elcho, Cascade, Port John, Neekis, Spiller, Roscoe, Dean, Hoyet, Namu, Gull chucks, MacGee, Ship point, Cape Swain, Gale creek, Tunu and Tlxstu river systems,)

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

Objective: Restore critical salmon spawning habitats.

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

Strategy: Significantly increase the budget for habitat rehabilitation.

Strategy: Identify which systems require rehabilitation most immediately.

Strategy: Restore greatest priority streams by 2015.

Strategy: Continue habitat restoration in lower-priority streams.

Strategy: Identify streams that require Chinook, Coho and sockeye spawning channels and construct.

Strategy: Monitor the effectiveness of restoration efforts and where necessary modify approaches to habitat enhancement and restoration.

Objective: Apply the "Doctrine of Priority" through the establishment of Heiltsuk exclusive use areas.

Strategy: Through public consultation and information gathered through traditional use and traditional ecological knowledge studies identify all important Heiltsuk salmon fishing areas.

Strategy: Calculate community nutritional requirements to ensure identified areas are adequately large to ensure conservation measures and Heiltsuk salmon FSC interests are met.

Strategy: Implement Heiltsuk exclusive use areas by integrating special management measures into existing federal and provincial management plans.

Strategy: Monitor the effectiveness of Heiltsuk exclusive use areas at enhancing salmon resources and providing increased opportunities and access for Heiltsuk fishermen.

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

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: 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 affecting salmon bearing streams and associated estuaries and clam beds.

Strategy: Require forest companies which do not follow forestry practices and negatively impact salmon bearing streams to compensate Heiltsuk Nation for damages.

Objective: Eliminate negative impacts from the shearwater shipyard on the food fishery.

Strategy: Quantify the effects on the fishery from the mill and shipyard in Shearwater.

Strategy: Investigate and if required limit negative watershed affects on salmon streams.

Strategy: Identify contaminated sites and clean up.

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

Strategy: Identify critical or sensitive salmon runs that may require 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.

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

Objective: Reduce local trout populations that are impacting salmon stocks.

Strategy: Identify critical or sensitive salmon runs that may require special protection measures.

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

Strategy: Develop commercial and recreational trout fisheries that could reduce the impact of trout on salmon survival.

Strategy: Encourage community consumption of trout.

10.1.7 Commercial fishing

10.1.7.1 Background

The commercial fishing industry has defined the coast since the 1870s³⁴. While the number of species that are harvested has expanded significantly (table 10.1) 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 groundfish³⁵. In Heiltsuk Territory alone, the projected 2007 landed commercial catch value was estimated at \$14.3 million³⁶.

Commercial fishing is still an important employer in PNCIMA: 16% of commercial fishing employment in the province occurred on the North Coast³⁷ in 2002³⁸. Of the total employment in the region, 7.7% was in the fishing and fish processing sectors³⁹. However, many commercial species are in decline⁴⁰ and through buy-back programs and consolidation⁴¹ of licences commercial fishing is playing a smaller role in local PNCIMA community economies⁴². In fact, there has been a 17% decline in industry employment since 1996⁴³.

The Heiltsuk 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 Heiltsuk believe they should play in the fishery.

Table 10.1: Marine species commercially harvested within Heiltsuk Territory.

Salmon
Halibut
Rockfish/Ground fish
Intertidal Bivalve
Geoduck
Red Sea Urchin/Green Sea Urchin
Sea Cucumber
Crabs
Prawn/Shrimp
Herring/ROK

10.1.7.2 Management principles

Joint management agreements with the DFO will be negotiated to ensure that the Heiltsuk 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 Heiltsuk will undertake studies to determine the effectiveness of current and proposed management regimes at sustaining populations of commercially important species and improving Heiltsuk people's well-being. 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.

10.1.7.2.1 Halibut

Goal: The halibut fishery is managed sustainably, recognizing the Heiltsuk Nation's priority access to halibut for food, social and ceremonial purposes.

Objective: Secure immediate and long-term FSC access through improved monitoring, licence reform, reduced TAC and the establishment of Heiltsuk Exclusive Use Areas.

Strategy: Conduct local studies to determine stock status and characteristics in Heiltsuk Territory.

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

Strategy: Implement mandatory dockside monitoring, to decrease the amount of halibut being sold on the black market.

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 Heiltsuk will have right of first refusal for licences confiscated in our territory

Strategy: Protect important halibut areas close to Bella Bella from the commercial and recreational fisheries through the establishment of Heiltsuk Exclusive Use Areas.

Strategy: Streamline dual licence program through decreased complexity and increased flexibility, which allows Heiltsuk commercial halibut fishermen to catch halibut and non-target species for FSC purposes 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: Impose fines on overages for the commercial fishery. All fines should go to Heiltsuk Nations to support management.

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

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 Heiltsuk to support our Guardian Watchmen programs and other resource stewardship initiatives.

Strategy: Require halibut fishermen to employ Heiltsuk 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.

10.1.7.2.2 Ground fish

Goal: Ecosystems and FSC resources are protected from the destructive practices of the ground fishery in Heiltsuk 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 sustainable management of ground fish resources.

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 Heiltsuk 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: Require ground fish fishermen to employ Heiltsuk 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: 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 Heiltsuk will have right of first refusal for licences confiscated in our territory.

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

Strategy: Change rockfish conservation areas to Heiltsuk 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 Heiltsuk's present and future needs as well as resource conservation.

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: Streamline dual licence program through decreased complexity and increased flexibility, which allows Heiltsuk commercial ground fish fishermen to catch ground fish and non-target species for FSC purposes 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 Heiltsuk Territory unless studies indicate an environmentally sustainable fishery is possible.

Strategy: Support and monitor the mid-water trawl hake fishery. If bycatch becomes an issue close the fishery in Heiltsuk Territory.

Strategy: Conduct a workshop with long line fishermen to identify and protect important coral beds.

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

10.1.7.2.3 Intertidal bivalve (Clam)

Goal: Sustainable intertidal bivalve fisheries that contribute to the local economy and provide ready access for FSC purposes.

Objective: Manage intertidal bivalve resources to allow for the Heiltsuk commercial and FSC fisheries to co-exist in Heiltsuk Territory.

Strategy: Inventory all of the beaches in Heiltsuk Territory and increase monitoring of all beaches. As a starting point, DFO and Heiltsuk traditional use data should be validated and summarized. This will require increased monitoring capacity.

Strategy: Enhance commercial beaches to improve production.

Strategy: Make the cultured cockles fishery rotational, limiting the number of beaches that are open at any one time.

Strategy: Eliminate the wild cockle commercial fishery. Cockles should be reserved for the FSC fishery.

Strategy: Ensure all beaches incur some level of harvest to encourage population growth.

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

Strategy: Hold quota on all intertidal bivalve fisheries (except wild cockles) at current levels until a proper assessment of populations can be conducted.

Strategy: Ensure all intertidal bivalve commercial fishing licenses in Heiltsuk Territory are held by the Nation.

Strategy: Prohibit benthic dredging for bivalves in Heiltsuk 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.

10.1.7.2.4 Geoduck

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

Objective: Eliminate poaching and the 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 our Territory.

Strategy: Improve communication with DFO, harvesters, and Heiltsuk, about when and where harvesters are in Heiltsuk 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 Heiltsuk fisheries/ 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 Heiltsuk monitors during geoduck fishery openings in Heiltsuk Territory.

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

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 Heiltsuk will have right of first refusal for licences confiscated in our territory.

Objective: Increase Heiltsuk participation in 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 current 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 Heiltsuk Nation.

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

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 Heiltsuk 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: Streamline dual licence program through decreased complexity and increased flexibility, which allows Heiltsuk commercial geoduck fishermen to catch geoduck for FSC purposes

10.1.7.2.5 Red and green sea urchin

Goal: A sustainable urchin fishery that contributes to the local economy and provides suitable access for FSC purposes.

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

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 Heiltsuk will have right of first refusal for licences confiscated in our territory.

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

Strategy: Require all dive fisheries to implement the same monitoring regulations including Heiltsuk on-grounds monitors and improved dockside monitoring.

Objective: Increase the appreciation of the importance of urchins in kelp bed ecosystems.

Strategy: Improve education, both within community and for general public, about the important relationship between kelp, sea otters, and urchins.

Objective: Manage urchin resources in a manner that creates Heiltsuk 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 Heiltsuk 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 urchin fishermen to catch urchin for FSC purposes.

10.1.7.2.6 Sea cucumber

Goal: A sustainable sea cucumber fishery that contributes to the local economy and provides suitable access for FSC purposes.

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

Strategy: Confiscate licences of sea cucumber divers caught poaching and give to the Central Coast Commercial Fisheries Authority, which will distribute them among Central Coast First Nations. The Heiltsuk will have right of first refusal for licences confiscated in our territory

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

Strategy: Require all dive fisheries to implement the same monitoring regulations including Heiltsuk on-grounds monitors and improved dockside monitoring.

Objective: Manage sea cucumber resources in a manner that creates Heiltsuk employment and secure access to FSC resources.

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

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 Heiltsuk Territory at a 4.2% exploitation rate. An additional 25% of harvestable areas in Heiltsuk Territory should be exploited based on scientific survey and a joint agreement between the Heiltsuk and DFO. 50% of the harvestable area in Heiltsuk Territory will be closed permanently to the harvest of sea cucumbers.

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

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 Heiltsuk 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 sea cucumber fishermen to catch sea cucumber for FSC purposes

10.1.7.2.7 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 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 Heiltsuk 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 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 Heiltsuk 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.

10.1.7.2.8 Prawns

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

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

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

Strategy: Increase locally based in season monitoring, allowing more precise and local opening and closures.

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

Strategy: Maintain prawn size of 30mm and large mesh size.

Strategy: Maintain current non-quota licence-based fishery.

Strategy: Decrease number of allowable extra traps for stacked licences from 200 to 100.

Strategy: Identify and designate important Heiltsuk exclusive use areas for prawns (e.g. Spiller, Roscoe, Troup, Johnson).

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

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 Heiltsuk will have right of first refusal for licences confiscated in our territory

Objective: Ensure the prawn fishery benefits local residents.

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

Strategy: Require prawn fishermen to employ Heiltsuk 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.

10.1.7.2.9 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.

Strategy: Place a moratorium on the shrimp trawl fishery in all of Heiltsuk

Territory.

Strategy: Monitor the impacts of these closure on eulachon populations

10.1.8 Herring

10.1.8.1 Background

The Heiltsuk have been harvesting spawn on kelp (SOK) for FSC and commercial trade since time immemorial. Harvest of SOK involved all members of the community and was one of the Heiltsuk's chief economic resources. Despite this, DFO did not grant the Heiltsuk a single commercial SOK licence when they began regulating the fishery in 1975. Still, some Heiltsuk members continued to harvest and sell SOK.

In 1988, Donald and William Gladstone were charged with selling SOK not caught under a commercial fishery. The charges led to a Supreme Court of Canada decision (*R. v.*

Gladstone - 1996) confirming that the people of the Heiltsuk Nation have a constitutionally protected aboriginal right to harvest and sell SOK on a commercial basis. The court determined that the Heiltsuk SOK commercial right is second only to conservation, and takes priority over all other user groups including the non-Heiltsuk commercial fishery.

Since this decision the Heiltsuk Nation and DFO have been attempting to come to a equitable conclusion through the *Gladstone Reconciliation* Process. The process has proved frustrating for the Heiltsuk people. Fourteen years has resulted in only a few licences being transferred to the Heiltsuk. Today, the Heiltsuk only hold 9 SOK licences, out of the 44 allocated to the Central Coast. This is a mere 5% of the TAC for the region.

During discussions with DFO over the last decade, the Heiltsuk have warned about the unsustainable impact of the commercial sac-roe fishery on herring populations, and the negative social and cultural impacts on Heiltsuk society as a result of high unemployment. Despite this, DFO continued to allocate nearly 90% of herring TAC on the Central Coast to the commercial sac-roe fishery.

Unfortunately, our concerns have fallen on deaf ears in DFO and while unemployment continues to be a significant issue in our community, declining stock numbers have resulted in the closure of the FSC and commercial SOK fishery in our Territory. This outcome was wholly avoidable if only DFO had listened to our concerns.

We maintain that DFO must ensure:

- The Heiltsuk achieve their food and ceremonial requirements
- The Heiltsuk realize greater access to commercial SOK for both foreign and domestic markets
- The cut-off for the sac-roe fishery be increased to 37, 600 tons for areas 7, 8 and 9 to protect the Heiltsuk Nation's rights in the SOK commercial, food, social and ceremonial fisheries.

The Heiltsuk Nation continue to support the work of our Gladstone Reconciliation team and maintain that as traditional managers of the resources in our Territory we are better able to sustainably manage our resources. DFO should work with us under a joint-management agreement to manage Central Coast herring stocks.

10.1.8.2 Management Principles

Goal: Sustainable herring fishery that contributes to the local economy and provides suitable access for FSC purposes.

Objective: Manage herring in Heiltsuk Territory separately to ensure a more sustainable harvesting level, which supports economic and FSC needs.

Strategy: Support negotiations under the Gladstone Reconciliation process.

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

Strategy: Improve stock assessments in Heiltsuk Territory by better involving the Heiltsuk Nation, 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 17,600lbs to 37,600lbs. Maintain 17,600lbs cutoff for SOK fishery.

Strategy: Reduce the exploitation rate for Central Coast herring to 10%

Strategy Increase access to herring for FSC purposes. The current 3-5% does not adequately consider potlatches, trading and bartering, other ceremonial events, and a growing Heiltsuk populations. Access should be evaluated every 5-years to ensure FSC needs are being met.

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 Heiltsuk 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 herring fishermen to catch herring for FSC purpose

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

10.1.9 Eulachon

10.1.9.1Background

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". 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 Heiltsuk 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"⁴⁵.

Eulachon was an important component of the Heiltsuk 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 by-catch 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 curtailed⁴⁶.

Although the BC shrimp trawl industry has claimed to have reduced eulachon by-catch by 80% over the period from 2000-2001⁴⁷, the issue of collateral damage has not been addressed. Collateral damage is the damage and mortality of escaping and discarded organisms caused by towed gear⁴⁸. 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 season⁴⁹. Yet eulachon fail to return in fishable numbers to the Bella Coola and Wannock River. 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 variability⁵⁰. 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 species⁵¹. 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 Heiltsuk 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.

10.1.9.2 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 limit all *possible* impacts on eulachon numbers.

Strategy: Ban logging near eulachon rivers during spawning season.

Strategy: Place a moratorium on benthic trawl fisheries.

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 and Wuikinuxv to establish a eulachon transplant and hatchery program.

10.1.10 Aquaculture

10.1.10.1 Background

The Heiltsuk have practiced forms of aquaculture for thousands of years, including shellfish enhancements that were owned and managed by families and salmon habitat management and enhancement practices that were the property of extended family groups. These traditional practices were central features in Heiltsuk culture long before the coming of Europeans to this coast.

Heiltsuk traditional management involved sites controlled and managed by extended family groupings, including shellfish harvesting areas and salmon streams. Stocks would be managed to ensure the long-term survival and abundance over time. As we are told through our oral traditions, salmon eggs from some areas were moved into streams where

they had not occurred previously. The stocks from these systems would be harvested in the system by the family who had the rights there, and used for sustenance and other purposes such as trade.

Clam beaches were similarly used by families with the rights to an area, and it is becoming clear that some areas were built up through rock wall constructions which resulted in additional shellfish habitat.

These two examples are what could only be considered a form of incipient aquaculture. Therefore, the Heiltsuk are not new to the ideas of aquaculture.

With the Heiltsuk population decline and the following European, Colonial and later Canadian interference in Heiltsuk governance and rights, such practices became fragmented and fell out of use.

Throughout the 20th century, Canadian businesses were established that took advantage of the millennia of responsible Heiltsuk management to preserve their resources, especially salmon. Non-First Nations saw no need to actively manage streams, or to be concerned with conservation, as the resource was viewed as inexhaustible. However, after successive years of over harvesting and lack of sound management these resources have proven finite and for many species are in danger of becoming commercially extinct.

As fisheries resources on the coast began to decline, government and industry began to enter into shellfish and salmon aquaculture. In government and industry aquaculture is viewed as a new industry, but to the Heiltsuk it is seen both as a return to the traditional ways, and as a partial admission of failure on the part of those who have been mismanaging the fisheries and habitat they rely on for the past century and a half.

As finfish aquaculture was developed operators began having problems with pollution, disease, parasites and escapement. The Heiltsuk, learning of these problems and concerned about the state of wild stocks began what has become a longstanding opposition to salmon aquaculture and current management practices. This feeling is widely held among community members, especially fishermen, elders and cultural leaders. In addition, some traditional Heiltsuk do not see caging salmon as an appropriate way to treat a resource that holds spiritual connotations. During the Heiltsuk land use planning processes, community surveys and numerous public meetings were conducted. During these processes the opposition to salmon farming was nearly universal. Such a resounding opinion is a clear message that salmon aquaculture should not be allowed in Heiltsuk Territory as it is currently practiced. Further, concern was raised that even if aquaculture is practiced elsewhere on BC's coast it may still impact Heiltsuk rights.

When questioned about shellfish aquaculture, however, the Heiltsuk community was very receptive to aquaculture development given that it would:

• Be controlled by the Heiltsuk;

- Not harm the widespread subsistence harvest;
- Not harm the communal wild clam harvest.

The Heiltsuk Tribal Council not only supports the establishment of this type of development but has done some investigation to assist in the development of communal business operations.

The Heiltsuk people are concerned about the following issues with respect to finfish aquaculture as it is currently practiced:

- Alienation of the physical area required for the farms infringe on Aboriginal title and ownership to the lands, waters, subtidal and benthic environments that the farms occupy.
- Lack of Heiltsuk management authority in whether and how these operations are sited, managed and operated. The traditional Heiltsuk governance has been given virtually no respect in the establishment and operations of these facilities.
- The negative impacts from fish farm pollution. Under the open net cage system, pollution in the form of fecal matter and waste food enters the marine environment and causes problems for other marine resources.
- The harm caused to wild salmon stocks by salmon aquaculture through escapes, pollution, disease, and the unnatural levels of parasites that these farms cause. The wild salmon resources are of extreme importance to the Heiltsuk for social, cultural, spiritual, ceremonial, and economic reasons, and form a significant part of the Heiltsuk cultural ways. Endangering these resources is simply not acceptable, especially given the fact that this seems to be a replacement for these same wild stocks.
- The negative impacts of chemicals used in combating parasites, disease, and fungal agents. Some pesticides are known to harm crustaceans resources such as crabs, prawns and shrimp. The Heiltsuk are also concerned that there may be other harmful aspects to these developments that may be occurring that are not known.

The governments, both provincial and federal, have been promoting the salmon aquaculture industry often vociferously and in the face of strenuous opposition. In light of this situation, communications have not been cordial or open, and the Heiltsuk are concerned that there is a lack of impartiality and respect for the duties to protect other values by these agencies.

The Heiltsuk have strenuously opposed the imposition of salmon farming in Heiltsuk Territory for years, even waging court battles, protests and public information campaigns. The situation abated somewhat as the economics of salmon farming took a slight downturn but the issue is far from resolved.

Many Heiltsuk feel that a return to appropriate protection of habitat, responsible management and habitat and stock enhancement could restore much of what has been lost in the past century of mismanagement. This strategy has been pursued by the Heiltsuk, often with little response from government. The Heiltsuk have worked for years to restore habitat and have two small salmon hatcheries, which were established with strong community support.

The Heiltsuk would like to see the shellfish aquaculture industry established in a way that will respect Heiltsuk management and harvest for subsistence and wild stock commercial harvest. Development should occur in a thoughtful and appropriate manner in areas that recognize biological constraints and Heiltsuk social and cultural values.

10.1.10.2 Management principles

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

Objective: Reduce the negative impacts of aquaculture to the local marine environment through increased monitoring and enforcement

Strategy: Prohibit open net-pen aquaculture in Heiltsuk Territory.

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 Heiltsuk values and interests are represented.

Strategy: Require finfish aquaculture sites to contain and properly dispose of any waste resulting from power washing and cleaning.

Objective: Continue to support economic growth of sustainable aquaculture in Heiltsuk Territory.

Strategy: Identify areas with high potential for aquaculture and set aside for future expansion of aquaculture in Heiltsuk Territory.

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

Strategy: Challenge geoduck association's position on geoduck aquaculture and explore as a possible aquaculture species for Heiltsuk

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 to improve 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 on-going monitoring strategies.

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

Strategy: Create standardized environmental assessments and procedures for Heiltsuk Territory.

Strategy: Require accurate and timely record taking and public release of escapement numbers regardless of size. Information should automatically be sent to the Nation and designated person or representative.

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

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.

10.1.11 Recreation and tourism

10.1.11.1 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 Heiltsuk Territory; however, wildlife viewing, travelling by cruise ship⁵², 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.

With the exception of sport fishing, the area lacks the brand recognition required to ensure long-term tourism growth into the future. However, many reports have indicated that there is great potential for growth in this industry⁵³. Gislason (2007) estimates that tourism/recreation contributed \$1.8 million to BC's economy in 2005 and employed 32,200 people on a person-year basis. Of this 10% of all marine based tourism/recreation employment occurred on the North Coast. Vance (2004) reports similar numbers, estimating that tourism reliant employment represents 7% of the total employment in the PNCIMA.

In the past, the Heiltsuk Nation and peoples have shied away from supporting tourism activity in Heiltsuk Territory because of the threats, both real and perceived, that tourism poses to Heiltsuk culture and the Territory's natural resources. Now, the Heiltsuk Nation and peoples are open to capturing the range of economic, social and environmental benefits that can be realized through strategic and planned participation in this sector. The Nation perceives the tourism and recreation sector as an opportunity for diversifying the Heiltsuk economy while also sustaining the natural resource base. In particular, the Heiltsuk Nation feels that the ecotourism⁵⁴ model has a synergy with *Gvi'ilas* and EBM.

Bella Bella is the largest community on the Central Coast. It is a major stop for BC ferry routes and has a regional airport. The village has a public dock, fuel station, post office, liquor store, grocery store, cultural education centre, telecommunications infrastructure, regional hospital, as well as a number of B&B's, restaurants and small shops. Currently, however, tourism companies and visitors to the region are spending very little time or money in Bella Bella. The Heiltsuk Nation and peoples seek to become major players in this sector of the Central Coast economy. To this end, the Heiltsuk Nation has included tourism and recreation into their 15-year economic development plan.

While the Central Coast remains one of the only undeveloped tourism and recreation areas on the coast of BC, the Heiltsuk Nation feels that Heiltsuk Territory is ideally suited to tourism and recreation. A range of tourism feasibility studies conducted in the area support this belief.

The Heiltsuk Territory is a spectacular tourism destination with rugged outer coast waters and beaches, inland waterways, as well as grand fiords and inland lakes. This terrain supports a range of activities from fishing to kayaking, coastal cruising, surfing and hiking. There are wildlife viewing opportunities for whales, grizzly bears, black and spirit bears, wolves, salmon, otters, seals, sea lions, marine birds, eagles and many more species. The Heiltsuk culture and history also provide a rich resource for Heiltsuk tourism development.

The provincial tourism capability model⁵⁵ shows high capability for tourism in considerable areas of Heiltsuk Territory including and around Bella Bella, Namu, Hakai Pass, Kwakshua (Hecate Island), Fish Egg Inlet, Koeye River, and Walbran and Rippon Islands at the entrance to Rivers Inlet. There are many other spectacular areas with high tourism potential such as natural hot springs and grizzly areas. The mid-coast opportunities study⁵⁶ shows high and moderate suitability in extensive areas of the Territory for ocean kayaking, nature observation, marine cruising, destination lodges, hut-to-hut systems, outdoor adventure activities and air-based tours. Finally, a Coast Information Team (CIT) report⁵⁷ ranked the Bella region second highest in the PNCIMA for tourism potential based on the following attributes: features, activities, irreplaceability, lodge development suitability, and activity development suitability. The CIT report cited the following potential ocean-based tourism products: saltwater fishing, ocean canoeing and kayaking, wildlife viewing, and diving.

The obvious benefits of tourism in the region must be balanced with the associated negative impacts. For example, the increase in marine and kayak touring and associated moorage and camping has resulted in conflicts in areas used by the Heiltsuk as food gathering camps, clam harvesting areas and seaweed grounds. Sound management and planning can minimize these negative impacts. The objectives and strategies listed below provide management guidelines for realizing a vibrant and sustainable tourism industry in Heiltsuk Territory.

10.1.11.2 Management principles

Goal: Adverse impacts of tourism in Heiltsuk Territory have been avoided or mitigated.

Objective: Ensure the Heiltsuk have greater control over the tenuring process and the management of tourism in our Territory.

Strategy: Ensure tourism tenures in our Territory include provisions for joint ventures and/or revenue sharing with our Nations.

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

Strategy: Include Heiltsuk tourism knowledge holders in any other industry planning initiatives that may impact tourism.

Strategy: Ensure protocol agreements and relevant tenuring processes work harmoniously to manage resources in Heiltsuk Territory. Require provincial tenuring process to meet the needs of the Nation's tourism protocol agreements.

Strategy: Work with BC Parks to ensure marine interests are included in the development of conservancy management plans.

Objective: Reduce or mitigate the negative impacts of tourism and recreation activities on wildlife and natural areas by actively managing recreation use in Heiltsuk Territory.

Strategy: Create a Strategic Tourism Plan that outlines management guidelines for tourism in our Territory, and an economic plan for Heiltsuk 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 relevant industry associations, conservation organizations, researchers, and community members to develop appropriate wildlife policies.

Strategy: Limit visitation 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 (e.g. Grave Island).

Strategy: Require a well-informed Heiltsuk 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 Heiltsuk planning.

Strategy: Stop commercial guided hunting until adequate baseline studies and a Heiltsuk management plan have been completed and wildlife viewing areas have been designated.

Strategy: Prohibit resident sport hunting of predatory species (e.g. bears and wolves).

Strategy: Create designated dump sites (e.g. burn barrels) at cabins in territory, which can be covered. Guardian Watchmen should maintain garbage sites.

Strategy: Create communication materials that Guardian Watchmen can hand-out to visitors to Heiltsuk Territory.

Objective: Ensure tourism and recreation activities do not infringe on Heiltsuk rights or interfere with Heiltsuk cultural and traditional use in the Territory.

Strategy: Establish protocols and policies to guide Heiltsuk cultural tourism (i.e. sharing cultural information cultural sites, village-based tours etc.) Work with Elders, Chiefs, and Heiltsuk membership, to develop appropriate management guidelines.

Strategy: Protect or limit use of some areas for tourism activity (i.e. burial sites, sacred sites, cultural sites, village sites, family camps, traditional food harvesting areas, medicinal harvesting areas, shellfish areas, seaweed camps, commercial harvesting areas, isolation areas, etc.) Seasonal regulations may be appropriate.

Strategy: Create a system of designated kayak and boat access campsites away from middens, clam harvesting areas, village sites etc.

Strategy: Equip designated campsites / huts with basic infrastructure to minimize impacts (i.e. toilets, foot trails, huts, food hangs, etc.)

Strategy: Educate operators/visitors/associations about designated tourism and recreation areas.

Strategy: Educate operators/visitors/associations about appropriate protocols and behaviour when visiting Heiltsuk Territory.

10.1.12 Commercial recreational fishery

10.1.12.1 Background

The recreational fishery plays an important role in the social and economic life of many British Columbians. In the past twenty years, sport fishing has become a hundred million dollar industry. However, sport fishing also has negative environmental, social and cultural impacts. These include:

Impact on cultural resources and areas: Despite First Nations' constitutional right to marine resources for FSC purposes, recreational and commercial fisheries often get access to fishing resources before the Heiltsuk. This is especially true for salmon. As a

result, Heiltsuk access to resources for FSC purposes are often negatively impacted. In addition, sport fisherman are usually not aware of Heiltsuk resource management regulations and important cultural areas, which can lead to misuse.

Few local benefits: While the Heiltsuk experience the negative impacts of the sport fishery they see little to no benefits for their community. Few employment, revenue sharing, or joint-management opportunities exist. The Heiltsuk maintain that as stewards of their Territory they should benefit from the resources and economic development initiatives in the area.

Pressure on small salmon runs: Many of the most productive tidal water chinook and coho fisheries are mixed stock fisheries. As the recreational fishing sector grows there is serious potential to impact smaller weaker runs while targeting more productive runs. The New Direction Policy document (1999) indicates that after Section 35 fisheries the recreational fishery has priority access over commercial fishery for Chinook and Coho salmon. However, the policy does not attempt to define any trigger points at which the fishery will be closed, particularly for specific areas or stocks. This becomes particularly complex for fisheries that target mixed stocks.

Concentrated impacts: The commercial recreational fishing sector typically concentrates its efforts in select and often very localized regions of the BC coast and river systems. The concentrations of fishing lodges can result in localized over fishing - particularly for less mobile species such as rockfish and shellfish.

Overfishing: There are no regulations limiting the total catch by commercial sport fish operators or the number or size of commercial lodges. The increased capacity of the commercial sport fishery requires a cap on the total amount of catch allowed each year.

Catch and release mortality: Catch and release has been touted as a conservation tool. However, mortality rates associated with catch and release are approximately 10 - 30% for salmonids^{58,59}. This may by a useful conservation tool to reduce mortality rates on non-target species (ie. those that are protected for conservation reasons); however, the policy of catch and release allows people to "sift through" a target species and keep only the ones that are desirable (ie. fish that are suitably large). The Heiltsuk believe fishing should not be viewed as a sport or form of entertainment and fish that are caught should be fully utilized.

Poor monitoring and enforcement of regulations: Monitoring and reporting in Pacific fisheries has been addressed in a number of recent policy initiatives by Fisheries and Oceans Canada. Despite this new direction there has been little increase in effort and resources dedicated to the collection of accurate sport fish catch information. In some regions of the coast the lodges have gone to a logbook system where catches need to be reported daily. However, there are few resources to validate this information or mechanisms in place to verify information. As stewards of our Territory, the Heiltsuk want to play an active role in the monitoring and enforcement of the recreational fishery.

The goals, objectives and strategies presented below are designed to address the negative environmental, social and cultural impacts of the sport fishery in Heiltsuk Territory. If adopted, they will move the industry toward a more sustainable and equitable fishery.

10.1.12.2 Management principles

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

Objective: Protect fisheries resources and increase reproductive potential of fish stocks using Heiltsuk exclusive use areas.

Strategy: Create Heiltsuk exclusive use areas, which prohibit recreational and sport fishing, to protect critical ground fish habitat.

Strategy: Create Heiltsuk exclusive use areas to protect critical shellfish habitat and resources.

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

Strategy: Monitor the effectiveness of Heiltsuk exclusive use areas at restoring vertebrate and invertebrate populations. Where necessary modify areas to restore and enhance fish stocks.

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

Strategy: Establish a moratorium on the number of lodges, including gloating lodges, limit the number of rod days available to each lodge/charter fishing boat until carrying capacity of Heiltsuk Territory is determined.

Strategy: Determine the carrying capacity of Heiltsuk Territory to support a sustainable recreational fishery.

Strategy: Based on carrying capacity, establish management strategies to limit the impact of sport fishing in Heiltsuk Territory.

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

Objective: Ensure Heiltsuk rights to resources for food, social and ceremonial purposes are not obstructed by sport fishing activities.

Strategy: Ban all sport fishing within boundaries of Heiltsuk reserves.

Strategy: Ban fishing on culturally sensitive areas such as gravesites and petroglyphs.

Strategy: Control outboard motor and plane access in all rivers in Heiltsuk Territory, except for emergency or safety reasons.

Objective: Manage the recreational fishery to ensure long-term sustainability of non-anadromous fish stocks in Heiltsuk 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: For each statistical sub-area within Heiltsuk Territory, set total allowable catches for ground fish resources.

Strategy: Develop regulations that include seasonal closures on rockfish, lingcod and halibut during critical spawning periods.

Strategy: Review and adjust all species bag limits (daily and annual) to ensure a sustainable total allowable catch in Heiltsuk Territory is not exceeded.

Strategy: Create quotas on all species for lodges operating in Heiltsuk Territory.

Strategy: Require sport fishermen to purchase individual licences or tags for each species harvested (including shellfish). Strategy: Require all recreational fishermen to record and report effort and catch, size and date of species harvested.

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

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

Objective: Manage the recreational fishery to ensure long-term sustainability of shellfish stocks in Heiltsuk Territory.

Strategy: Review and adjust shellfish bag limits to ensure a sustainable TAC in Heiltsuk Territory is not exceeded.

Strategy: Establish and implement a TAC for all shellfish species to prevent localized over fishing by commercial recreational operators.

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

Goal: The environmental impact recreational fisheries have on the marine and fresh water environments in Heiltsuk Territory are reduced, mitigated or limited.

Objective: Reduce, mitigate, or eliminate the impacts of marine pollution from commercial operators on fisheries resources within Heiltsuk Territory through

better siting and spill response, more stringent regulation, and increased monitoring and enforcement.

Strategy: Develop and enforce policy, based on Heiltsuk traditional knowledge and values, for discharge of pollutants (sewage/organics/petroleum products) in Heiltsuk Territory.

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

Strategy: Require garbage to be removed from designated campsites and lodges and disposed of at permitted dumpsites. Failure to do so will result in a fine.

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

Strategy: Require existing lodges to meet Heiltsuk siting policy.

Objective: Reduce, mitigate or eliminate the impacts of marine pollution from transient vessels on fisheries resources within Heiltsuk Territory through closure of key harvesting areas, prohibition of raw sewage dumping, and better public education.

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 Heiltsuk Territory.

Objective: Reduce, mitigate or eliminate the impacts of marine pollution from recreational foreshore developments on fisheries resources within Heiltsuk Territory, through better treatment and storage of possible pollutants.

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.

10.1.13 Food, Social and Ceremonial

10.1.13.1 Background

The Heiltsuk community has an ancient, deep and abiding relationship to Heiltsuk Territory. This relationship exists on many levels: spiritual, cultural, ceremonial, and material among them. One of the major expressions of this relationship is in the harvest

of resources from the land (which in Heiltsuk phrasing includes marine portions of the Territory).

In the past, nearly everything the Heiltsuk needed for their survival was harvested from Heiltsuk Territory. The Heiltsuk year was divided into two phases – the first phase was a time for harvesting foods and resources, and the second was a ceremonial season where there was little or no harvest. This division demonstrates two significant elements in Heiltsuk culture.

Items that the Heiltsuk needed but could not obtain within the Territory were acquired in trade from their neighbours. Trade with adjacent nations was made with things that were manufactured by Heiltsuk or locally abundant in Heiltsuk Territory. The Heiltsuk became well-known and wealthy from their role as carvers and traders, during pre-contact times and into the fur trade era.

During the colonial period, the governments of Canada and BC began infringing on traditional Heiltsuk rights to harvest and trade resources. There was a distinction made between commercial and food fish – which had not previously existed. The practice of fishing for food continued, while the fishing for trade was regulated and became known as commercial fishing. At this time Heiltsuk ceremonial and spiritual practices were outlawed and repressed.

Narrowing of First Nations' rights and title included limiting First Nations to small reserves. This practice was particularly restrictive in the coastal regions of British Columbia, where it was argued that small 'fishing camp' reserves could be established, as First Nations' well-being and economies revolved around sustenance and commercial fishing. This rationale was referenced repeatedly during the McKenna-McBride Commission, including a submission by Heiltsuk Chief Moody Humchitt who submitted:

I would like to say in respect to the Reserves which were set aside for the Bella Bella Indians some time back...these Reserves were set aside for the exclusive use of the Indians. I think we ought to enjoy exclusively the hunting, and particularly the fishing privileges, on these Reserves and in the vicinity of these reserves, which we do not enjoy at the present time.⁶⁰

The commission concluded that the reserve system on the coast was designed to protect First Nations' rights and access to the fisheries, which sustained their societies and economies, and recommended that the Canadian Government legislate First Nations' fisheries rights.

However, it was not until 1990, in *R. v. Sparrow* that First Nations' rights to fisheries for sustenance was confirmed and afforded priority over other uses. Since 1990, the courts have further recognized First Nations's rights to fisheries. In particular, *R. v. Gladstone* (1996), which confirmed that the Heiltsuk have a commercial right to sell spawn on kelp, and most recently in *Ahousaht Indian Band and Nation v. Canada* (2009), which confirmed that the Nuu-cha-nulth nation's right to fish and sell fish.

These small victories are set against a 200-year history of losses and prejudice. Because of fisheries management design, decision making authority and licencing structure, the Heiltsuk continue to struggle to meet their FSC needs and are shut out of the commercial fishery.

Despite these pressures, the Heiltsuk have maintained their relationship to their land, and have resisted the imposition of some of the repressive laws. Maintaining the Subsistence Economy – or food fishery – has been a major element of Heiltsuk cultural continuity. It has enabled the Heiltsuk to maintain close ties to different parts of the Territory, and to sustain their families and the social structure of the community. Harvest of resources from the Territory is an important part of the contemporary and ongoing activities of the Heiltsuk people, providing food, medicine, fuels, building materials, ceremonial and spiritual necessities and other materials.

The customary laws of the Heiltsuk dictate that these resources be shared among extended family, and be given to people who are less fortunate – including widows, the elderly, the sick and the poor. This has acted as a social safety net for millennia and continues to work today.

As the 20th century progressed, Aboriginal rights advanced and the overt oppression of cultural ways ceased. With these changes, Heiltsuk ceremonial life was revitalized. The demographic changes occurring created a much larger Heiltsuk population, and the concept of 'food fish' was expanded to include social and ceremonial needs, as well as subsistence food.

In contemporary Heiltsuk culture, food from the land figures largely in: home consumption, food sent to relatives, trade with other First Nations, social events such as luncheons and informal gatherings, and formal ceremonial events such as feasts and potlatches. This holds true for Heiltsuk both living within the village and those living outside of Heiltsuk Territory and often includes the same foods that were traditionally harvested and traded for.

The continuing importance of resources that are harvested from the land is an indication of the strength of the Heiltsuk culture and attachment to the land. The reality is that a large percentage of the food and goods that people in Bella Bella consume continues to be derived from the land. It is an important part of the economy that continues to contribute good quality, healthy food for the Heiltsuk. There are redistribution customs that ensure that even people who are not able to get out on the land still obtain a share of the food and resources. Trade continues between families, and nations, and the foods and materials gathered continue to provide large proportions of the food for ceremonies and feasts.

The subsistence economy demonstrates a spiritual and cultural connection, but also a crucial material benefit that could be described as one of the healthiest elements of the contemporary economy in Bella Bella.

10.1.13.2 Management principles

Goal: Heiltsuk have access to abundant FSC resources.

Objective: Respect and uphold the "Doctrine of Priority" through the establishment of Heiltsuk exclusive use areas where Heiltsuk 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 Heiltsuk fishing areas.

Strategy: Calculate community nutritional requirements to ensure identified areas are adequately large to ensure conservation measures and Heiltsuk FSC interests are met now and into the future.

Strategy: Implement Heiltsuk exclusive use areas by integrating special management measures into existing federal and provincial management plans.

Strategy: Monitor the effectiveness of Heiltsuk exclusive use areas at enhancing resources and providing increased opportunities and access for Heiltsuk fishermen.

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

Objective: Remove barriers to traditional foods access and storage.

Strategy: work with the Social Development Office and other community groups to identify individuals in the community that do not have the means to fish for food (elders, single parents etc.).

Strategy: Provide freezer storage at the processing plant or other freezer facilities for community members to store food fish.

Strategy: Hire community members to food fish for individuals who are unable to food fish for themselves.

Strategy: Encourage more donations by fishermen to support local community food bank programs (i.e. Ninuaglilas - elder's centre). 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 protocols).

Strategy: Provide a fuel subsidy for people fishing on behalf of the community.

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.

Goal: Anthropogenic impacts on food fish resources are halted or mitigated.

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

Strategy: Work with Heiltsuk 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.

Objective: Eliminate impacts on the food fishery from shearwater shipyard and other industrial foreshore developments through increased monitoring, stricter regulation and restoration.

Strategy: Quantify the impacts from the mill and shipyard in Shearwater.

Strategy: Ensure that there are no watershed impacts on clam beaches and salmon streams.

Strategy: Identify contaminated sites and have them cleaned up.

Goal: Heiltsuk language and traditional knowledge are understood and widely used in the management of FSC resources.

Objective: Increase the visibility of Heiltsuk tribal use and occupancy within our Territory through improved presence, signage and education.

Strategy: Ensure Heiltsuk names are established and adopted by the community for food fish areas and other areas of cultural importance to the Heiltsuk people.

Strategy: Change selected non-Heiltsuk place names to their Heiltsuk name.

Strategy: Build cabins at traditional harvesting camps throughout our Territory.

10.1.14 Abalone

10.1.14.1 Background

Northern abalone have always been an important component of the Heiltsuk diet and economy. The Heiltsuk 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 Heiltsuk are very alarmed by the continued decline of such a culturally important species. As outlined in the management principles below, we believe that concerted efforts need to be put in place to reduce the impacts of poaching and increasing brood stock.

10.1.14.2 Management principles

Goal: A healthy Northern Abalone population, which allows for the harvest of abalone for FSC purposes.

Objective: Reduce stresses such as poaching and predation from sea otters on abalone which are preventing their recovery.

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

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

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 Northern abalone poaching.

Strategy: Increase sea urchin numbers, which provide protection for juvenile abalone.

Strategy: Increase community awareness of the impacts of abalone poaching by having Hemas leaders talk to known Heiltsuk who harvest for the black market

Strategy: Reinstate a sea otter aboriginal fishery to manage ecosystem health.

Objective: Introduce a trial abalone FSC tidal harvest in Heiltsuk Territory.

Strategy: Identify areas in Heiltsuk Territory that could support a tidal 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.

11 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 Heiltsuk 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" ⁶¹

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

Goal of the Heiltsuk 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 Heiltsuk people is ensured, and a sustainable economy, which benefits local people, is created.

The Heiltsuk 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 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 Heiltsuk MUPC identify areas important to FSC and determine how large those areas should be to provide for the Heiltsuk FSC needs.

The socioeconomic study provided information on the current industries in each 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 Heiltsuk values and interests, the Territory was zoned to help promote certain industrial uses while limiting those that do not align with Heiltsuk 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 Heiltsuk 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 Heiltsuk 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 Heiltsuk 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 Heiltsuk 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 Heiltsuk 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 Heiltsuk zoning plan (Figure 12.1).

11.1 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 Heiltsuk 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 Heiltsuk First Nation cultural use.

Uses that do not require permits

• Non-extractive Heiltsuk First Nation cultural use

Uses that require a permit

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

11.2 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 Heiltsuk 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 Heiltsuk 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 Heiltsuk First Nation cultural use
- 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

11.3 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 Heiltsuk 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
- Heiltsuk First Nation cultural use

Uses that require a permit

- Scientific research
- Non-extractive commercial tourism
- Commercial recreational and fishing activities
- FSC catch requirements determined on a community to community basis by the community

11.4 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

- Non-commercial, non-extractive recreational use
- Heiltsuk 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

11.5 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

• To be determined

Uses that require a permit

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

11.6 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

- Non-commercial, non-extractive recreational use
- Heiltsuk First Nation cultural use
- Non-extractive commercial tourism
- Scientific research

Uses that require a permit

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

11.7 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
- Heiltsuk 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 to community basis by the community

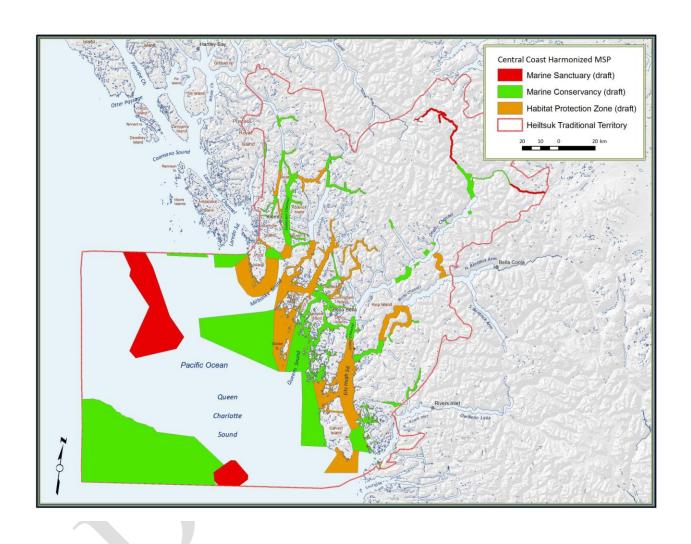
Table 12.1: Zoning Matrix for Heiltsuk Territory, which identifies allowable activities in each zone.

	Enhanced Management Areas					ıs	
	>	1		_			
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		√	✓	√	✓	~	✓
resources all species					,		
Commercial Fisheries - Finfish							
Salmon - Net fisheries (all species)			V		✓	✓	✓
Salmon - Troll fisheries (all species)			✓	✓	✓	√	✓
Herring – Net fisheries			✓	✓	√	✓	✓
Herring – Spawn on kelp		✓	✓	✓	✓	√	✓
Groundfish - Long line fisheries (all species)			V	✓	√	√	√
Groundfish - Hand line fisheries (all species)		1	√	1	√	√	✓
Groundfish – Trap fisheries (black cod)			V	√	✓	√	√
Groundfish - Benthic trawl							
Groundfish - Mid-water							
trawl)							
Commercial Fisheries -							
Invertebrate							
Prawn/Shrimp – Long line			✓	✓	✓	✓	✓
trap							
Shrimp – Benthic trawl							
(beam and otter trawls)			√	✓	✓	√	√
King crab – Trap			∨	∨	∀	∨	∨
Dungeness Crab – Trap fishery			v		•	*	•
Urchins – Dive fishery (all			✓	✓	√	√	√
species)							
Sea cucumber – Dive fishery			✓	✓	✓	√	√
Geoduck - Dive fishery			√	✓	✓	√	√
Other species – Dive fishery			✓	✓	✓	✓	✓
Recreational Fisheries							

				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
Finfish - Commercial recreational fishing			✓	√	√	V	√
Finfish - Non-guided recreational fishing			✓	✓	V	✓	√
Shellfish – Commercial rec. fishing			✓	✓	~	V	V
Shellfish – Non-guided rec. fishing			✓	✓	√	✓	✓
Aquaculture							
Finfish Aquaculture				√			
Shellfish Aquaculture			✓	✓			✓
Algaculture			✓	✓			✓
Other aquaculture				√			✓
Ecotourism/Recreational							
Activities							
Wildlife viewing	✓	✓	√	√	✓	✓	✓
Kayaking	✓	✓	√	✓	✓	✓	✓
Camping	✓	✓	V	✓	✓		✓
Diving		✓	\checkmark	✓	✓		✓
Marine Transportation							
Cargo ships	/					✓	✓
Oil tankers						✓	
Cruise ships			✓	✓		✓	✓
Ferries		✓	✓	✓		✓	✓
Fishing Vessel Traffic		✓	✓	✓	✓	✓	✓
Recreational boating		✓	✓	✓	✓	✓	✓
Transportation							
infrastructure developments							
Docks (public/private)				✓			✓
Marinas and breakwaters				✓			✓
Fuel Stations				✓			✓
Anchorages			✓				✓
Alternative energy							
Hydro electric					✓		✓
ROR					✓		✓
Wind generation					✓		✓
Tidal generation					✓		✓

				Edward Marcon and Assess			
				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
Wave generation					✓		✓
Power transmission lines					✓		✓
Non-renewable Energy							
Seismic Survey							
Drilling and oil platforms							
Pipelines							
Mining							
Mining and related							✓
development							
Foreshore							
development/other than							
logging							
Industrial developments							✓
Logging related							
Log booming							✓
Log sorts							✓
Near shore timber							\checkmark
extraction							
Education							
Research	\checkmark	✓	✓	✓	✓	✓	✓
Educations and outreach	\checkmark	V	✓	✓	✓	✓	√
Monitoring	\checkmark	✓	✓	✓	✓	✓	✓

Figure 12.1 Heiltsuk Nation Spatial Marine Zoning Plan.



12 COMMUNITY ECONOMIC STRATEGY

12.1 Background

Unemployment in Bella Bella is significantly higher than the National average. ⁶² Of those employed close to half are employed part time, self-employed or seasonally employed. Full time employment is almost entirely limited to public sectors positions such as Band office administration, education and health care. Jobs in the marine sector, once the dominant employer in our community, are almost non-existent. In a recent survey, over 70% of Heiltsuk people surveyed believed that a priority should placed on marine-based economic development. ⁶³

Indeed, 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 support the Heiltsuk Land Use Plan and the Heiltsuk 15-year Economic Strategy. The strategies take into consideration the carrying capacity of the ecosystems in our Territory and recognize our Nation's skills and assets.

In some instances, we seek to create our own businesses and opportunities. In other cases, we will work with partners and businesses in our Territory to the benefit of all parties. Timelines are only given for some of our economic goals. Others are left open and development will depend on market forces and community capacity.

12.2 Economic goals, objectives and strategies

12.2.1 Fisheries

12.2.1.1 Wild harvest

The Heiltsuk assert that fisheries resources are a part of our aboriginal heritage, never surrendered; the waters are ours by traditional right and usage. We maintain that we have rights and title over 100% of the fisheries in our territory. The government of Canada must implement interim measures until issues of rights and title have been settled. As is consistent with our position in the past, interim measures should equate to 50% of the commercial fisheries in our territory, phased in over a 5-year period.

Goal: Commercial fisheries are once again a major contributor to Heiltsuk economy and well-being, and support the viability of the Heiltsuk processing plant.

Objective: Restructure fisheries licence regulations to result in increased local licence ownership and improved Heiltsuk well-being.

Strategy: Only support the transition to quota systems where Heiltsuk's access to licences is not impinged upon by inequitable allocation policy.

Strategy: Licences transferred to the Heiltsuk are specific to the Heiltsuk Territory.

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

Objective: Increase Heiltsuk ownership and operation of licences to ensure an economically viable portion of the licences in our Territory, are owned and operated by the Heiltsuk.

Strategy: With other coastal First Nations, collectively lobby DFO to expand and reform Pacific Integrated Commercial Fisheries Initiative (PICFI) to result in the transfer of a minimum of 51% of all licences to First Nations.

Strategy: Require DFO to transfer 65% of commercial salmon licences in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer 51% of the commercial Halibut quota in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer 51% of all hook and line fisheries quota in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer 51% of all commercial hake quota in Heiltsuk Territory to Heiltsuk.

Strategy: Require DFO to transfer 51% of all prawn licences in Heiltsuk Territory to Heiltsuk.

Strategy: require DFO to increase the quota or require the involuntary transfer of 51% of geoduck licences in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer 51% of urchin quota in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer 51% of sea cucumber quota in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer 51% of all commercial hake quota in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer 51% of the Dog fish in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer 51% of the Black cod in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer 51% of the Lingcod fishery in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer 51% of pilchard (California sardine) fishery in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to allocate 100% of all new fisheries licences in Heiltsuk Territory to the Heiltsuk.

Strategy: Require DFO to transfer SOK licences, as agreed upon under the Gladstone Reconciliation Process, in Heiltsuk Territory to the Heiltsuk.

Strategy: Modify scientific permits to allow the Heiltsuk, when conducting studies that require harvesting, to use catch for FSC or commercial purposes.

Strategy: Require scientific permits in Heiltsuk Territory to be approved by the Heiltsuk Nation and require permit holders to employ Heiltsuk staff.

Objective: Improve Heiltsuk understanding of the economic feasibility and biological limitations of a trout fishery in larger Heiltsuk lakes, and where appropriate implement a commercial trout fishery.

Strategy: Identify which lakes would be most likely to sustain a commercial trout fishery.

Strategy: Conduct feasibility study on identified lakes.

Strategy: Conduct a biological issues study to determine sustainability of a commercial trout fishery.

Strategy: Implement findings of feasibility and biological studies.

Objective: Increase Heiltsuk participation in intertidal bivalve fisheries through licence restructuring, new fisheries, local processing and beach enhancement.

Strategy: Require DFO to ensure that 100% of clam licences in Heiltsuk Territory are held by Heiltsuk.

Strategy: Reduce the number of licences in Heiltsuk Territory to provide a greater harvest for each licence and a more economically viable fishery.

Strategy: Enhance beaches close to Bella Bella to improve the commercial fishing opportunities.

Strategy: Investigate the creation of a cultured cockle fishery.

Strategy: Investigate the viability of entering the butter clam fishery.

Strategy: Investigate the little neck clam fishery.

Strategy: Re-establish trade practices of intertidal bivalves with other nations.

Strategy: Investigate the feasibility of smoking and canning intertidal bivalves at the Heiltsuk fish plant.

Objective: Increase Heiltsuk boat and equipment ownership to a level 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 all licence transfer programs.

12.2.1.2Traditional

Goal: A thriving FSC fishery that reflects the sustenance economy of our ancestors.

Objective: Increase informal trade between Heiltsuk people and other First Nations.

Strategy: Process goods and re-establish trading partnerships with other First Nations.

Objective: Create employment opportunities for Heiltsuk people using FSC resources.

Strategy: Develop value-added smoking plant for the processing and sale of wild Heiltsuk salmon.

Strategy: Run village tours that raise awareness about our use and connection to our Territory. Eg. Tours of traditional smoke houses and associated legends and stories.

Strategy: Continue to develop a clam fishery.

Strategy: Foster economic opportunities with Herring spawn on kelp.

12.2.1.3 Recreational

Goal: A sustainable commercial recreational fishery, in which the Heiltsuk are major partners

Objective: Increase employment opportunities for Heiltsuk people through our direct involvement in the commercial recreational fishing sector.

Strategy: Secure a tenure to create a Heiltsuk owned and operated sport fishing lodge/Eco-tourism operation (possibly at Breadner Point, Spider Island).

Strategy: Establish co-owned and operated recreational fishing lodges through partnership with an existing lodge.

Strategy: Secure 3 additional tenures by 2020.

Strategy: Continue to include economic development as part of conservancy agreements and management plans for collaboratively/comanaged conservancy areas.

Strategy: Seek resources to create a separate fund within the Heiltsuk Community Development Society aimed at supporting Heiltsuk entrepreneurs entering the tourism/recreation and fishing sectors.

Objective: Increase employment opportunities for Heiltsuk people through the establishment of protocol agreements with commercial sport fish operations.

Strategy: Require commercial operators to ensure 10% of their total workforce is Heiltsuk.

Strategy: Require land-based commercial operators or operators storing floating lodges in Heiltsuk Territory to employ Heiltsuk caretakers during off seasons.

Strategy: Require commercial operators to pay storage fees for floating lodges left in Heiltsuk Territory.

Strategy: Require land-based commercial operators to pay lease fees to the Heiltsuk Nation.

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.

12.2.2 Aquaculture and mariculture

Goal: Expand Heiltsuk involvement in the aquaculture industry.

Objective: Explore opportunities to develop kelp aquaculture in Heiltsuk Territory and where appropriate develop kelp business.

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: Explore opportunities to develop closed containment finfish aquaculture in Heiltsuk Territory and where appropriate develop kelp business.

Strategy: Conduct a market demand and feasibility study.

Strategy: If opportunities exist, create business plan for closed containment finfish aquaculture including identifying suitable sites, setting up pilot operations, and establishing potential partnerships.

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

Objective: Continue with the Central and North Coast Shellfish Aquaculture Business Plan strategy.

Strategy: Monitor and maintain trial grow-out experiments.

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

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

Strategy: Identify and pursue additional sites for shellfish aquaculture.

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

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

Strategy: Conduct a market demand and feasibility study.

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

Strategy: Secure government support and funding for this economic development opportunity.

Objective: Improve Heiltsuk understanding of the economic feasibility and ecological concerns of ocean ranching in Heiltsuk Territory, and if appropriate develop ocean ranching business.

Strategy: Conduct feasibility study on ocean ranching in the Central Coast Strategy: Conduct a biological issues study to determine the potential impacts on wild stocks (e.g. impacts on biodiversity, over-fishing of non-target stocks and carrying capacity).

Strategy: If appropriate, based on feasibility and biological studies, start a trial food-fishery ocean ranching program.

Strategy: If successful, increase production to include commercial outputs.

12.2.3 Seafood processing

Goal: A thriving seafood processing operation, which employs Heiltsuk and provides the Nation with revenue.

Objective: Create a multi-species processing plant, which is operational for the majority of the year.

Strategy: Seek funding to repair and upgrade the Heiltsuk processing and freezer plant.

Strategy: Train a Heiltsuk member to maintain the processing and freezer plant.

Strategy: Solicit government transportation subsidy to reduce the cost of transporting product from the Central Coast processing plants.

Strategy: Re-visit proposals to seed Heiltsuk beaches with Manilla clams, which could be processed at Heiltsuk processing plant.

Strategy: Analyse which species are likely to present the greatest economic return for the Heiltsuk processing plant. Opportunities include SOK, trout, shellfish, sea cucumber, urchins, salmon, dogfish, halibut, pilchards, and hake.

Strategy: As a starting point, focus on existing Heiltsuk assets and licences.

Strategy: Approach past clients and commercial fishing associations to attract business for Heiltsuk processing plant. Explore the possibility of joint ventures.

Strategy: Increase hatchery program (ocean ranching) in order to supply more fish for the Heiltsuk processing plant.

Strategy: Sell surplus salmon roe from hatchery-reared chum salmon.

Strategy: Develop local markets for processed seafood.

Strategy: Seek direct markets oversees, limiting middleman costs.

Strategy: Work with sport lodges to process and smoke their clients' fish.

Strategy: Create a recognized and sought after Heiltsuk brand of processed and smoked seafood.

Objective: Develop a Heiltsuk owned and operated facility for value added products.

Strategy: Review existing market demand and feasibility studies on value added products such as a smoking plant (salmon, shellfish) and shellfish canning, and if necessary undertake additional analysis.

Strategy: If opportunities exist, create business plan for value added products.

Strategy: Secure financial support for building value added plants.

12.2.4 Tourism

Goal: Tourism becomes a major contributor to the Heiltsuk economy.

Objective: Increase Heiltsuk participation in the tourism sector through direct participation in the industry, protocol agreements and/or partnerships with existing tourism businesses, and improvements in infrastructure.

Strategy: Maximize opportunities for Heiltsuk entrepreneurship within the tourism sector, especially highly supported activities such as cultural and interpretive tourism, marine tourism, wildlife viewing, nature/culture resorts, sport fishing, and kayaking.

Strategy: Establish agreements with outside tourism operators to support Heiltsuk goals and commit to local hiring, purchasing, contracting or partnering.

Strategy: Evaluate the benefits secured through existing and signed protocol agreements (i.e. Big Time Sport Fishing BC Ltd, Hakai Lúxvbális Conservancy Agreement).

Strategy: Secure existing and future commercial use permits and tenures (i.e commercial recreation tenures, guide-outfitting licences, park comanagement agreements).

Strategy: Establish a permit/visitor fee system and direct revenues to infrastructure investments, planning and management.

Strategy: Target cruise ships and fishing / nature lodges for sales of Heiltsuk tourism products (i.e. specialty foods, arts and crafts, books, cultural programs).

Objective: Develop Bella Bella as a gateway community to the Central Coast and to Heiltsuk Territory.

Strategy: Invest in needed infrastructure, attractions, products, and services.

Strategy: Seek out and support synergies with private and public investment into tourism business development in Bella Bella.

Strategy: Maximize tourism sales opportunities at Bella Bella airport, Band Store, fuel dock, restaurants etc.

Strategy: Explore a cultural heritage tourism strategy for Heiltsuk Territory.

Strategy: Construct a campground in Bella Bella to encourage visitors to stay for longer periods.

Strategy: Once constructed, use Heiltsuk big house and museum as visitor attractions to promote Heiltsuk culture to tourists.

Strategy: Develop visitor information services (product map, visitor information centre, web page).

Strategy: Establish a central high profile website promoting Heiltsuk tourism.

Strategy: Establish a Heiltsuk Tourism Association to market and promote Heiltsuk Territory and Bella Bella.

Strategy: Develop strong regional partnerships for tourism product development and marketing (Central Coast First Nations, BC Ferries, Cariboo Chilcotin Coast Tourism Association, and Central Coast Regional District).

Objective: Harmonize commercial activities such as forestry, fisheries, mining, etc. with Heiltsuk tourism and recreation goals.

Strategy: Through general land use planning and area-specific management plans harmonize Heiltsuk tourism goals with other commercial activities such as forestry operations, commercial fishers (i.e. shellfish, Spawn on Kelp (SOK), salmon, halibut), mining activity etc.

12.2.5 Marine transportation and shipping

Goal: The Heiltsuk are active partners in the marine transportation and shipping sector in Heiltsuk Territory.

Objective: Increase Heiltsuk participation in the transportation and shipping sector through increased direct employment, business development and the creation of a transportation sector fee system.

Strategy: Increase the number of Heiltsuk working as pilots, deckhands and engineers.

Strategy: require Heiltsuk to hold all port and harbour tenures, allowing us to assess each ort development on a project-by-project basis.

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

Strategy: Charge transient vessels for taking on water if they do not take on fuel.

Strategy: Use the Kwwiawah to transport seafood product transfer. This will require upgrades to the vessel, and a business plan that ensure the venture is viable.

12.2.6 Energy projects

Goal: The Heiltsuk are active partners in the energy sector in Heiltsuk Territory.

Objective: Increase Heiltsuk participation in the alternative energy sector through partnerships with established alternative energy developers.

Strategy: Create a business strategy for approaching and attracting alternative energy development opportunities to Heiltsuk Territory.

Strategy: Require any development proposal to include and Impact-Benefit Agreement between the developer and the Heiltsuk Nation. At a minimum, such an agreement should include resources for impact studies, provisions for education and training, employment opportunities, and revenue sharing.

Strategy: Negotiate joint venture agreements with energy developers, where such agreements are in the best interest of the Heiltsuk Nation.

Strategy: Explore the feasibility of the Heiltsuk 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.

12.2.7 Other initiatives and opportunities

Goal: Realize economic benefit from fisheries monitoring programs and data collection systems.

Objective: Create a fisheries monitoring services business to bid on commercial fisheries monitoring, data collection and reporting contracts.

Strategy: Conduct a market demand and feasibility study.

Strategy: Create a business plan to establish a commercial fisheries monitoring business.

Strategy: Secure government support and funding for development of commercial fisheries monitoring services business.

Strategy: Identify and offer commercial fisheries monitoring training courses to Heiltsuk so we can work as on-grounds/dock-side monitors.

13 CAPACITY BUILDING

13.1 Background

The Heiltsuk 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 watchmen. The goals, objectives and strategies below provide a blueprint for increasing capacity in our community.

13.2 Capacity goals, objectives and strategies

Goal: Heiltsuk traditional management of the marine environment has been reaffirmed and rejuvenated.

Objective: Improve awareness and use of Heiltsuk language, culture and resource values among Heiltsuk people.

Strategy: Develop curriculum for Heiltsuk students that re-establish connections with the management of the natural environment.

Strategy: Establish cultural camps that promote cultural awareness and raise awareness around traditional management practices.

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

Strategy: Develop video documentaries highlighting Heiltsuk traditional management practices and connections with the natural environment.

Strategy: Re-establish "imaginary voyages" through the Heiltsuk Territory where elders share stories about the Territory with youth.

Strategy: Develop an elders support program where the youth would assist the elders with chores including processing of fish, firewood etc.

Strategy: Rebuild rediscovery camp and cabins on North Goose Island to support cultural programs and to be used as an outpost for Guardian Watchmen.

Strategy: Support repatriation of Namu and use as a cultural site.

Strategy: Seek out funding to support Koeye's work in providing cultural programs and increasing awareness among our people.

Objective: Educate visitors about the significance of Heiltsuk natural resources and the importance of protecting them.

Strategy: Provide information on Heiltsuk history and traditional management practices through the development of pamphlets, guidebooks, websites etc.

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

Strategy: Create internship program in DFO to allow Heiltsuk to learn more about science and conservation officer positions and DFO to learn more about Heiltsuk cultural laws.

Goal: Heiltsuk institutional structures are sufficiently financed to allow for the (a) ongoing involvement in marine resource decision-making processes and (b) creation of a long-term Heiltsuk restoration, monitoring and enforcement programs.

Objective: Secure funding from short and long-term sources to support restoration, monitoring, enforcement and resource management programs.

Strategy: Develop long-term joint-management agreements with Federal and Provincial governments that include revenue sharing to support restoration, management, monitoring, and enforcement efforts

Strategy: Develop protocol agreements with commercial operators (or establish as part of tenure contracts) that include a "sustainability fee" for on-going monitoring, management, and enhancement of fisheries resources.

Strategy: Through agreements with government, secure funds to establish a student grant to support students interested in pursuing an education in enforcement or resource management.

Strategy: Require government to compensate Heiltsuk Nation for past resource mismanagement that has resulted in high unemployment. Funds will be used for local economic development.

Goal: Heiltsuk members have the skills and capacity to engage in all marine sectors of the economy.

Objective: Provide Heiltsuk with access to education needed for marine employment in all sectors of the marine economy.

Strategy: Work collaboratively with provincial and federal governments, ENGOs, and post-secondary and research institutions to identify specific needs and develop accredited training courses for Heiltsuk 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 aboriginal organizations, government agencies and industry.

Strategy: Sign agreements with government and business to provide funding for Heiltsuk to attend educational institutions.

Strategy: Educate youth about traditional ways through such programs as Sons and Daughters of Tradition.

Strategy: Re-certify Heiltsuk divers as seafood harvesters, to participate in the commercial dive fisheries.

Strategy: Create school programs to make students aware of the types of marine jobs available, skills required, pay scale and paths toward attainment of those skills.

Strategy: Include practical courses (e.g. marine emergency training, boat safety) in the secondary school curriculum.

Strategy: Establish summer student employment program, which employs students at hatcheries.

Objective: Ensure Heiltsuk 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 Heiltsuk Territory, which provide employment opportunities for Heiltsuk members. These opportunities should be available across all areas including management.

Objective: Establish a Heiltsuk Integrated Resource Management Department to manage our marine natural resources.

Strategy: Train Heiltsuk 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 Heiltsuk marine use plan. At a minimum, a crew of 10 Guardian Watchmen should be established. Additional summer staff will likely be required.

Strategy: Create a vision and terms of reference, including decision making structures, advisory board roles etc. and job descriptions for the each Integrated Resource Management Department.

Strategy: Sign joint-management agreements with government, which reestablish Heiltsuk authority and jurisdiction to manage our marine resources.

Strategy: Designate Heiltsuk Integrated resource Management Department as a non-profit society to facilitate the financing and management of the organization.

Objective: Ensure adequate infrastructure and equipment needed to support marine programs is available.

Strategy: Identify transportation, communications, safety, and monitoring and recording equipment needs to properly police Heiltsuk Territory.

Strategy: Seek funding through grant programs and trust funds to purchase/obtain needed transportation, communications, safety, and monitoring and recording equipment. At a minimum, transportation should include one live aboard vessel and two fast hard bottom boats.

Strategy: Develop a network of cabins throughout our Territory to be used by Guardian Watchmen.

Strategy: Identify office, storage, moorage, and support structure needs.

Strategy: Purchase/obtain needed office, storage, moorage, cabins and support structure needs.

14 PLAN IMPLEMENTATION, MONITORING AND AMENDMENT

14.1 Implementation

The Heiltsuk 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 Heiltsuk Nation jurisdiction and governing authority over our marine environment and its resources, which enable revenue and benefit sharing, and provides for equitable Heiltsuk 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 impactbenefit 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.

14.1.1 Policy development and management

Implementation of our plan will require legislative, policy and Integrated Fisheries 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 Heiltsuk will work

with the Federal and Provincial governments to create these changes over the life of the plan.

14.2 Monitoring and research

Monitoring the environmental, social, cultural and economic conditions in Heiltsuk 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 Heiltsuk 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 Heiltsuk 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 Heiltsuk 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.

14.3 Adaptive management

Increased research and monitoring in Heiltsuk 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

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¹ 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.>

² Heiltsuk Tribal Council. 2005. *Heiltsuk Land Use Plan*.

³ Heiltsuk Tribal Council. 2005. *Heiltsuk Land Use Plan*; BC ARR 2006. *Heiltsuk First Nation*.

⁴ Heiltsuk Tribal Council. 2005: 11. Heiltsuk Land Use Plan.

⁵ Heiltsuk Tribal Council. 2005. *Heiltsuk Land Use Plan*.

⁶ Heiltsuk Tribal Council. 2001. Draft Heiltsuk Integrated Marine and Land Use Plan

⁷ Ibid.

⁸ Ibid.

⁹ Black, M. 1997. Bella Bella: A season of Heiltsuk art. Royal Ontario Museum.

¹⁰ Heiltsuk Cultural Education Centre. 1997. *History notes on the Bella Bella Heiltsuk*. <Online: http://www.hcec.ca/heiltsuk.html; accessed 17 March 2007.>

¹¹ Ibid

¹² Ibid

¹³ 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.

¹⁴ Cameron R. Brown & Associates 2004; HTC 2005; Indian and Northern Affairs Canada (INAC). 1997-2005. *Heiltsuk Population Statistics*. Vancouver, BC: Indian and Northern Affairs Canada

¹⁵ BC Stats 2001a. 2001 Census Fast Facts: BC Aboriginal Identity Population – Band Membership, Status, On/Off Reserve. <Online: http://www.bcstats.gov.bc.ca/data/cen01/facts/cff0109.PDF; accessed 26 July 2006.>

¹⁶ 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.

¹⁷ Ibid.

- ²³ MAL. 2009. *Legislation and Regulation*. <Online: http://www.agf.gov.bc.ca/clad/land-prog-services/leg-reg.html; accessed 30 May 2009.>
- ²⁴ 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.
- ²⁵ 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 of North America</u>. University of Washington Press: Seattle and UBC Press: Vancouver. 384 pp.
- ²⁶ BC Hydro. 2007. <Online http://www.bchydro.com/environment/greenpower/greenpower1754.html, accessed 22 March 2007.>
- ²⁷ BC Hydro 2002. *Green & alternative energy division green energy study for British Columbia phase 2: mainland 2002.* p.27. <Online http://www.bchydro.com/rx files/environment/environment3927.pdf; 20 April 2007.>
- Ministry of Energy, Mines, and Petroleum Resources. 2007. Ocean Energy. <Online:</p>
 http://www.em.gov.bc.ca/AlternativeEnergy/ocean energy/default.htm; accessed 22 March 2007.>

¹⁸ Ibid.

¹⁹ Education Canada 2007. *Employer Info: Bella Bella Community School Society*. <Online: http://www.educationcanada.com/browse.phtml; accessed 19 March 2007.>

²⁰ BBCS 2007. *Bella Bella Teaching Staff*. <Online: http://www.bellabella.ca/staff.php; accessed 19 March 2007.>

²¹ Hailzaqv College 2007. *Hailvaqz College*. <Online: http://heiltsukcollege.ca; accessed 19 March 2007.>

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.

²⁹ Eco Trust 2001. North of Caution: A journey through the conservation economy on the northwest coast of British Columbia. Vancouver, BC: Ecostrust Canada.

³⁰ Ibid.

³¹ Harris. D. 2001. Fish, las and colonialism: the legal capture of salmon in British Columbia. Vancouver, BC: UBC Press

³² Turning Point Initiative (TPI). 2004. Our Future Harvest: A New Approach to Coastal First Nations' Commercial Fisheries. Vancouver, BC: Turning Point Initiative.

³³ Chrisholm, B. 1986 Reconstruction of prehistoric diet in British Columbia using stable-carbon isotope analysis. Doctoral thesis in archaeology. Burnaby, BC. Simon Fraser University.

³⁴ Eco Trust 2001. *North of Caution: A journey through the conservation economy on the northwest coast of British Columbia*. Vancouver, BC: Ecostrust Canada.

³⁵ Gislason 2007. Economic contribution of the oceans sector in British Columbia. Queens Printer.

³⁶ 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.

³⁷ 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 Bella area plus the Prince Rupert and surrounding area (taken from Gislason 2007)

³⁸ Gislason 2007. Economic contribution of the oceans sector in British Columbia. Queens Printer.

³⁹ 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.

⁴⁰ Tank, S. 2006. State of the Catch: A professional's guide to sustainable seafood. Vancouver, BC. David Suzuki Foundation.

⁴¹ Ecotrust Canada. 2001. *North of Caution: A journey through the conservation economy on the northwest coast of British Columbia.* Vancouver, BC: Ecotrust Canada.

 $^{^{42}}$ Gislason. G.S. 2007. *Economic contribution of the Ocean sector in BC*. A report for the Oceans Coordinating Committee.

⁴³ 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.

⁴⁴ 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.

⁴⁵ Harrington R. 1967. Ooligan and the grease trails of British Columbia. *Canadian Geogrpaic Journal*. **January:** 28-31.

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.

⁴⁷ 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.

⁴⁸ Broadhurst, M. K., Suuronen, P. & Hulme, A. 2006. Estimating collateral mortality from towed fishing gear. Fish and Fisheries 7: 180-218.

⁴⁹ 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.

⁵⁰ 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.

⁵¹ Hay, D. E. 1995. The mysterious ooligan. *The Westcoast Fisherman*, Vancouver, BC. March.

⁵² 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.

⁵³ Gislason. G.S. 2007. *Economic contribution of the Ocean sector in BC*. A report for the Oceans Coordinating Committee.

⁵⁴ Ecotourism is most often defined as travel to natural areas that conserves the environment and improves the welfare of local people (www.ecotourism.org).

⁵⁵ Ministry of Small Business, Tourism and Culture.

⁵⁶ Marilyn Chisholm and Associates. 2001. Mid-Coast Forest District Tourism Opportunity Strategy. Prepared for the Ministry of Small Business, Tourism and Culture.

⁵⁷ Economic Planning Group. 2004. Coastal British Columbia Economic Gain Spatial Analysis Tourism Sector Report. Coastal Information Team.

⁵⁸ Cox-Rogers, T. Gjernes and E. Fast. 1999. A review of hooking mortality rates for marine recreational coho and Chinook salmon fisheries in British Columbia. Canadian Stock Assessment Secretariat, 99/127.

⁵⁹ Fisheries and Oceans Canada. 2009. <online http://www.pac.dfo-mpo.gc.ca/fraserriver/recreational/recfishery99sprtcatch_e.htm. Accessed 12May2008.>

⁶⁰ Harris, D. (2009). Landing Native Fisheries: Indian Reserves and Fishing Rights in British Columbia, 1849-1925. P. 170. UBC Press. Vancouver, BC.

 $^{^{61}}$ Ehler C & F. Douvere. 2006. Pp. 13. Visions for a sea change. <nline http://ioc3.unesco.org/icam/images/stories//SEA%20CHANGE%20VISION%20.pdf. Accessed 21October2008.>

⁶² 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.

⁶³ Ibid.