

***Engaging Inuvialuit Youth
in Oceans Stewardship:
A Proposed Strategy***

By: Michelle Schlag

**A Thesis Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Degree of
Master of Natural Resources Management**

Natural Resources Institute
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**Engaging Inuvialuit Youth
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**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of
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ABSTRACT

This research presents and supports a proposed strategy to engage Inuvialuit youth in oceans stewardship with the purpose of fostering increased Inuvialuit youth interest and participation in oceans stewardship activities. The objectives of the research were: a) to assess trends of Inuvialuit youth participation; b) to evaluate reasons for the trends; c) to identify components of a successful strategy to engage youth; d) to examine programs outside the ISR to identify principles and techniques to encourage youth involvement; and e) to make recommendations for a strategy to engage Inuvialuit youth in oceans stewardship.

The research methodology that was designed and utilized contains the following approaches: a) preparing myself to conduct the research by initiating the scientific research licensing process with the Aurora Research Institute and making a preliminary visit to the communities of Inuvik and Tuktoyaktuk to begin community consultations; b) establishing working relationships with local people by visiting with community leaders, people at their homes, and attending local resource management board and committee meetings; c) gathering data through focus groups with youth and interviews with Inuvialuit elders, parents, local resource managers, past and present teachers, and environmental stewardship program administrators from across Canada; d) analyzing data by coding, categorizing, and developing themes that were synthesized and evaluated. The software Atlas.ti was used to facilitate the analysis process by visualizing connections and relationships; and e) verifying the research findings by preparing a summary report and then returning to the communities to present my findings to the research participants, community organizations, and the public at large.

There are a number of interesting findings, conclusions, and lessons to be learned from this research. Key findings of the research include: A proposed strategy was developed and attempts to address both directly and indirectly many of the issues facing youth including a lack of support to complete their education and the lack of opportunities available to spend extended periods of time on the land and ocean; Youth share the feeling with elders, community leaders, and local resource managers that they are unprepared to take on oceans stewardship responsibilities from their elders; Youth also feel short changed in terms of the quality of formal education that they are receiving. An important lesson to be learned from this research is that a great opportunity to involve Inuvialuit youth in oceans stewardship activities is being missed. Inuvialuit youth have expressed a desire to participate in oceans stewardship activities but to date there have been limited opportunities for their involvement. The main recommendation of the research is the adoption of the proposed strategy. This research thesis outlines a strategy based upon the research findings to engage Inuvialuit youth in oceans stewardship, and identifies BSIMPI as having a key role to play in promoting the knowledge gathered from this study in ways that will encourage the larger community to assume responsibility for its implementation.

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Quyanaq!
Quyananainni!
Quana!

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ACRONYMS

AHRDCC	Aboriginal Human Resources and Development Council of Canada
ARI	Aurora Research Institute
BSIMPI	Beaufort Sea Integrated Management Planning Initiative
CAPP	Canadian Association of Petroleum Producers
CARC	Canadian Arctic Resources Committee
CCHREI	Canadian Council for Human Resources in the Environment Industry
COPE	Committee for Original People's Entitlement
CC	Community Corporation
CCP	Community Conservation Plan
DFAIT	Department of Foreign Affairs and International Trade
DFO	Department of Fisheries and Oceans
DIAND	Department of Indian Affairs and Northern Development
ERIB	Environmental Impact Review Board
EISC	Environmental Impact Screening Committee
FJMC	Fisheries Joint Management Committee
GNWT	Government of the Northwest Territories
HRDC	Human Resources and Development Canada
HTC	Hunters and Trappers Committee
IDC	Inuvialuit Development Corporation
IEF	Inuvialuit Education Foundation
IFA	Inuvialuit Final Agreement
IGC	Inuvialuit Game Council
ITK	Inuit Tapirisat Kanatami
IRC	Inuvialuit Regional Corporation
IRRC	Inuvialuit Renewable Resources Committee
ISR	Inuvialuit Settlement Region
IWCO	Independent World Commission of the Ocean
NAP	Northern Affairs Program
NAYS	National Aboriginal Youth Strategy
NRTEE	National Roundtable on the Environment and Economy
NWT	Northwest Territories
RCAP	Royal Commission on Aboriginal Peoples
RWED	Department of Resources, Wildlife and Economic Development
TEK	Traditional Ecological Knowledge
WMAC-NS	Wildlife Management Advisory Council – North Slope
WMAC-NWT	Wildlife Management Advisory Council – Northwest Territories
YTG	Yukon Territorial Government

GLOSSARY OF TERMS

- Aboriginal* Includes First Nations and Inuit peoples.
- Co-management* The sharing of natural resources management authority, responsibilities, and accountability between government and the Inuvialuit.
- Community Corporation* The corporate body responsible for the management of compensation and benefits received by the Inuvialuit under and through the Inuvialuit Final Agreement. Each of the six Inuvialuit communities has its own Community Corporation (IFA 1984, IRC 2003).
- Comprehensive Land Claim Agreement* A binding agreement between the Federal Government (and usually the Provincial or Territorial Government) and an Aboriginal group which exchange claims of undefined Aboriginal rights for a clearly defined, long-lasting set of rights and benefits that are set out in the settlement agreement. Land claims can be negotiated with Aboriginal groups in areas where there were no treaties or other legal agreements have been made (INAC 2003).
- Integrated Management* A management approach that acknowledges the interrelationships among the environment, instructional arrangements, and land and resource use, and land and resource users. Integrated management is inclusive of issues and participants, and is encompassing in temporal and geographic scope (Cicin-Sain and Knecht 1998).

Inuvialuit

Inuvialuit is used to identify the Inuit of the Western Arctic based in the communities of Inuvik, Aklavik, Paulatuk, Holman, Sachs Harbour, and Tuktoyaktuk.

Oceans Stewardship

Caring for the land, ocean, and associated resources so that healthy ecosystems can be passed on to future generations.

Stewardship

Caring for the earth and assuming responsibility for preserving, protecting and restoring the environment (Lerner 1993).

Subsistence

Harvesting for the direct consumption of harvests for food, clothing and other items required for survival (Usher 2002).

Sustainable Development

Development which meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED 1984).

Traditional Ecological Knowledge

The collective body of knowledge and values that have been acquired over time through experiences, observations on the land and ocean, spiritual teachings and is passed down through the generations (ITK 2003).

Wholism

Synonymous with holism. Wholisim is a belief that everything exists in relationship to everything else (Romberger 2001).

CHAPTER ONE – INTRODUCTION TO STEWARDSHIP, OCEANS GOVERNANCE, AND THE INUVIALUIT

Stewardship

The term stewardship has recently become popular amongst resource industries, government agencies, and community activists to describe their philosophy of resource use and management (CAPP 2003, Government of Canada 2002, Biodiversity Convention Office 2001, Environment Canada 1996, Laynard and Delbrouck 1994). There are a wide variety of definitions of stewardship however, they all to include an ethic of caring for the earth, and assuming responsibility for preserving, protecting, and restoring the environment (Wenz, 2001, CWS et al. 1995, Knight and Landers 1998, Laynard and Delbrouck 1994, Lerner 1993). Stewardship can be defined as caring for the earth, assuming responsibility, and taking action to ensure that healthy ecosystems are passed on to future generations. Stewardship is being practiced across Canada by landowners, individual citizens, private companies, environmental activists, Aboriginal organizations, and volunteers. The success of stewardship initiatives depends largely on collaboration, action, local capacity, and ownership (Government of Canada 2002c). Most stewardship literature focuses on the care of and responsibility for terrestrial resources (Dallmeyer 2003). In Canada where the oceans play critical economic, social,

and environmental roles, extending an environmental ethic to the oceans is becoming increasingly important.

Oceans Management

Canada has the longest coastline in the world and the ocean is an integral part of many Canadian communities. Over the past decade Canada has moved to assume management responsibilities for an economic zone of 2.9 million square kilometres of marine waters. Almost one-quarter of the Canadian population lives in one of Canada's three coastal regions: the Atlantic, Pacific, and the Arctic. The complexities associated with these marine management responsibilities are illustrated in the numerous oceans-related conventions to which Canada is a party. They include shipping, fisheries, biodiversity, pollution, climate change, and safety of life at sea (Government of Canada 2002, DFO 1997a).

In Canada the federal government has principal authority over the oceans and their resources. There are more than twenty federal agencies and departments that have at least some responsibility for oceans management (Government of Canada 1999). In 1997, Canada passed the Oceans Act. The Act addresses economic, social, and environmental ocean objectives and sets the stage for the development of Canada's Oceans Strategy. The Oceans Strategy (2002) provides a framework for implementing Canada's marine management responsibilities. This strategy identifies the important role

that stewardship plays in fulfilling Canada's oceans management obligations (Government of Canada 2002).

Oceans Stewardship

The oceans and their resources play an important role in the history, identity, and culture of Canadians on all three coasts. The oceans continue to provide Canadians with economic, social, and environmental benefits but their fragility and vulnerability are becoming increasingly evident. Canadians are recognizing that the oceans must be effectively managed and protected so that they can continue to provide benefits today and in the future. As a result, Canadians from coast to coast to coast are becoming involved in oceans stewardship activities (DFO 2003a). When stewardship is extended to include the oceans it can be defined as caring for the land, oceans, and associated resources; assuming responsibility; and taking action so that healthy ecosystems can be passed on to future generations. Nowhere is oceans stewardship more important than in the Western Canadian Arctic where there are industrial development pressures and people who depend on the ocean resources for food.

Stewardship and Canada's Oceans Agenda in the Western Arctic

The Government of Canada has identified the importance of oceans stewardship in Canada's Oceans Strategy. The Government defines ocean stewardship as "acting responsibly to conserve the oceans and their resources for future and present generations" (Government of Canada 2002 p.20). The Oceans Strategy builds on the existing foundation of stewardship that includes community groups, volunteers, individual citizens, activists, and actions such as beachsweeps. The Government recognizes that involving Canadians in oceans stewardship is key to implementing the Oceans Strategy. It also recognizes that stewardship is primarily implemented at the local level. The Government of Canada commits to building on these initiatives and to promoting new national initiatives, education of the importance of the oceans both ecologically and economically, encouraging partnerships, and the engagement of Canadians (Government of Canada 2002). Implementing Canada's Oceans Strategy is critical in the fragile arctic environment; nowhere is this more important than the Inuvialuit Settlement Region (ISR) in the Canadian Western Arctic where people live and rely on the resources of the land and ocean for food.

The Inuvialuit and Oceans Stewardship

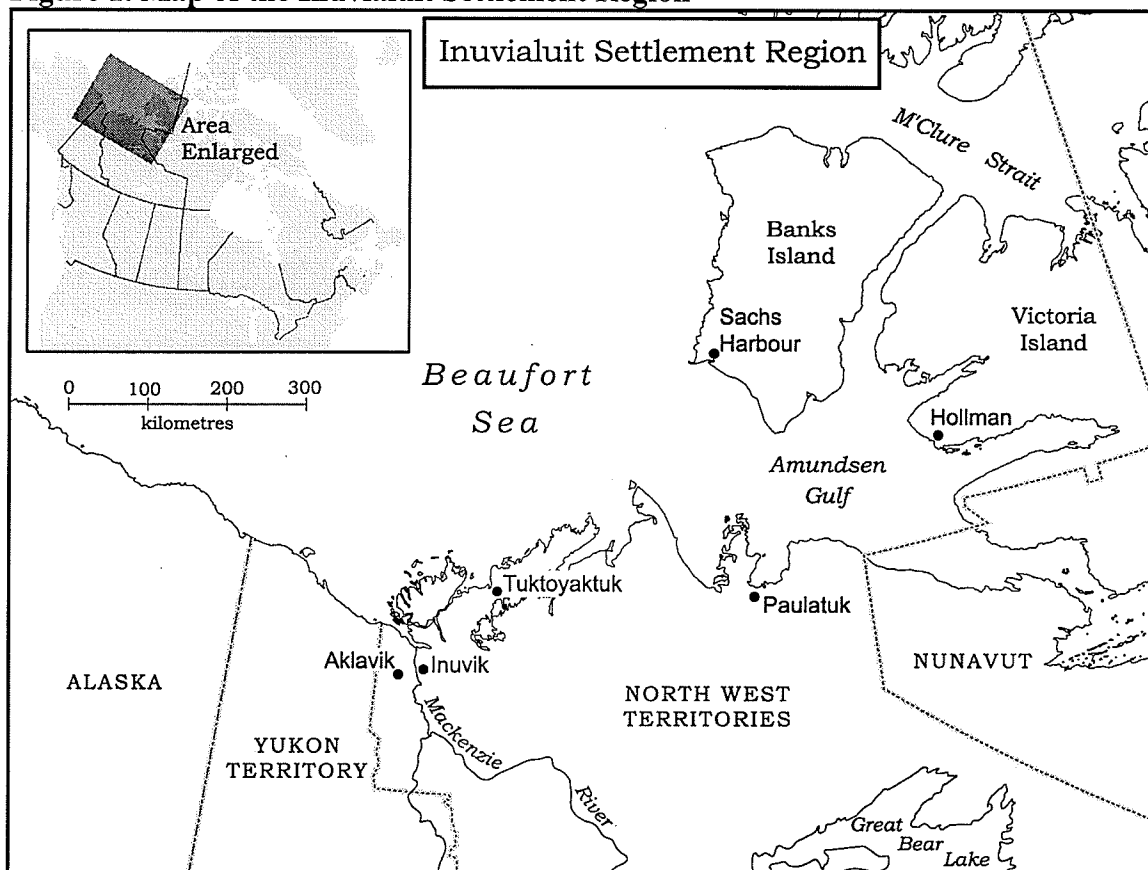
The ISR includes the northern portion of the Mackenzie Delta, the Beaufort Sea, Banks Island, and the western portion of Victoria Island and is largely

inhabited by the Inuvialuit, and unique group of Inuit. To view a map of the ISR see Figure 1. As with all Inuit, the Inuvialuit trace their ancestry back to the Thule. Traditional Inuvialuit shared a complex hunting and social system with their Thule ancestors. The traditional Inuvialuit culture proved successful and stable, as they were able to adapt to the shallow sea and river mouth environment of the ISR. Over time the Inuvialuit people have experienced change including the arrival of European whalers and disease, and the eastward migration of Alaska Inupiat that resulted in a merging of cultures forming the modern day Inuvialuit. The modern day Inuvialuit are relatively recent in origin, as is their name Inuvialuit, meaning 'the real people'. The Inuvialuit were formerly called 'Siglit' or 'Chiglit' (Alunik et al. 2003). The ISR is also home to a significant population of Gwich'in First Nations people in Aklavik and Inuvik as well as a substantial non-native population in Inuvik.

The ISR contains six small communities that offer few employment and business opportunities. The traditional economy of the ISR includes marine subsistence hunting and fishing. The Inuvialuit have for centuries harvested a variety of whales, seals, and marine fish for food. There are substantial benefits associated with the sharing of food, retaining long-standing cultural practices and integrating young people into work roles and the community including the reduced need for a cash income. The public sector economy is important in the ISR as government (Inuvialuit, Territorial, and Federal) provides the majority of employment in the ISR. The private sector cash economy includes marine shipping, marine related arts and crafts, marine related tourism, research, and significant offshore oil and gas potential (GSGislason 2003, IRC 2003). Subsistence

harvesting is still practiced in all the ISR communities, but is strongest in the smaller communities that have very few employment opportunities (Ayles and Snow 2002, IRC 2003). The ocean resources are an integral part of the Inuvialuit lifestyle and culture. The Inuvialuit harvest over 100 species of fish, mammals, and birds. Forty of these species are harvested regularly providing 99% of country food, eighteen of which are marine species including beluga whales, ringed seals, polar bears, sea birds, and anadromous fish (Usher 2002). (See Figure 2).

Figure 1. Map of the Inuvialuit Settlement Region



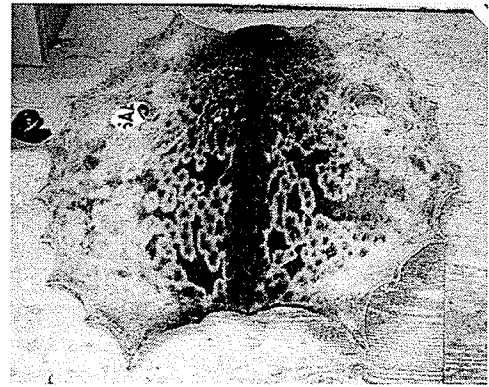
Source: DFO

Despite the changing and merging of cultures the Inuit of the Western Canadian Arctic, including modern day Inuvialuit, have continuously been stewards of the ocean. The Inuvialuit have tried to maintain a balance between resource use and preservation based upon use, traditional knowledge, and their respect for the environment (Fast et al.2001). Traditional ecological knowledge (TEK) reflects the Inuvialuit connection with the land and ocean, as well as the relationship that exists between the land and ocean, resources, and culture. The Inuvialuit have developed a personal knowledge of their environment over time through their observations and experiences travelling on the land and ocean. Much knowledge has been passed down over time from one generation to the next (ITK 2003). The deeply held connection that many Inuvialuit have to the land and ocean make them particularly concerned with protecting and preserving the natural environment so that it remains healthy for future generations (NRTEE 2001). The relationship that many Inuvialuit have with the land and ocean shapes their concerns, interests, and instils a value of respect and caring for the earth (Winn 1991). The Inuvialuit's subsistence use of wildlife promotes stewardship by creating a constituency among resource users that value conservation in balance with other land and ocean uses such as industrial development (Usher 2002).

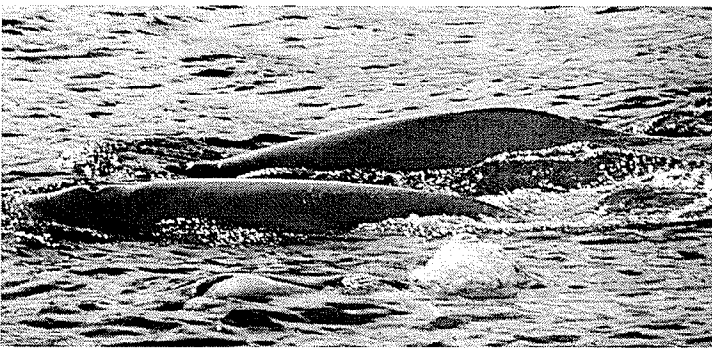
Figure 2. Marine Species Harvested



A) Harvested seals



B) Seal skin



C) Beluga whales



D) Muktuk



E) Broad Whitefish



F) Dry fish

The Inuvialuit Final Agreement

The ISR is governed by the Inuvialuit Final Agreement (IFA), which is a comprehensive land claim agreement entered into by the Inuvialuit and the Government of Canada. The IFA was completed and signed in 1984. Land claim agreements are designed to recognize Aboriginal interests in land, subsurface rights, and renewable resources throughout the claims area. Land claim agreements also affirm Aboriginal participation in the management of renewable resources (Elias 1995, Muir 1994). Comprehensive land claim agreements are powerful because they are protected by Section 35 of the Canadian Constitution.

The IFA transferred all of the land to the federal government and left the Inuvialuit with approximately 35,000 square miles of land within the ISR (Elias 1995, Muir 1994, Government of Canada 1984). This agreement recognizes Inuvialuit interest to land, subsurface rights, and renewable resources in the Inuvialuit traditional territory (Notzke 1995). The IFA outlines specific rights of the Inuvialuit to land; monetary compensation; and participation in resource development, harvesting, and management (Notzke 1995). “The basic goals by the Inuvialuit and recognized by Canada in concluding this Agreement are to:

- a) Preserve Inuvialuit cultural identity and values within a changing northern society;
- b) Enable Inuvialuit to be equal and meaningful participants in the northern and national economy and society; and

- c) Protect and preserve the Arctic wildlife, environment, and productivity” (Government of Canada 1984 p.1).

In order to implement Inuvialuit rights related to renewable resources co-management bodies were institutionalized in the IFA to address issues related to environmental impact assessment, wildlife management, and fisheries management (Elais 1995). These co-management bodies include: the Wildlife Management Advisory Council – North Slope (WMAC-NS), the Wildlife Management Advisory Council – N.W.T. (WMAC –NWT), the Fisheries Joint Management Committee (FJMC), the Environmental Impacts Screening Committee (EISC), and the Environmental Impact Review Board (EIRB) (Government of Canada 1997).

The IFA outlines the roles, powers, and responsibilities of the co-management bodies in renewable resource management (Berkes et al. 2001).

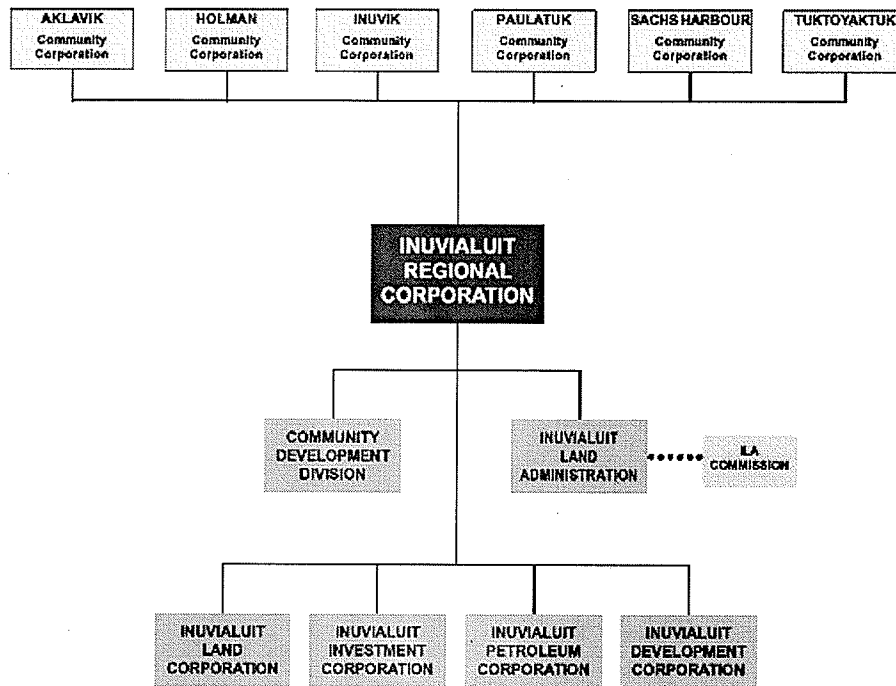
Under the IFA the Federal Government is permitted to own and manage the ocean and ocean resources in the ISR. As a result, the ocean is subject to two administrative structures: those created by the IFA and those created by legislation (Elias 1995, Muir 1994). The Department of Fisheries and Oceans (DFO) and Indian and Northern Affairs Canada (INAC) are the lead federal government agencies with marine management jurisdiction in the ISR. The Fisheries Joint Management Committee (FJMC), as designated in the IFA, is a co-management body that has a marine related mandate. The Beaufort Sea Integrated Management Planning Initiative Working Group (BSIMPI) is a co-management body that has the lead role in implementing Canada’s Oceans Strategy in the ISR. During its first year of operation the BSIMPI Working Group recognized the

need to involve Inuvialuit youth in their work. BSIMPI realized that their long-term obligation for the careful and responsible management of ocean resources in the ISR would depend on the active involvement of the younger generation. Community leaders and Inuvialuit elders in the ISR share this realization with BSIMPI.

The Inuvialuit Government

The umbrella governing body of the Inuvialuit people is the Inuvialuit Regional Corporation (IRC). The IRC was established to receive the lands and financial compensation, and to administer the benefits of the IFA. The mandate of the IRC is to “continually improve the economic, social and cultural well-being of the Inuvialuit through the implementation of the IFA and all other available means” (IRC 2003). To view the IRC corporate structure see Figure 3. The Inuvialuit people directly control the IRC and its subsidiaries through a democratic process. The IRC invests in its subsidiaries, and represents the Inuvialuit collective political interests (IRC 2003).

Figure 3. IRC Corporate Structure



Source: IRC 2003.

The Communities of the Inuvialuit Settlement Region

There are six communities in the ISR: Aklavik, Inuvik, Tuktoyaktuk, Sachs Harbour, Holman, and Paulatuk. See Figure 4. The communities of the ISR are small in size with few employment and entrepreneurial opportunities (Ayles and Snow 2002, Hamilton 1994). The population of the Region is 5630, with 3280 Inuvialuit (See Table 1)(IRC pers comm. 2002). Subsistence harvesting is present in all of the communities, but is strongest in the smaller communities (Carpenter et al. 1991). Of the six communities, four are coastal and two are located inland.

Table 1: Inuvialuit Settlement Region Community population numbers

Community	Total population	Inuvialuit population	Inuvialuit under age of 29	
			Population	% of Inuvialuit population
Aklavik	700	350	179	51%
Inuvik	3200	1200	624	52%
Paulatuk	270	270	154	57%
Sachs Harbour	120	120	65	54%
Holman	400	400	212	53%
Tuktoyaktuk	940	940	526	56%
Total	5630	3280	1760	54%

Source: IRC pers. Comm. 2002

The community of Aklavik or Aklarvik, meaning the “place where one gets grizzly bear”, is located in the Mackenzie Delta. Aklavik is the most westerly community in the Northwest Territories. The community was the regional centre prior to Inuvik being built. Wage employment in the community is largely associated with the local government and the oil and gas industry (IRC 2003, Ayles and Snow 2002).

The community of Holman or Uluksaqtuuq, meaning the “place where one finds materials to make ulus”, is located on the west coast of Victoria Island. Holman is the most easterly community in the ISR. Holman is a very traditional community known for its print making artwork. Seal hunting played a large role in the economy of Holman until anti-sealing movement caused a downturn in the market. This community has very close ties with the central arctic (IRC 2003, Ayles and Snow 2002).

The community of Inuvik or Inuuviik, meaning, “living place”, is located on the western branch of the Mackenzie River. Inuvik is the largest community in the ISR and serves as the economic and government centre. The community was built in the 1940s as

a regional centre to replace Aklavik. This community has the vast majority of wage-employment opportunities in the ISR. Inuvik is home to Aurora College and the Aurora Research Institute. Subsistence hunting, fishing, and harvesting continue to play an important role in community life, even though this community has the majority of wage and government job opportunities (IRC 2003, Ayles and Snow 2002).

The community of Paulatuk or Paulatuq, meaning the “place where one finds the soot of coal”, is located at the mouth of the Hornaday River. The main activity in this community is subsistence harvesting. Paulatuk is also the gateway to the Tutuk Nogat National Park and has become a focus of mineral exploration (IRC 2003, Ayles and Snow 2002).

The community of Sachs Harbour or Ikaahuk, meaning the “place where one crosses”, is located on Banks Island and is the smallest community in the ISR. Sachs Harbour is home to the headquarters of Aklavik National Park. The only non-governmental employment available in the community is through tourism, sport hunts, and the commercial harvest of Muskoxen (IRC 2003, Ayles and Snow 2002).

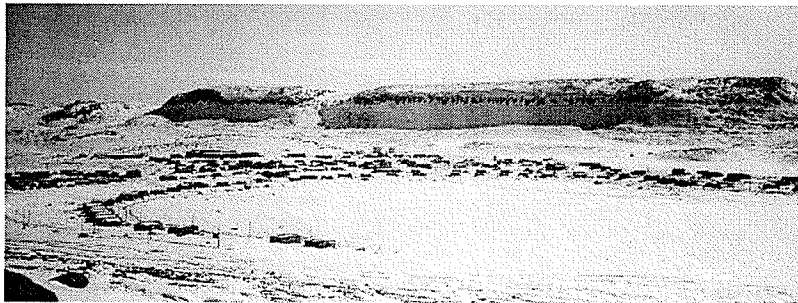
Tuktoyaktuk or Tukuuyaqtuuk meaning the “place resembling caribou”, is located on the coast of the Arctic Ocean. Tuktoyaktuk contains the only deepwater port in the region and the area is the focus of on and offshore oil and gas exploration. Tuktoyaktuk is the major Inuvialuit community in the ISR. In the 1980s, Tuktoyaktuk was the centre of oil and gas development activities in the Western Arctic and remains of interest to the petroleum industry today. Tuktoyaktuk is a coastal community that practices traditional

whaling but its subsistence harvesting activities extend inland into the Mackenzie Delta (IRC 2003, Ayles and Snow 2002).

Figure 4. Communities of the ISR



A) Hamlet of Aklavik



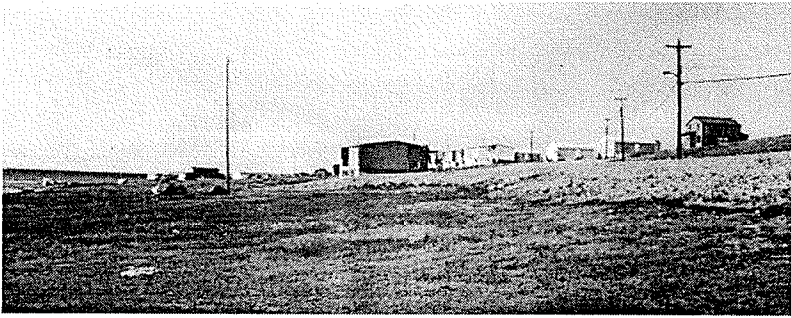
B) Hamlet of Holman



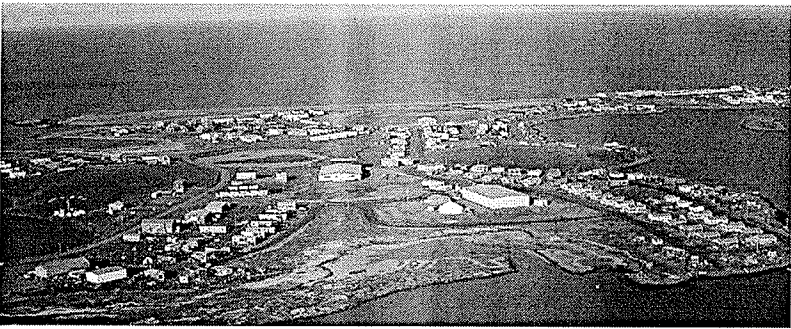
C) Town of Inuvik



D) Hamlet of Paulatuk



E) Hamlet of Sachs Harbour



F) Hamlet of Tuktoyaktuk

The Critical Role of Inuvialuit Youth in Oceans Stewardship

Inuvialuit youth involvement in oceans stewardship is critical for a number of reasons including; stewardship activities tend to be place specific, cultural continuity,

they are going to inherit the earth and management responsibilities, and the benefits of participating in oceans stewardship activities:

It is important for youth to get involved in oceans stewardship activities in their local community and region because according to Beavis (1994) stewardship tends to be place specific. Therefore, it is local people who must take action to ensure the preservation, protection, and responsible development of natural resources and the environment. Local youth are the most likely to be concerned and motivated to action if there is a perceived problem or issues relating to the land and ocean environment. This is especially important in the ISR due to the oil and gas development and potential mining development that is going to take place. The local people of the ISR should play an important role in this change.

Youth should participate in oceans stewardship because the land and ocean are integral components of the Inuvialuit lifestyle and culture. The relationship that many Inuvialuit people have with the land and ocean shapes their concerns, interests, and instils a value of respect and caring for the earth (Winn 1991). Many elders and community members are concerned that youth are not learning enough traditional knowledge and skills. According to the FJMC (2000) youth involvement in stewardship is an investment into the future of youth and the conservation of the natural resources that will generate the preservation of the Inuvialuit culture and lifestyle. Stewardship is also important because their ability to use and maintain ocean resources for food and to sustain their cultural values and traditions will directly affect their quality of life (Fast et al. 2001).

Youth are going to inherit the earth and its resources and oceans stewardship activities can serve as a training ground to teach youth not only traditional skills and knowledge but also scientific knowledge and skills such as ecology, sampling, and monitoring. Participating in oceans stewardship will help youth develop a sense of connection to the environment and an ethic of responsibility for ensuring its continued health. Youth must develop a sense of responsibility to ensure that the land and ocean remain healthy for future generations, but it should be recognized that they also have contributions to make today. Getting involved in oceans stewardship activities will provide youth with hands-on experiences to learn about the natural environment from both traditional and western scientific perspectives. Participating in oceans stewardship activities when they are young will help ensure that youth have the necessary knowledge and skills to take on leadership roles in oceans stewardship as adults. Involvement in oceans stewardship activities will help youth learn about the ecology of the environment, traditional knowledge, and it will increase their awareness of the of the governance functions of co-management bodies in the ISR. When youth take over management responsibilities this knowledge will allow them to make better decisions about licensing applications, environmental assessments etc., and they will also be able to influence research conducted in the ISR.

Purpose and Objectives

Inuvialuit elders and community leaders are concerned regarding the lack of interest and necessary skills being acquired by the youth to take leadership roles in oceans stewardship and management in the ISR communities (Fast pers comm. Oct 4, 2002). However, there are also concerns that as youth acquire a higher education in the southern educational institutions that they will not return to the North due to greater opportunities elsewhere. As a result, the BSIMPI Working Group is seeking ways to engage Inuvialuit youth in the stewardship of ocean resources. The objectives of this intention are to have northern youth:

- Develop skills that enable them to take leadership roles in the community; and
- Want to stay and work in the North once they acquire the necessary skills and training.

Some steps have been taken to engage Inuvialuit youth -“career days, summer programs, curriculum development. These are just some of the initiatives that co-management bodies are using to engage the young people of the region” (FJMC 1999 p.16).

An important element of the approved three-year work plan for the BSIMPI Working Group is developing a strategy to involve young people in oceans stewardship. While the need to engage youth in oceans stewardship issues has been identified and some steps taken, these efforts are not very well defined or integrated. As such, the

purpose of this research is to establish the important role of youth in oceans stewardship and to develop a strategy that will foster increased Inuvialuit youth interest, and participation in oceans stewardship activities in the ISR. The specific research objectives are to:

1. Assess the trends related to the level of Inuvialuit youth participation in oceans stewardship activities;
2. Evaluate reasons for the trends of participation in oceans stewardship activities;
3. Identify components of a successful strategy to engage Inuvialuit youth in oceans stewardship;
4. Examine youth programs outside of the ISR related to environmental stewardship to identify principles and techniques to encourage youth involvement; and
5. Make recommendations for a strategy to engage Inuvialuit youth in oceans stewardship activities in the ISR.

Scope

The majority of the field research was conducted in the six ISR communities. Inuvialuit elders, parents, youth, as well as local resource managers and past and present teachers participated in the research. The scope of study also included Youth Environmental Stewardship Program Administrators from across Canada.

The study explored perceptions, motivations, and attitudes of ISR community members, especially youth, towards youth involvement in oceans stewardship as well as educational and training requirements for meaningful participation. The study focused on Inuvialuit youth to ensure their participation in the development of a strategy to engage youth in oceans stewardship. The study was conducted from March 2002 to September 2003.

Project Management

This research was conducted by the researcher Michelle Schlag as a Masters Thesis at the Natural Resources Institute, Faculty of Environment, University of Manitoba. The research was conducted under the supervision of Professor Thomas Henley (NRI), Dr. John Sinclair (NRI), Academic Advisors, and in consultation with Christopher Trott (Native Studies), Dr. Helen Fast (DFO Winnipeg), and Mary Anne Francey, an Inuvialuit youth beneficiary.

Document Organization

This chapter introduced the study area and the research project. Chapter Two introduces the concepts of oceans governance in Canada, co-management, traditional ecological knowledge, stewardship, education and training, and strategies for youth engagement. Chapter Three explains the research methodologies used to conduct the

study. Chapter Four reports on the research findings of the study and their implications for youth. Chapter Five is a proposed strategy for engaging youth in oceans stewardship. Chapter Six contains a summary of the research, conclusions, and recommendations of the project. The appendices include the scientific research licences; ethics review board approval; focus group consent form, confidentiality form, and questions; interview consent forms and schedules; as well as the summary document that was distributed to the public for verification purposes.

CHAPTER TWO – STEWARDSHIP, OCEANS GOVERNANCE, EDUCATION AND TRAINING, AND YOUTH ENGAGEMENT

A literature review was conducted prior to field research to establish the conceptual framework and underpinnings of the project. The literature review also helped with the development of understanding of similar past projects and appropriate research methodologies. The literature review included the collection of relevant literature (both grey and published), analysis, and a synthesis of the literature.

In this chapter I look at stewardship, oceans governance in the ISR, co-management, TEK, education in training in Aboriginal and northern communities, and strategies to engage Aboriginal youth in the economy and environmental industry. Literature regarding Inuvialuit culture, social conditions, and land claim agreements was also reviewed to provide context and background information to the researcher. Through reviewing literature on these subjects I attempt to enhance the quality of this research. The literature review sets the ideological framework and policy context of oceans stewardship in Canada. The literature review also sets the stage for participants' comments and provides the necessary background for discussion in Chapter Four.

Stewardship

The term stewardship has become increasingly popular over the past decade and is used to describe a variety of activities in a number of different sectors. It is increasingly being used by resource industries, government agencies, and community activities to describe their philosophy of resource use (CAPP 2003, Government of Canada 2002, Biodiversity Convention Office 2001, Environment Canada 1996, Beavis 1994, Laynard and Delbrouck 1994). There are a number of different definitions of stewardship, however they consistently include an ethic of caring for the earth and taking responsibility to preserve, protect, and restore the environment. Some perspectives include a responsibility for protecting the country's economic and social fabric in addition to the environment (CAPP 2003). The term stewardship is commonly understood to include an obligation to ensure a healthy environment for present and future generations (Wenz 2001, Knight and Landers 1998, CWS et al. 1995, Laynard and Delbrouck 1994, Lerner 1993). Therefore stewardship can be defined as caring for the earth, assuming responsibility, and taking action to ensure that healthy ecosystems are passed on to future generations. The Government of Canada defines oceans stewardship as "acting responsibly to conserve the oceans and their resources for the present and future generations" (2002 p.v1). Stewardship is important for protecting, preserving, and restoring the environment. Perhaps more importantly, participating in stewardship activities acts as an "ethical, emotional, and political training ground" (Lerner 1993 p.6). Stewardship is based upon reciprocity and caring for the earth. It tends to be place

specific – the people living there share a set of experiences and interests of the natural environment. Stewardship requires the recognition that we are caretakers of the natural environment (Beavis 1994). Stewardship activities contribute to sustainability by linking the environment, economy, and community well-being. Stewardship is an appropriate term to express the integration of a respect for nature, the protection and maintenance of ecological integrity, and consideration of future generations (Lerner 1993).

Stewardship Activities and Participants

Stewardship activities commonly include advocacy, conservation, education, monitoring, research, fundraising, and co-operation between different stakeholders and interest groups. In many Aboriginal communities co-management bodies play a key role in stewardship as they perform a number of the above activities including advocacy, monitoring, research, and co-operation between stakeholders. Individuals who become involved in stewardship activities tend to be humanistic intellectuals such as teachers, social workers, and other service professionals, and students (Lerner 1993). Lerner describes these people as resourceful, high minded, self-sacrificing, and socially conscious individuals. People involved in stewardship tend to be well educated and are aware of environmental issues. Education is important to stewardship because participants must be able to understand complex issues, critically analyze problems, develop solutions, and consider the consequences of actions taken (Manitoba Education and Training 2000). People who are involved in stewardship must have an understanding

of the issues and the capacity to participate stewardship activities. People become involved in stewardship activities because they have concerns about an issue and often believe that government and others will not be able to adequately address the issue(s). In many cases individuals and community groups can be more effective at addressing issues than government since they can respond quickly to circumstances and are independent of constraints characteristically imposed on government agencies (IWCO 1998, Lerner 1993).

Benefits of Participating in Stewardship

People who become involved in stewardship activities enjoy a number of benefits. These benefits include learning more about their natural environment, meeting other people with similar interest and values, having fun, and taking pride in having contributed to the well-being of their community and natural environment (Lerner 1993). Once people become involved in stewardship they usually stay involved. Reasons for their continued involvement include shared feelings of solidarity, strength, camaraderie, and employment associated with their efforts. The communities also benefit directly from their citizen's participation in stewardship and indirectly by growing capacity and self-reliance (CWS et al. 1995, Lerner 1995). Youth involvement in stewardship groups and activities is important if they are to have longevity and continue into the future (Laynard and Delbrouck 1994).

Youth Participation in Stewardship

Currently, there are opportunities for youth to participate in environmental programs across Canada. Youth are increasingly seen as having a unique perspective on environmental and resource issues and want to participate in decisions that will affect their lives (Caputo 2000). Youth have proven their motivation and ability to develop creative solutions in environmental programs across Canada (DFAIT 1997). Youth can offer fresh viewpoints, flexibility, and the ability to view problems and issues from different perspectives (DFAIT1997).

Youth motivation to participate in environmental stewardship activities largely depends upon the issues and opportunities available to them to do something about their concerns (Caputo 2000). Youth can be motivated to become interested and involved in environmental issues by using their natural interests and skills (Mason 1991). Youth can also be motivated through being outdoors and experiencing nature first-hand. Allowing children and youth to experience nature first hand is crucial to establishing an environmental ethic. Children and youth must gain an understanding and appreciation of the interconnectedness of the natural world in order to become responsible and caring stewards of the environmental (Mason 1991). Youth want to be encouraged to participate in sustainable development activities. They also want to be recognized and rewarded for their efforts through additional opportunities, professional development, and financial assistance for research and education (Manitoba Roundtable on Sustainable

Development 2001). Youth also feel that it is important that they are treated with respect by adults and that their viewpoints are heard (Caputo 2000).

Aboriginal Peoples and Stewardship

Booth and Jacobs (2001) describe Aboriginal people as the ideal ecologists because of their close relationship with the natural environment. Aboriginal people typically adapted their needs to the capacity of their surrounding environment and have had a relationship of reciprocity and balance with other living things (Booth and Jacobs 2001). Aboriginal people are set apart from other stewards due to their use of the environment through subsistence activities (Lerner 1993). Lerner says that Aboriginal people act as stewards through their personal relationship with the land and animals, and when they use hunting, fishing, and harvesting methods, which demonstrate respect for the environment (1993). Aboriginal people were able to harvest animals and fish without depleting resources by using specialized equipment (i.e. Chisasibi Cree used certain gill net size to catch specific age and species of fish), by having control over which species are harvested, when they are harvested, and what size are harvested (Lerner 1993).

Another key component of Aboriginal stewardship is TEK that has been passed down from one generation to the next. This TEK plays a large role in shaping Aboriginal peoples values and instilling a stewardship ethic. Many Aboriginal people have maintained their intense spiritual connection to the land; this relationship involves stewardship and continuity (RCAP 1996). Aboriginal people have traditionally

demonstrated the qualities of environmental stewards in their intimate knowledge and interaction with the natural environment (Manitoba Education and Training 2000). Respect for all life forms is paramount in Aboriginal cultures. When the earth is harmed everyone including humans suffers (IISD 2002). This is demonstrated in the Inuvialuit belief “that the future well-being of the land and its wildlife are inseparable from their own” (Carpenter et. al 1991 p.2). Many Inuvialuit people participate in stewardship in the ISR and use TEK to influence resource management decisions through co-management bodies.

Oceans Governance in the Inuvialuit Settlement Region

In the ISR marine and freshwater resources are managed through two administrative structures: those created by federal legislation and those created through the IFA (Muir 1994). There are four lead groups with ocean governance responsibilities and obligation in the ISR: DFO and INAC are the lead federal agencies with oceans management responsibilities in the ISR; The FJMC is a co-management body created through the IFA that has an oceans related mandate; and the BSIMPI Working Group a co-management body created to implement the policy objectives of Canada’s Oceans Act and Oceans Strategy in the Western Arctic.

All four of these departments and co-management bodies are actively involved in oceans stewardship in the ISR. The DFO and INAC are both committed to implementing Canada’s Oceans Strategy and therefore stewardship. Both are members of BSIMPI,

which is dedicated to implementing Canada's Oceans Strategy. The DFO is also committed to educating people about the importance of the oceans and providing opportunities for people to participate in oceans stewardship through activities such as Oceans Day and work placements for the FJMC Student Mentoring Program. INAC is also committed to stewardship through its obligation of maintaining ecological integrity in the North. The FJMC is involved in oceans stewardship through initiatives such as community conservation plans, beluga management plans, and the Student Mentoring Program.

It is important to recognize that both DFO and INAC may have a conflict of interest in the administration of natural resources. Both of these agencies are responsible for protecting natural resources and Aboriginal interests in natural resources while at the same time they are mandated to promote the commercial use of those natural resources. INAC provides permits for oil and gas exploration within the ISR while concurrently having a fiduciary responsibility to Aboriginal people residing in the area. DFO, often INAC's partner, is mandated to ensure resource conservation and stewardship. Within a federally managed regulatory process these two mandates must be reconciled. It is critical to understand that the IFA is recognized by the Canadian Constitution and therefore gives the Inuvialuit rights to intervene against Canada's broad national interests.

Department of Fisheries and Oceans

The DFO is the lead federal agency responsible for the co-ordination of oceans programs and policies (Government of Canada 1997). The DFO has oceans governance jurisdiction through the Oceans Act, which became law in 1997. The Act is national in scope and is based upon the principles of integrated management, sustainable development, and the precautionary approach. The objectives of the Oceans Act are to establish a framework for oceans resource management and marine environmental protection in Canada. This was achieved by defining the ocean areas to be managed and protected, establishing guiding principles, consolidating and defining oceans programs to increase the efficiency and effectiveness of oceans conservation and protection initiatives (Government of Canada 1997). The Oceans Act also called for the development of a national oceans strategy to clearly define the federal policy on estuarine coastal and marine ecosystem management (Government of Canada 1997c).

The Oceans Strategy was completed in 2002. The Strategy recognizes the close connection that many First Nations, Inuit and other Aboriginal groups have with the ocean environment and provides a framework for their involvement in oceans management. The Strategy also recognizes the important contribution that stewardship activities in Canada make and calls for the support of current initiatives as well as the development of new initiatives (Government of Canada 2002). The DFO plays an integral role in implementing Canada's Oceans Strategy and therefore stewardship in the ISR.

Indian and Northern Affairs Canada

INAC has the lead federal role in the North and northern development through its Northern Affairs Program (NAP). INAC influences activities and developments in the oceans sector through a range programs and services it provides such as northern land claim settlements, devolution of responsibility to the territorial government, and sustainable development. Despite the impact of INAC's activities less than 1% of the departments' expenditures are spent directly on northern oceans related activities. Through the NAP, INAC has management obligations related to water, hydrocarbon, mineral, and other resources in the North. In addition, INAC has obligations related to offshore resources, maintaining the ecological integrity of the North, and for the coordination of federal circumpolar concerns. INAC is also responsible for the implementation of the Arctic Environmental Protection Strategy, an agreement between circumpolar countries to reduce pollution entering the Arctic Ocean and regulates coastal and non-shipping offshore activities. Another significant role that INAC plays in the Northwest Territories and the Yukon is representing the Government of Canada in the negotiation of comprehensive land claim agreements (Government of Canada 1997).

Fisheries Joint Management Committee

The FJMC has the responsibility through the IFA for the management of fish and marine mammals in the ISR. The FJMC has the responsibility to assist Canada and the

Inuvialuit to administer the rights and obligations relating to fisheries under the IFA. The committee consists of four members, two appointed by the Inuvialuit Game Council (IGC), two appointed by the Government of Canada, plus a Chairman appointed by the four members (Government of Canada 1984). The FJMC has developed a public registration system for fishing in the ISR, restricts public rights to access, and allocates subsistence quotas for fish and marine mammals among communities. The FJMC also provides the Minister of Fisheries and Oceans with recommendations regarding subsistence quotas, Inuvialuit commercial fishing, allocation of preferential fishing licences, regulations regarding commercial and sport fishing, and the identification of waters where fishing may be prohibited. The FJMC also provides the Minister with advice regarding regulations, research policies, and administration of fisheries generally affecting the ISR, and on any new international agreements being developed that may impact upon ISR fisheries (Government of Canada 1984). The FJMC has the long-term goal of increasing numbers of Inuvialuit that become involved in managing the renewable and non-renewable natural resources in the ISR (FJMC 2001).

Beaufort Sea Integrated Management Planning Initiative

In 1999 the Inuvialuit Regional Corporation (IRC), the IGC, the FJMC, DFO, and the Canadian Association of Petroleum Producers (CAPP) agreed to collaborate on the development of integrated management planning for marine resources and coastal areas in the ISR. This agreement is called the Beaufort Sea Integrated Planning Initiative

(BSIMPI). The regional co-management mechanisms of the IFA enabled the development of the management process for BSIMPI (Government of Canada 2002). The management structure of BSIMPI includes a Senior Management Committee, a Working Group, and Secretariat. The Senior Management Committee provides guidance to the Working Group on initiatives related to the development of management planning processes for oceans related activities in the Beaufort Sea. The Secretariat consists of DFO staff that provides technical, communication, and administrative support to BSIMPI. The BSIMPI Working Group consists of IRC, ICG, DFO, FJMC, CAPP, and INAC. The objectives of BSIMPI are to facilitate sound decisions addressing large marine ecosystems, multiple users, and marine quality (Government of Canada 2002). This will be achieved through integrated management which is a continuous, dynamic process designed to overcome fragmentation inherent in government to make decisions for the sustainable use, development, and protection of coastal and marine areas (Cicin-Sain and Knecht 1998). Integrated management in the ISR seeks collaboration between stakeholders on developing goals, plans, and policies related to the Beaufort Sea (NRTEE 1998). During its first year of operation this co-management body realized that their long-term obligation for the careful and responsible management of ocean resources in the ISR would depend on the active involvement of the younger generation. As a result BSIMPI have identified involving youth as a key priority.

Co-Management of Wildlife and Natural Resources

The term co-management is used to describe an arrangement to share the responsibilities for resource management, conservation, and-or economic development between government and other user groups. Co-management is commonly defined as sharing decision-making power in the management of renewable resource (Cicin-Sain and Knecht 1998, Frideres 1998, NRTEE 1998, Elias 1995). The parties involved in co-management have different perspectives but share a common goal of maintaining environmental integrity (AINA 1996, Inuvialuit Joint Secretariat 1996). Co-management ensures that resource users are directly involved in resource management decisions. Co-management can also result in improved working relationships between northern and state stakeholders. This improved working relationship helps to ensure effective resource management by bringing together different parties with information about the ocean and its resources, resulting in the maximum resources available to decision-makers to address management issues (AINA 1996, Inuvialuit Joint Secretariat 1996). Co-management in relation to oceans can be defined as an arrangement between government and stakeholders to share the responsibility for oceans management and stewardship. Through an integrated management planning process co-management should strive to maintain the ecological integrity of the marine environment (NRTEE 1998). Co-management can be defined either through legislative or administrative processes (NRTEE 1998). In the Canadian North the term stewardship is often used synonymously with activities of co-management bodies.

Co-Management Through Comprehensive Land Claim Agreements

Since the 1970s co-management has become a method of resource management commonly used by Northern Aboriginal peoples because resource users are directly involved in decision-making and can ensure that appropriate decisions are made (AINA and IRRC 1996, IRC 1996). Co-management systems have been used to manage natural resources from James Bay to the Western Arctic. These systems are often created as a result of comprehensive land claim agreements. Co-management through land claim agreements involves an institutional arrangement of sharing power, responsibilities, and obligations between government and local resource users regarding the management and allocation of resources (Berkes et al. 2001, Treseder et al. 1999, NRTEE 1998). Co-management has also developed outside of land claim agreements, usually in response to a real or perceived crisis in wildlife management (Berkes et al. 2001). Co-management also usually requires the establishment of one or more committees consisting of equal government and Aboriginal representatives. Having co-management arrangements in land claim agreements ensures that Aboriginal participation in resource management is legally protected (NRTEE 1998). The Inuvialuit have been one of the pioneers of co-management as it has been in practice in the ISR for the past 19 years. In the ISR, co-management allows the Inuvialuit to play a meaningful role in resource management while being able to benefit from government management expertise (Carpenter et al. 1991).

Co-Management In the Inuvialuit Settlement Region

Co-management has been utilized in the ISR since 1984, after the signing of the IFA (Carpenter et al.1991). The co-management process in the ISR uses an ecosystem-based approach that is necessary for effective resource management and oceans stewardship (AINA 1996, Inuvialuit Joint Secretariat 1996). The natural resources co-management regime in the ISR strives to allow for traditional and industrial resource utilization of both renewable and non-renewable resources, but not one at the expense of the other (Elias 1995). Due to the importance of wildlife to the Inuvialuit people, the sustainability of wildlife has been one of the major determinants of the design of the co-management system in the ISR. Co-management has provided the Inuvialuit with opportunities to meaningfully participate in resource management and oceans stewardship while still benefiting from state expertise such as that of the DFO (Carpenter et al.1991). Co-management in the ISR strives to incorporate TEK into the decision making process. Co-management bodies try to have at least 1 Elder and 1 younger hunter ensuring that board members are holders of TEK. Co-management bodies attempt to incorporate TEK in resource management and stewardship through the input of Inuvialuit members. The future of co-management in the ISR rests on the wisdom and experience of elders and the ideas and experimentation of youth (FJMC et al. 1999). Co-management bodies in the ISR are directly involved in stewardship through their incorporation of Inuvialuit values and TEK into decision-making. The FJMC is directly

involved in oceans stewardship through its role in the development and implementation of the Beluga Management Plan as well as the Student Mentoring Program.

Traditional Ecological Knowledge

TEK is collective knowledge and values that have been acquired over time through experiences, observations from the land and ocean, spiritual teachings, and is passed down through the generations (ITK 2003, Berkes et al. 2001, McDonald et al.1997). TEK comprehends how living things interact with the environment and is based on the safe and sustainable use of renewable resources (McDonald et al.1997). TEK is held largely by elders who are responsible for passing it down through the generations by going out on the land and ocean and teaching youth. Elders view this passing on of TEK as critical to the future wise use and stewardship of community resources. By spending time on the land and ocean youth develop an ethic of respect and a sense of connection to the natural environment. They also develop a strong sense of place through experiencing the land and ocean on a daily basis.

Inuvialuit Traditional Ecological Knowledge

Ocean resources are an integral part of the Inuvialuit lifestyle and culture. The Inuvialuit “have sought and maintained a balance between resource use and species preservation based on experience, traditional knowledge, and respect” (Fast et al. 2001

p.184). TEK underpins the oceans stewardship role of the Inuvialuit. TEK reflects the Inuvialuit connection to the land and ocean and the relationship that exists between the land and ocean, resources, and culture (McDonald et al. 1997). This knowledge has been developed over time through the personal observations and the experiences of the Inuvialuit people as they travelled on the land and ocean. Much knowledge has been passed down from generation to generation through informal education i.e. learning from your family and elders out on the land and ocean (ITK 2003). The deeply held connection that many Inuvialuit have to the land and ocean make them particularly concerned with protecting and preserving the natural environment so that it remains healthy for future generations (NRTEE 2001).

Dichotomy of Formal and Traditional Education in the North

There is an inherent contradiction between traditional and formal education. It is important to recognize that if youth are formally educated they will likely have little in common with their elders and/or parents who have a traditional value set. It is very difficult for youth to obtain both a formal and a traditional education. If youth stay in school they spend less time on the land. If youth spend extended periods of time on the land required to learn traditional knowledge and skills they are unlikely to be able to continue or succeed in the formal school system.

We all must recognize the importance of sustaining the environment for future generations. The formal education system in the North as in the South attempts to retain

links to the land (i.e. through field trips to nature centres, parks etc.). The difference between the North and South is the cultural dimension in the North that is inherently different than in the South. The difference is that people in the South are urban based and tend to have a weak or no connection to the land. In contrast the Inuvialuit have largely retained a close connection to the land because of its' continual use for food and cultural activities. Providing youth with the opportunity to learn traditional knowledge is important to cultural survival. However, it is important to recognize that cultural survival does not mean maintaining a way of life frozen at a particular time, but rather having control and continuity in an ever-changing globalized world (Dean 2004). "Indigenous peoples' participation in education is an essential part to transforming abstract policy formations into long awaited results that make a real difference in peoples lives" (Dean 2004 p.15). This dichotomy between formal and traditional education raises a question of balance and focus. The land has a different level of importance among the Inuvialuit because it is tied with cultural identity. Any strategy that is developed to address Inuvialuit youth and includes traditional and formal education must consider the broad ethical questions associated.

Formal Education and Training in the North

In order to participate in environmental stewardship activities (both traditional and formal) youth require a particular set of values. These values include: self respect; concern about local, national, and international issues; concern about the future; respect

for the environment; willingness to share; and the ability to work cooperatively with others (Manitoba Education and Training 2000). In order for youth to be stewards of the natural environment they need to learn to critically analyze problems, develop creative solutions to problems, and to consider the consequences of their decisions on future generations (Manitoba Education and Training 2000). According to Manitoba Education and Training youth require a foundation of skills including literacy and communication, problem solving, human relations, and the ability to effectively use modern technology (2000). These skills can be obtained through formal education and training. Education and training facilities have begun only recently to support Aboriginal people as students. This has resulted in Aboriginal youth reaching adulthood without the skills, knowledge, or credentials to compete for jobs or take positions of responsibility in their communities (RCAP 1996). It is a major challenge for educators to provide youth with the required skills to succeed in both the traditional and modern economy.

Education Attainment Levels

Schools lay the foundation for lifelong education, which provides youth with the greatest opportunity for a satisfying and productive life (Malcom and Wilman 1987). Aboriginal people in Canada have a significantly lower education attainment rate at 20 percent compared to 70 percent of non-aboriginal Canadians (City of Calgary 2002). The northern education system is plagued with problems; the drop-out rates of school in the NWT begins in the seventh grade. In 1999, the high school graduation rate in the ISR

was only 23 percent, which is below Nunavut at 28 percent, and rural Northwest Territories at 98 percent (“Falling Far” 2002). Low educational attainment levels have a tremendous impact on youth and their communities because it is directly linked to quality of life through employment opportunities, financial well-being, and economic self-sufficiency (HRDC and GNWT 1995). Another problem plaguing northern schools is the quality of education. The ISR has lower basic education levels than those of schools in southern Canada. This is evident because most students must upgrade their basic education if they are to fulfil their aspiration of acquiring professional, managerial, and leadership positions (Vodden 2001). Education levels in the ISR have not significantly improved between 1984 and 1999, which suggests that the actual capacity of students is still relatively low (Vodden 2001). Not only are low educational attainment levels a key barrier for achieving the economic objectives of the IFA since this is essential to achieving national participation and integration, but it also directly affects the ability of youth to effectively participate in oceans stewardship activities (Vodden 2001).

Youth drop out of school for variety of reasons including lack of family and institutional (the school system) support, substance abuse, poverty, and socio-economic factors (Condon 1987). Students also become increasingly frustrated and fall behind as a result of poor attendance and/or inadequate motivation. Often this frustration manifests itself in abandonment of school (Condon 1987). Further, northern students must travel further than other Canadian students to attend college and university and are often not prepared for attending schools away from their close-knit families (KPMG 1992). Despite these difficulties Aboriginal youth are seeking out the tools and support to

complete their formal education, which includes high quality teachers, culturally relevant education, as well as the support and encouragement of family and local community members (City of Calgary 2002). Motivating youth to complete their formal education is of great importance because educational attainment is intrinsically linked to the economic future of Aboriginal communities (RCAP1996). Formal educational attainment is important to oceans stewardship because participants require the capacity to understand complex environmental issues, critically analyze problems, and find solutions to these problems.

The Role of the Formal Education System in Aboriginal Communities

The school system is seen by many Aboriginal people as assimilationist as it is designed to make Inuit and First Nations peoples capable of earning a living in an industrial society (Lindberg 2004, Hamilton 1994). Aboriginal peoples want schools to provide their children with a culturally relevant education that includes their native languages and traditions. This will assist with continuation of culture and help their children develop as citizens of Aboriginal nations (RCAP 1996). The North is experiencing rapid change and the local youth must be well educated to effectively deal with economic and political changes (Condon 1987). A flexible formal education system that is able to adapt to changing circumstances (i.e. increasing development) of the circumpolar region is important. A flexible formal education system would facilitate

the learning of necessary attitudes, skills, and knowledge to participate effectively in both the subsistence and wage economies (Malcom and Wilman 1987).

It is also important to recognize that education and learning does not only take place in schools – parental and community involvement is also essential. Community organizations and parents should share their experiences and instill values of education in youth. Parental and community support of the education system is paramount if youth are going to succeed in getting an education. Without parental and community support culturally relevant curriculum becomes irrelevant because it will not be able to achieve success (Malcom and Wilman 1987).

Educational Supports in the ISR

The Inuvialuit Education Foundation (IEF), a non-profit organization that was formed in 1990, provides educational supports to Inuvialuit beneficiaries. The IEF strives to increase the number of Inuvialuit beneficiaries accessing and completing their education. The IEF programs focus on both formal and informal education. The IEF provides beneficiaries with five types of supports including tutoring, a student loan program, scholarships, student incentive trips, and summer camp program. The student tutoring program is offered to students from grades 5 through 12. The program is operated in partnership with the local District Education Authorities and is available in all of the ISR communities. Student loans are available to Inuvialuit students attending a post secondary education institution enrolled in a program with a duration of at least two

years. To qualify for this program students must have and maintain a 70% average. The IEF administers a number of scholarships for Inuvialuit beneficiaries attending post secondary academic institutions. Students require a 70% average to qualify for the scholarships that range from \$1000.00 to \$5000.00. The student incentive trip program is used to familiarize students with the southern environment and universities and colleges. Students in grade 11 and 12 are chosen to participate in the program based upon academic achievement. The community corporations in each of the ISR communities deliver the summer camp program. Unlike the other programs offered by the IEF, summer camps focus on language, traditional, and cultural skills (IRC 2003). These educational supports are important for oceans stewardship because they encourage youth to complete their education, which will provide them with the knowledge and skills to effectively participate in ocean stewardship.

Training of Aboriginal People in the Environment and Resource Sector

There are shortages of Aboriginal people in professional fields such as economics, medicine, engineering, community planning, forestry, wildlife management, geology, and agriculture (CCHREI 2002, RCAP 1996). Government initiated training programs are offered to Aboriginal youth and adults. These training programs often do not meet the needs of the participants. Evaluations by Human Resources Development Canada (HRDC) and the Government of the Northwest Territories (GNWT) of employment enhancing programs found that programs need to find innovative ways to provide training

because current methods of delivery are not in tune with the learning needs of the participants, this is especially true for Aboriginal peoples and youth (GNWT and HRDC 1995). Strategies to engage Aboriginal youth in the economy and environmental industry have been developed to assist formal education and training institutions, and Aboriginal communities in teaching students the knowledge and skills that they require to be stewards and environmental managers. These strategies have identified gaps in knowledge and skills of Aboriginal students, as well as in the currently available resources used to teach Aboriginal students. Teaching resources are being developed to teach Aboriginal students the knowledge and skills required to participate in the environmental sector and stewardship activities.

Strategies to Engage Aboriginal Youth

Engaging Aboriginal people in the Canadian economy and labour force have recently become a government priority because the Aboriginal population is young in age and growing rapidly. There have been a number of strategies developed with the objective of encouraging Aboriginal youth participation in sports, improving Aboriginal well being, and increasing participation in the environmental industry. A strategy can be defined as a plan or policy to achieve a specific objective or goal (Oxford Dictionary). Strategies to engage Aboriginal youth are important because they are the fastest growing segment of Canadian society and they are plagued with social problems including high

rates of poverty, suicide, unemployment, and low education levels (Working Group of NAYS1999).

There are no strategies specifically dealing with engaging Aboriginal youth in oceans stewardship. As a result two strategies to engage Aboriginal youth in the economy and environmental sector have been reviewed. These strategies were chosen because they deal with many of the issues of this study such as social conditions, education and training, environmental awareness, and employment, which all directly affect youth participation in oceans stewardship in the ISR. The two strategies reviewed are the National Aboriginal Youth Strategy (NAYS) and the Building Environmental Aboriginal Human Resource (BEAHR) Strategy.

National Aboriginal Youth Strategy

The NAYS was developed because Aboriginal youth “are the future leaders, educators, professionals and role models of their communities” (Working Group of NAYS 1999 p.1). Aboriginal youth are links to the past but they also have a vision for the future. NAYS is based upon the belief that solutions to social problems and low education and training levels can be found through partnerships between all stakeholders. NAYS has been designed to support a vision for Aboriginal youth which includes “a healthy future which involves building on the diversity of Aboriginal communities and recognizes their spiritual, emotional, physical, intellectual, and cultural values“ (Working Group of NAYS 1999). The vision also includes a future that offers Aboriginal youth

equitable opportunities to live successful and fulfilling lives. In order to make this vision a reality Aboriginal youth need to be equipped with the necessary skills and information to take full advantage of education, training, and employment opportunities (Working Group of NAYS1999). To support this vision, the NAYS Working Group determined that government and Aboriginal groups and organizations should develop and implement initiatives that reflect the needs of Aboriginal youth. This would have to be done using an integrated approach. Government and Aboriginal groups would have to envision:

1. Community economic development, business and employment opportunities that are available and encouraged;
 2. Involvement of Aboriginal youth in decisions that impact their lives and recognition as equal partners in the development of their individual and collective futures;
 3. Removal of barriers to social, education, and economic opportunities;
 4. Environments that are supportive; and
 5. Implementation of measures to enable Aboriginal youth to enhance the quality of their lives, direct their future and fulfil their dreams
- (Working Group of NAYS 1999 p.5).

Initiatives developed as a response to the strategy should be based upon the following principles: inclusive; community-based; flexible; respect; effective and efficient; holistic; accessible; individual empowerment; and community empowerment (Working Group of NAYS 1999). These initiatives need to reflect the needs and priorities of Aboriginal youth while maintaining their focus on youth becoming leaders

and role models within their communities (Working Group of NAYS 1999). It is also important that the strategy be dynamic to respond to changing needs and that initiatives be co-ordinated to maximize success and prevent overlap (Working Group of NAYS 1999).

Building Environmental Aboriginal Human Resources Strategy

The Canadian Council for Human Resource in the Environment Industry (CCHREI) and the Aboriginal Human Resources Council of Canada (AHRDCC) partnered to develop the BEAHR Strategy. The strategy was developed in anticipation of a future labour shortage in the environmental sector and Aboriginal population growth in Canada (CCHREI 2002).

The strategy strives to engage Aboriginal people in the environmental sector with the goal of obtaining the support of industry, educators, government, and Aboriginal communities to develop the tools required to fill the gaps in environmental education.

The four objectives of BEAHR are to:

1. Create awareness of environmental careers;
2. Career development;
3. Development of resource materials; and
4. Environmental education of Aboriginal students that will result in future employment (CCHREI 2002).

Awareness campaigns, mentors, and role models are being used to engage Aboriginal communities. The strategy also encourages the development of community-based internship and training initiatives and that all resource material developed will reflect Aboriginal cultures and traditional knowledge systems (CCHREI 2002). Student guides that clearly outline the path from high school to post secondary institutions as well financial resources available to assist them are also to be developed (CCHREI 2002).

A number of significant findings were made by CCHREI and AHRDCC when developing the BEAHR strategy. They discovered that many teachers lack the required math and science skills to peak students' interest in environmental issues and careers. This has a significant impact on youth participation in stewardship because youth must be aware and concerned about environmental issues in order to be motivated to participate in stewardship activities. As a result CCHREI and the AHRCC have identified a need for the development of teachers guides that contain Aboriginal sensitive teaching methods for math and science with the goal of assisting with the promotion of environmental careers (CCHREI 2002).

Chapter Summary

This chapter has introduced the concepts of stewardship, ocean governance in the ISR, co-management, TEK, and briefly discussed formal education in the Canadian North as well as two other strategies, BHEAR and NAYS, that have been developed to engage Aboriginal youth. It also discusses the role that each concept and strategy plays in oceans

stewardship. I have attempted to demonstrate that many of the activities carried out by government are under the umbrella of stewardship. I have also attempted to demonstrate how co-management and TEK are a part of oceans stewardship in the ISR.

Throughout this chapter I have tried present the importance of oceans stewardship in oceans management. The responsibility for preserving and protecting the oceans is the responsibility of every Canadian and not just that of government. Each individual, government agencies, co-management bodies, and industries have a role to play in oceans stewardship.

Oceans stewardship is especially important in the Western Canadian Arctic and the ISR because of the increasing development pressures on the area. The Inuvialuit have been stewards of the oceans for generations through their close connection to the land and ocean, responsible use of resources, and TEK, which contains stewardship values.

The involvement of Inuvialuit youth in oceans stewardship is important because they are going to inherit the earth from elders. As environmental issues become increasingly complex youth will need an ever-growing list of skills and knowledge to make responsible oceans management decisions. Youth involvement in stewardship will also help to ensure the continuity of the Inuvialuit culture.

CHAPTER THREE - RESEARCH METHODS

The research was conducted through working with the BSIMPI Secretariat and Inuvialuit youth. A preliminary site visit was conducted to lay the groundwork for the research, to obtain necessary research approvals, and to begin communications with the communities and interested parties. Primary information was collected through visiting the communities between November 2002 and January 2003. The methods used while visiting the communities included: attending meetings, visiting; participation; youth focus groups; interviews; and participant verification. The research was conducted using a qualitative approach. All information collected is confidential unless permission was granted otherwise, and parental consent was required for all study participants under the age of 18 (Leedy and Ormrod 2001, Grenier 1998).

The participants of the study included Inuvialuit youth (people between the ages of 14 and 29), elders, parents, past and present local teachers, and local resource managers from the various communities of the ISR. The participants of the study were people who have a direct interest in the future of youth, youth themselves, as well as people concerned about the continued health of the ocean. Youth Environmental Stewardship Program Administrators from across Canada were also interviewed as part of the study to provide insight into the techniques to engage youth stewardship programs elsewhere in Canada. There were ninety-one participants of the study, fifty youth and forty-one interviewees.

Site Visit

A preliminary site visit to the communities of Inuvik and Tuktoyaktuk was conducted in July 2002. The purpose of the visit was to prepare for the fieldwork by getting the necessary research approvals from the Aurora Research Institute (ARI) and to begin collaboration with the communities included in the study.

All research conducted in the Northwest Territories must be licensed by the ARI. Because the research was being conducted in both 2002 and 2003, two scientific research licences were required. A copy of the licences can be seen in Appendix A. The scientific research licence application process requires the researcher to conduct community consultations. Consultations were conducted with: the DFO the IRC, the IGC, the FJMC, the BSIMPI Working Group; as well as Hamlet and Town offices; Hunter and Trapper (HTC's) and Elders Committees; and Community Corporations in each of the six ISR communities. Consultations were conducted through mailing copies of the research proposal, writing letters, telephone calls, faxes, emails, and meetings with interested parties where possible. During the consultations the research methods were discussed; participant selection methods were of specific interest to many Inuvialuit community organizations. As a result, a number of community organizations such as the Elders Committees, HTC's, and some of the High Schools internally choose study participants. The site visit helped to begin to develop relationships with Inuvialuit youth, community members, resource managers, and other interested parties. These working relationships assisted in the planning and organization of the research.

During the preliminary site visit I also assisted with the DFO Oceans Youth Retreat and Oceans Day Activities. This allowed me to meet and discuss ocean management issues with people from the DFO and youth from all six ISR communities.

Research Assistant

Mary Anne Francey, a youth Inuvialuit beneficiary, was hired as my research assistant. She provided the researcher with an introduction to the Inuvialuit communities and culture. She assisted with the primary information collection between November and December 2002. Mary Anne travelled to the communities of Paulatuk, Aklavik, and Tuktoyaktuk with the researcher and assisted with the focus groups at the local high schools. Mary Anne also assisted with many organizational tasks associated with the research.

Attendance at Meetings

As part of the research I attended meetings of local decision-making bodies early in the field season. I attended HTC and FJMC meetings. The purpose of attending meetings was to familiarize myself with these important decision-making bodies. There was no data collected at this stage but attending these meeting also helped to familiarize community organizations and leaders with the research project and myself. This method

proved very valuable in relationship building and was used by previous researchers in ISR (Hoyt 2001).

Visiting

Visiting was an important component of relationship building in this research project and it has been used in other projects in the ISR involving Aboriginal people and especially elders (Hoyt 2001, Riedlinger 2001). I was a stranger in all six of the communities and it was important to build relationships with people prior to asking them to share their knowledge with me (Hoyt 2001). Upon arrival to the different communities, my research assistant and I would go to the local community organizations to introduce ourselves and visit with key people in the community. Like Hoyt (2001) and Riedlinger (2001), I found that the stronger the relationship I had with people the more willing and candid they were when sharing information. The purpose of visiting was to build relationships and no data was collected at this stage.

Participation

Participation proved invaluable to the research. Throughout the research I lived with different families in the communities of Aklavik, Sachs Harbour, Holman, and Tuktoyaktuk and participated in daily activities. There was great value in living with

local families. I was provided with advice about the research as well as the Inuvialuit culture, which was useful when conducting interviews and focus groups.

I also participated in daily activities of local youth such as snowmobiling, hanging out at the coffee shop, watching movies, playing games etc. This allowed me to build in-depth relationships with youth and acquire information about their social conditions and aspirations for their future that would never have been obtained through interviews or focus groups. Participation allowed me to observe the relationships with youth and community organizations, which is important when developing a strategy to engage youth. There was no formal structure used during participation. However, I did write down notes after informal encounters with youth.

Youth Focus Groups

The purpose of the focus groups was to gain insight into Inuvialuit youth's perspectives, perceptions, motivations, and understanding of oceans stewardship and management. They also explored youths' knowledge of existing oceans stewardship activities. Focus groups were chosen because they allowed for several youth to participate simultaneously and it was felt that interaction among participants could provide more information to the researcher than individual interviews. Focus groups were also desirable due to time constraints (Leedy and Ormrod 2001). The output of the focus groups discussions was used as data in the study.

Focus groups were conducted in the communities of Aklavik, Inuvik, Tuktoyaktuk, Paulatuk, and Holman. There was no focus group conducted in the community of Sachs Harbour because the community does not have a high school and youth from the community were captured in Inuvik where they attend high school. Youth from all of the ISR communities were included in the research project to capture the differences between the delta and coastal communities. Fifty youth participated in the focus groups. Efforts were made to have a mix of both male and female youth participants; 55.6% were male and 44.4% were female. These focus groups comprised of between five and seventeen youth ranging in age from 14 to 29. The Principal at each of the high schools determined the method of selection of focus group participants. In Aklavik the Principal choose students from a number of different classes based on her perceived suitability to the study and youth interest in the topic. In Inuvik students volunteered based upon interest. In Holman, Tuktoyaktuk, and Paulatuk entire high school classes participated and were chosen based upon relevance to course material.

The focus groups were approximately 1½ to 2 hours in duration and consisted of a short PowerPoint presentation (15minutes) and questions relating to three themes: oceans stewardship, youth participation, and recommendations for a strategy to engage youth. The questions can be found in Appendix C. The presentation included information about the Oceans Act, Canada's Oceans Strategy, oceans stewardship, information about BSIMPI and some of their undertakings, and the importance of youth involvement in oceans stewardship in the ISR. The presentation was followed by three sets of questions. The questions were placed up on a wall and were discussed in small groups of

approximately five to six youth and one facilitator. All youth were encouraged and prompted to participate by the facilitator. After the questions under one of the three themes were answered the small group would then present to the larger group. This was repeated for each of the three themes. The researcher facilitated the focus groups, however, when there were large groups a teacher and/or the research assistant assisted with facilitation of the small discussion groups.

Interviews

Interviews were conducted with Inuvialuit elders, parents, past and present local teachers, and local resource managers. The purpose of the interviews conducted in the ISR were to determine the following:

- The value of oceans stewardship to the Inuvialuit and local resource managers;
- How Inuvialuit in different communities participate in oceans stewardship;
- If and why they thought engaging youth in oceans stewardship is important;
- What are the barriers to youth participation in oceans stewardship;
- What they themselves could do to engage youth in oceans stewardship activities; and

- What they thought needed to be included in a strategy to engage youth in oceans stewardship.

Interviews with Youth Environmental Stewardship Program Administrators from across Canada were also conducted to identify principles and/or techniques that have been utilized elsewhere to encourage youth involvement in environmental and/or oceans stewardship.

A copy of the interview schedules and consent forms can be found in Appendix D. Hand written notes were taken during the interviews as most participants were uncomfortable being audio-taped as originally had been proposed. Forty-one interviews were conducted in total. The majority of interviews took between 45 minutes to 1 hour to complete with some lasting as little as 30 minutes to others lasting as long as 3 hours.

Interviews with Inuvialuit elders, parents, past and present teachers and resource managers were semi-structured with open-ended questions. Interviewees were selected using snowball sampling, which is when key community organizations identify participants for the study (Hoyt 2001). The location of the interview was in a comfortable place of the interviewee's choice – which was most often their home or place of employment (Leedy and Ormrod 2001, Grenier 1998). Efforts were made to have both male and female interviewees to ensure that both gender perspectives were represented in the study. The gender division ended up 56.5% male and 43.5% female. Gender was not considered when selecting youth environmental stewardship program administrator participants.

Elders

Inuvialuit elders were included in the study because they are highly respected members of the community, they hold the TEK, and they have seen change occur over time. The elders who participated were selected by their local Elders Committee. In the community Sachs Harbour the Community Corporation selected the elders because there is currently not an active Elders Committee. This selection process was agreed upon during the scientific licensing application consultation phase of the research. There were eight elders who participated in the study: two males and six females. No elders from the Town of Inuvik were able to participate in the research due to scheduling conflicts.

Parents

Parents were included in the research because they have a direct impact on the life goals and success of youth and they are able to reflect on their own youth. Eleven parents participated in interviews from all six ISR communities: five male and six female. Hamlet's or Community Corporation's selected parents through snowball sampling except in the community of Inuvik. In Inuvik no community organization stipulated that it would select participants so posters were placed around town and participants volunteered.

Past and Present Teachers

Interviews were conducted with nine teachers: eight present teachers in five ISR communities (excluding Sachs Harbour) and one previous teacher in Inuvik. Teachers were included because of the impact education has on youth's career aspirations and choice, and the impact of the education system has on success at high school and post secondary educational institutions. The teachers were selected by the school Principal based upon relevance of the research to subjects they taught and/or their interest in participating in the research. Previous teachers were included in the study because of the high turnover rate of teachers in the ISR. However, due to the high turnover rate and that many previous teachers have left the ISR it was very difficult to find participants.

Local Resource Managers

Interviews were conducted with seven local resource managers. Local resource managers were included in the study because they are directly involved in ocean resources management and provide the majority of formal oceans stewardship opportunities to youth. Support from these organizations is essential, as they will offer many of the programs to engage youth under the strategy. Seven resource managers were interviewed from Parks Canada, FJMC, the Territorial Department of Resource Wildlife and Economic Development (RWED), and HTC's. All local resource management

participants were male. There were no local resource managers interviewed in the communities of Paulatuk and Sachs Harbour.

Youth Environmental Stewardship Program Administrators

Interviews or surveys were conducted with six Youth Environmental Stewardship Program Administrators from outside the ISR. These Interviews or surveys used the same set of questions and were conducted by telephone and email from Winnipeg. Participants were selected through snowball sampling and by the relevance of their program to the study. These telephone interviews and questionnaire were structured with a question set that was consistently used for each interview (Leedy and Ormrod 2001).

Analysis and Writing

The data were transcribed, coded, and categorized. An initial attempt was made to categorize data and a presentation was given to the academic advisory committee as well as other interested professors, students, and professionals. Discussions that followed the presentation were used to help further categorize the data. A content analysis was conducted to extrapolate themes and patterns to be used to develop the strategy. The information was organized for further analysis using Atlas.ti software. The Atlas.ti software was used to organize the data, facilitate the coding process, and to compare important segments of data. The software allowed the visual connection of codes and the

creation of networks of codes that helped by visualizing relationships. Themes were developed and used as the basis for analysis. Under each theme extracts of data were taken and put together with discussion and used as evidence in Chapter four. The information was synthesised and an evaluation of findings was conducted.

In addition to writing the thesis, a number of additional documents were written. A research update report was written for the BSIMPI-WG and Academic Advisory Committee, an interim summary report for participant verification of findings, presentations for participant verification and DFO, and an executive summary to be distributed at the end of the project. The writing of these documents is important because they helped my thinking on the project come together and crystallize (Hoyt 2001).

Verification

Verification of ISR community members was conducted to ensure that the interpretation of information collected was accurate. Verification helped to ensure the trustworthiness and validity of information, findings, and conclusions of the study (Leedy and Ormrod 2001, Grenier 1998). Verification is important because it aids in building quality into the research through obtaining feedback from research participants and community organizations. This was achieved by preparing a summary report and then returning to the study communities to present my findings to the participants, community organizations, and the public at large. To view a copy of the summary report see Appendix E. Other youth environmental and resource management program

administrators were contacted to verify the accuracy of the research findings. These participants were contacted via the method of their choice – telephone, mail, or email. Verification of findings occurred between May and August 2003.

CHAPTER FOUR – RESEARCH FINDINGS AND THEIR IMPLICATIONS FOR YOUTH

There are a number of significant research findings. They relate to the importance of engaging youth in oceans stewardship, oceans stewardship opportunities available to youth, awareness, value of formal education, TEK, mentors and role models, social issues, ethnicity, communication, attitudes of resource management professionals, and techniques to engage youth in stewardship activities outside of the ISR. Findings related to each of these themes are outlined below. The participants of the research also made a number of recommendations that are outlined below.

The ISR is a region that has experienced massive changes over the past two hundred years and remains in transition today. There has been a shift from subsistent harvesting to a wage economy (Hoyt 2001). The ISR has experienced substantial economic, social, and political change since the 1960s with the construction of the Distant Early Warning (DEW) radar line and the town of Inuvik. During the late 1970s and early 1980s there was significant oil and gas exploration that changed the employment pattern in the Region (Usher 2002). Now the ISR is also beginning to see interest from the mining industry. The wage economy has brought both economic benefits and social problems; drug and alcohol abuse, and violence are now common in all the ISR communities. The Inuvialuit traditions and culture must now compete with the images and messages received through satellite television and the Internet.

Youth involvement in oceans stewardship is important for both cultural and environmental reasons. Participation in oceans stewardship can provide youth with a connection to the land and ocean, a set of moral values, traditional and scientific knowledge, and self-esteem and pride in their culture. This chapter explores what types of activities youth are capable of participating in, formal education in the ISR, TEK, improving existing opportunities, creating awareness, communication between groups, the attitudes of local resource managers, and the implications all of these issues have on youth participation in oceans stewardship.

Opportunities for Youth Involvement in Oceans Stewardship

There are a number of programs with an oceans stewardship component in the ISR. They include the FJMC Student Mentoring Program, the Tariuq Monitoring Program, scientific research, Oceans 11 marine science curriculum, Oceans Day, cultural camps, and informal traditional activities each of which are described below. Each of these programs attempt to teach youth about the ocean environment, the importance of the ocean ecologically and to the Inuvialuit culture, as well to motivate them to take action and participate in programs and processes (i.e. hunter monitoring, co-management bodies etc.) to help ensure that the oceans remain healthy for present and future generations. These programs offer only a small number of opportunities for youth participation either through 'traditional' (resource user – hunting, fishing, harvesting etc.) or 'formal' ocean stewardship activities (scientific research, laboratory work, monitoring

etc.). The number and type of stewardship opportunities available vary in each ISR community.

The majority of 'formal' opportunities are available in Inuvik, Aklavik, and Tuktoyaktuk, while the majority of 'traditional' opportunities appear to be in the smaller communities of Sachs Harbour, Paulatuk, and Holman. Despite the lack of opportunities for youth to participate in both formal and traditional activities there is considerable interest among the youth to participate in both traditional and formal oceans stewardship activities such as trips on the ocean and the FJMC Student Mentoring Program. Interest and enthusiasm in participating in oceans stewardship is strongest in the coastal communities of Paulatuk, Holman, and Sachs Harbour. Youth in these communities discussed their connection to the ocean from seeing it and living from it everyday (Youth pers comm. 2002/2003). This relationship was not as evident among youth in Inuvik, Aklavik, and Tuktoyaktuk as they did not mention having a connection to the ocean. Some youth in Inuvik stated that they had not even seen the ocean (Youth pers comm. 2002). However, almost all opportunities to participate in formal oceans activities are based in the communities of Inuvik, Aklavik, and Tuktoyaktuk where the interest level among youth is lower.

The FJMC Student Mentoring Program

The FJMC Student Mentoring Program is run in partnership with the DFO and is designed to give students an introduction into fisheries science and resource management.

The program has been running in the community of Inuvik since 1996. Given the technical nature of most jobs in this field, the program is intended to encourage youth to continue their schooling so that they can become the future scientists and resource managers of the ISR (FJMC 2001b). The program provides participants with summer jobs where they have placements with resource managers and scientists in different agencies in the ISR and the DFO Freshwater Institute in Winnipeg. There are also training modules (FJMC 2001a). The program typically has three to four student participants from the community of Inuvik. Students from the other ISR communities have participated in the program in the past. In recent years however, the program has focused on youth in Inuvik.

Tariuq Monitoring Program

The Tariuq Monitoring Program is a community-based and community driven monitoring pilot project funded by the DFO through their oceans program. The program operates in the communities of Tuktoyaktuk and Aklavik, and participants include representatives from DFO, and members of the hunters' and trappers', elders' and youth committees. Program participants monitor fish abundance and health, and water temperature. This program provides baseline information and will indicate change over time in coastal and anadromous fish (BSIMPI 2002). This program teaches youth monitoring techniques and helps them learn to assess fish populations, another important component of the freshwater and marine ecosystem.

Scientific Research

Youth are occasionally provided the opportunity to assist with scientific research. They can be hired as research assistants to scientists where they can learn a variety of skills ranging from sampling and monitoring techniques, to interviewing and facilitating. These infrequent opportunities are open to youth from any of the ISR communities depending upon where the research is being conducted.

Arctic Marine Science Curriculum

The Oceans 11 arctic marine science curriculum was developed by the DFO Oceans Program in recognition of the need for arctic science and TEK curriculum material. The Department of Education for the Northwest Territories, Nunavut, and the Yukon participated in the development of these materials. The course was piloted to grade 11 students in Inuvik, Holman, and Paulatuk in winter 2003. There is currently no preliminary information on how the course is working, however if it is deemed successful by the Beaufort Delta Education Council then it will be expanded and offered in the communities of Aklavik and Tuktoyaktuk in the near future. This course has the potential to significantly increase youth interest in participating in oceans stewardship activities. Students who enrol in the course will learn about ecology as well as oceans governance issues in the ISR. Increased awareness of these issues may lead some youth to becoming involved in oceans stewardship activities. (See Figure.5).

Figure 5. Photo of School in Paulatuk



Oceans Day

Oceans Day is a national event intended to celebrate the importance of the oceans to Canadians (DFO 2003). In the ISR Oceans Day celebrations and activities have been hosted by the DFO and community organizations for the past two years. Oceans Day activities include specific activities for youth. For Oceans Day 2002 in Tuktoyaktuk, a youth retreat was held by DFO. Three youth from each of the ISR communities were brought together in Tuktoyaktuk for the retreat where they learned about the marine environment and oceans related careers. (See Figure 6). For Oceans Day 2003 in Aklavik, youth with were taken camping. The community response has been so positive to Oceans Day it will likely be held every year.

Figure 6. Photos from Oceans Day 2002



A) Youth retreat – missing link activity B) Oceans Day parade, Tuktoyaktuk

Cultural Camps

The Community Corporations and/or Brighter Futures run cultural camps in all six ISR communities. The Community Corporations try to improve the social, cultural, and economic well-being of Inuvialuit beneficiaries in each ISR community. Brighter Futures, developed by Health Canada in co-operation with Aboriginal and Inuit communities, is a program designed to improve the mental, physical, and social health of children, families, and whole communities (IRC 2003). The camps take between ten to twenty-five youth out on the land each summer to teach them traditional skills including hunting, fishing, harvesting, food preparation etc. Some of the communities such as Paulatuk also offer cultural camps in the winter to teach youth about being on the land and ocean during the different seasons. The goal of these camps is to teach youth respect for the land and ocean, to help them to develop a sense of connection to the land and ocean, and to pass TEK on to younger generations. Many youth said that they would like

to spend more time on the land and ocean with their families and elders. However, families typically are large often resulting in only the very young children being able to go because of limited equipment and the high costs of fuel and supplies (Youth pers comm. 2002/2003). In addition, going out on the land and ocean can mean missing tests and exams and no allowances are made for this at school (Youth and Parent pers comm. 2002/2003).

Implications of Existing Stewardship Initiatives

Most youth who participated in the research were not aware of the current oceans stewardship programs offered in their community and in the ISR. The youth who have participated in current stewardship programs said they were generally pleased with their experiences. Some youth did say that formal stewardship opportunities often did not provide them with enough financial incentives to participate. When programs are offered by government agencies youth automatically expect to be paid for their participation; this does not hold true for traditional oceans stewardship activities. All youth said they would like stewardship initiatives to provide employment opportunities like the FJMC Student Mentoring Program. They felt that the rate of pay for FJMC Student Mentoring Program is uncompetitive with other summer jobs available in the communities (Youth pers comm. 2002/2003). Youth also often were unable to see the future value of the experiences being provided (i.e. able to put beluga disease analysis on their resume).

There was an overwhelming interest among youth in Paulatuk and Holman to participate in the FJMC Student Mentoring Program. They were extremely interested in having the opportunity to participate in the program. They felt frustrated to be excluded from the program because of location when it is run by a co-management body that is supposed to serve the interests of all Inuvialuit people not just those of youth in Inuvik. Youth from Holman, Sachs Harbour, Paulatuk and Aklavik stated that youth in Inuvik always get all the opportunities while they were left with nothing (Youth pers comm. 2002/2003). The FJMC stated that they had involved youth from other communities in the past but had run into logistic and liability issues because participants were required to spend their summer in Inuvik away from their families due to limited work placements opportunities in the smaller communities. In addition, the Student Mentoring Program overlaps the school year in the coastal communities where students begin school in August automatically excluding them from participating in the program (FJMC pers comm. Dec 4 2002). It is important that a strong effort be made to involve youth from all the ISR communities in oceans stewardship opportunities. This will help reduce the feelings being forgotten and abandoned.

Some local resource managers felt very frustrated with the youth. Many programs offered to youth have had marginal success and often have difficulty attracting participants (Resource Manager pers comm. 2002). Local resource managers tended to equate this with an unwillingness and lack of interest among youth to get involved. Youth, however, said that it was a result of poor advertising and promotion (Youth pers comm. 2002/2003). A number of local resource managers also felt that youth lack the

basic capacity to effectively participate in stewardship programs and that it was the schools and parents responsibility to teach them to read and write not resource managers (Resource Manager pers comm. 2002). As a result of their negative past experiences some resource managers have become unwilling to work with youth, however, they do support the initiatives of other groups willing to take on the challenge.

Other local resource managers who would be willing to work with youth stated that they do not have the human or financial resources to provide youth with valuable oceans stewardship opportunities. Youth involvement is an add-on to someone's job and they recognized that involving youth is a large commitment and their workload is simply too heavy to afford spending time working with youth. Alternatively to feeling frustrated or having a lack of resources, some local resource managers stated that they simply had not thought about involving youth in their work or organization and were somewhat embarrassed of this oversight. As a result of this research two local resource managers said that they would make an effort to involve youth in their organization in the upcoming future (Resource Manager pers comm. 2002/2003).

Youth Capabilities of Participating in Stewardship

There are a wide variety of oceans stewardship activities that youth are capable of participating in such as the FJMC Student Mentoring Program and cultural camps. Offering oceans stewardship opportunities at a variety of levels will challenge youth to participate to their fullest capacity (Hart 1997). Youth should continue to participate in

existing opportunities in ISR communities as described earlier. However, it is clear that there are too few opportunities for the 1700 youth in the ISR, and that they are inequitably distributed.

Where there are few opportunities, youth working with adults can develop new opportunities for participation. Opportunities should provide youth with hands-on, participatory experiences that are both interesting and challenging (Youth pers comm. 2003, FedNor 1994). A continuum of opportunities would allow youth to participate at their desired level and progressively participate in more demanding and challenging programs over time. Youth stated that the types of activities they are capable and wanting to participate in include: oceans related school projects, day-long seminars and workshops, scientific research, monitoring projects, attending conferences such as Coastalzone and The Leading Edge, attending HTC meetings and BSIMPI Working Groups meetings, wage employment, and going on the land and ocean with family and elders (Youth pers comm. 2002/2003). These types of opportunities allow youth to learn how natural resource management decisions are made in the ISR. Travelling to elsewhere in Canada to attend conferences will provide Inuvialuit youth with the opportunity to share their experiences and learn from other Canadians. These types of initiatives allow youth to participate in activities that meet and increase their capacity, as well as build networks and relationships, and empower youth (FedNor 1994).

However, in order to participate in the technical oceans stewardship opportunities youth must increase their capacity in reading, writing, mathematics, and natural sciences. Capacity building is one of the most important issues facing Aboriginal people in the

North today. The issue of capacity is complicated by substance abuse and violence present in so many of the communities (NRTEE 2001). The challenge is to increase youths' capacity in these skills in a society where formal education is under appreciated.

Awareness of Opportunities and How to Get Involved

Youth believe that their participation in oceans stewardship is important but there is a lack of awareness of opportunities available for youth to participate in oceans stewardship activities. Youth identified this lack of awareness as one of the main barriers preventing them from participating in oceans stewardship (Youth pers comm. 2002/2003). Awareness of opportunities was cited as a large problem among youth and Youth Environmental Stewardship Program Administrators from outside the ISR. Youth are not aware of opportunities in their home community or other communities in the ISR. Even when they do learn of programs they do not know whom to contact to get involved. For example, despite the fact the FJMC Student Mentoring Program has been running since 1996 and is seen as a success by many community leaders and local resource managers, the large majority of youth said that they had not heard of the program. Further, most said that they had not even heard of the FJMC, which is evidence of an even larger problem. This lack of awareness suggests that oceans stewardship program administrators are not effectively promoting their programs. These findings about awareness and the suggestions made by Inuvialuit youth were very similar to FedNor's finding in northern Ontario (1994). Inuvialuit youth stated that they would like to see a

website dedicated to youth programs in the ISR that could have information about opportunities to participate in oceans stewardship activities. They would like information to be designed with them in mind – not adults. Youth thought travelling presentations about programs and services, to distribute materials, and to provide assistance on completing applications would be beneficial. Youth liked this idea because they rarely take the initiative to seek out this type of information (Youth pers comm. 2002/2003). This is currently done in the Delta communities, but often at lunchtime when students have left the building.

Youth also lack an awareness of government agencies and co-management bodies in the ISR with oceans stewardship responsibilities. This lack of awareness included Federal, Territorial, and Inuvialuit governing bodies. Youth are not aware of what groups are involved in oceans stewardship and what their roles and responsibilities are. With this general lack of awareness of oceans governance in the in the ISR, it is not surprising that youth are unaware of the oceans stewardship opportunities that these agencies and groups offer to youth, nor is their lack of knowledge of oceans related careers. It is evident that the problem is not just a lack of awareness of opportunities to get involved in ocean stewardship but also a general lack of awareness and understanding of the issues of oceans governance and stewardship.

Youth are also not aware of oceans-related careers and as a result do not think to pursue oceans management careers such as biologists, fisheries officers, and resource personnel. This lack of awareness of oceans related careers is important to oceans stewardship because these positions have a stewardship component to them. In addition,

the government agencies and private industry in the ISR that may employ them have expressed their commitment to oceans stewardship. Though scientists and oceans managers are present in the ISR communities they are not visible. Many of the scientists and ocean managers are from southern Canada, and are not integrated into the Inuvialuit community. They also do not provide youth with information of the work they do and the importance of this work to their communities (Youth pers comm. 2002/2003).

There is also a lack of awareness among community members with regards to providing youth with oceans stewardship opportunities. I was frequently told by community members and research participants that they are aware of what they need to do to involve youth in oceans stewardship (i.e. take youth on the land and ocean to teach traditional skills and knowledge), however, they do not know how get started. Many Inuvialuit community members would be willing to take youth out on the land and ocean for day or week long trips but they do not have the financial resources to provide the supplies, fuel, and equipment required. They also stated that they do not know how to find youth who are interested in participating (Elders and Parents pers comm. 2002/2003).

Value of Formal Education

Formal education is not highly valued in the ISR by many elders, parents, and youth. In Inuvik and Tuktoyaktuk this lack of value of formal education is reinforced by the fact that many people can make a decent living without a formal education. This

under appreciation of formal education is consistent with NRTEE findings (2001). Youth stated that formal education is not a high priority and is often not even discussed in their families or in the communities (Youth pers comm. 2002).

Youth said that they receive little encouragement to graduate from high school and to pursue a post-secondary education (Youth pers comm. 2002/2003). Parents said that they sometimes feel alienated from the educational system. They commented that they might not encourage their children to attend school because they themselves have not graduated. Some parents also stated that they had bad experiences in school when they were children (Parents pers comm. 2002). This is consistent with Condon's (1987) and Farrow and Wilman's (1989) findings. It is difficult for parents, families and elders to provide the encouragement and support required by youth to complete their formal education when they cannot see its value.

The schools are seen to have the responsibility for teaching youth about biological functions of the oceans and oceans governance (Parent pers comm. 2003). All participants of this research felt that if youth want professional level oceans management positions that they should graduate from high school and pursue a post-secondary education if required by the position. However, there is a concern among Inuvialuit elders, parents, and youth that even if youth do become educated there will be no local job opportunities available to them. Youth, elders, and parents often have difficulty seeing the value of a formal education because graduating from high school, college or University does not guarantee them employment in their community or the ISR. As a result, many Inuvialuit do not make the direct link between education and

employment (Elders, Parents, and Youth pers comm. 2002/2003, Purich 1992). They feel that youth will have to relocate to find employment or end up under or unemployed if they remain in their home community. This is also consistent with Condon's findings (1987). This concern is strongest in the smaller coastal communities. Purich found that if youth cannot link formal education with employment there are few incentives to complete their schooling (1992). Further complicating the situation is that many parents and elders do not see a formal education as important for youth that wish to be active in oceans stewardship through local co-management processes. Rather, these youth should focus on learning traditional skills and knowledge on the land and ocean (Elders pers comm. 2002/2003). In order for the value of formal education to be recognized in the ISR, the people must be able to see the connection between education and quality of life. The benefits of obtaining a formal education can be demonstrated to youth by role models and mentors.

The school system in the ISR is plagued with problems including high turnover rates of teachers, inexperienced teachers, pressure to graduate students resulting in the modification of programs to increase graduation rates (Teacher pers comm. 2002/2003). The lack of value of formal education is also demonstrated by the low educational standards in the ISR (Teachers pers comm. 2002, Vodden 2001). There is a concern among local resource management professionals that high school graduates lack the capacity and proficiency of basic skills such as reading and writing (Resource Manager pers comm. 2002). There is also a concern among local resource management professionals and teachers that the educational institutions in the ISR are under pressure

to raise their completion rates by modifying programs and advancing students who lack these basic skills (Resource Managers and Teacher pers comm. 2002). Youth recognize that they are receiving an inferior education and would like to be provided with a higher quality formal education (Youth pers comm. 2002/2003). Formal educational institutions must have rigorous academic standards to ensure that youth have the necessary skills and knowledge to participate in oceans stewardship activities and take on leadership roles in their communities (NRTEE 2001, Resource Manager and Teacher pers comm. 2002/2003). The watering down and modification of programs results in a system that does not adequately prepare youth for life in either the North or the South (Castellano et al. 2000). These low educational standards have severe implications for oceans stewardship in the ISR in that many youth will lack competency in basic skills such as reading, writing, mathematics and science, but they will also lack the capacity to understand complex environmental problems, and the ability to make educated decisions to ensure the continued health of ocean ecosystems.

Value of Traditional Ecological Knowledge

Elders, who are highly respected members of the community were seen by themselves, parents, and youth to have the primary responsibility to teach youth about the importance of the ocean, ocean stewardship, and to pass on the community's body of TEK and shared stewardship values (Elders, Parents, Youth pers comm. 2002/2003). Parents are also responsible for ensuring that their children learn respect for the ocean

and that they learn TEK of their elders (Parent pers comm. 2002). The Inuvialuit, like other Aboriginal people, see respect as being essential to understanding wildlife and the environment. They observed that problems arise out of a lack of respect (Elders and Parents pers comm. 2002/2003).

All participants of the study recognized the importance youth acquiring TEK to be a good steward of the ocean environment. The Inuvialuit see TEK as extremely important to being a responsible resource user and effective members of co-management bodies. There is a serious concern among Inuvialuit elders and parents about the lack of TEK being passed on to youth by both elders and their parents. TEK is passed on mainly through experiences out on the land and ocean. Elders are concerned that youth are not interested in learning TEK, that they lack a connection to the land and ocean, and respect for the earth which they fear will result in a loss of culture. Elders want to continue the tradition of handing down knowledge through the generations (Elders pers comm. 2002/2003). Going out on the land and ocean is an important activity for youth to participate in because it provides them with a sense of connection to the land and ocean, an understanding of the natural environment, respect for the earth, and an understanding and appreciation of their culture. All participants thought that it would be ideal for youth to possess both traditional and formal (competency in reading, writing, and western science) skill sets. However, many elders felt that youth could gain competency in formal skills such as reading and writing without graduating from high school (Elders pers comm. 2003).

Contrary to the opinions of elders', youth expressed a strong interest in going out on the land and ocean and learning TEK. Youth want to acquire these skills through experiencing the land and ocean first hand. Most youth stated that they do not have enough opportunities to spend time on the land and ocean with parents and elders. There appears to be a breakdown in communication between the elders and youth since both parties seem to want the same thing. Youth said that they wanted more opportunities to go out on the land for day, weekend, week, and two week long trips. Some of the cultural camps offered focus on younger children or youth that have dropped out school. In addition, schools do not make allowance for days missed because of going out on the land. As a result some youth felt as if they are being punished for staying in school (Youth pers comm. 2002). There is a constant problem in the North of trying to balance formal education and traditional informal education – a solution to achieving balance between the two has not yet been found.

Most families in the ISR spend at least some time on the land and ocean hunting, fishing, and harvesting food. The Inuvialuit still commonly hunt ringed seals, polar bears, beluga whales, sea birds, and marine fish (Harwood and Smith 2002). The biggest barrier preventing youth from going out on the land and ocean is financial as many families do not have enough equipment for everyone so older children are often left behind (Youth and Parent pers comm. 2002/2003). Elders also stated that they do not take youth out on the land and ocean because of the high costs of fuel, groceries, and other supplies (Elders pers comm. 2002/2003).

Mentors and Role Models

Inuvialuit youth stated that there is a lack of positive role models and mentors in the ISR. This includes Inuvialuit, other native, and non-native role models. The need for positive role models in their own age group was stressed repeatedly by youth (Youth pers comm. 2002/2003). Inuvialuit youth see mentoring as a way to learn about ocean governance and stewardship in the ISR (Youth pers comm. 2003). Role models are important because youth look to their communities for examples of success. Youth would be encouraged to make better choices by having a chance to see that other young people like themselves have made good lifestyle and career choices (FedNor 1994, City of Calgary 2002). Inuvialuit youth also want mentors who could help them learn about oceans-related career possibilities in the ISR. Youth currently feel that they are not getting the necessary information that they need in order to make good life decisions (Youth pers comm. 2003).

Social Issues and Feelings of Youth

All youth participants stated that social issues such as alcohol, drugs, and violence etc. prevent youth from getting involved in activities and programs (Youth pres comm. 2002/2003). Some youth are involved in alcohol, drugs, and violence themselves and often their family and friends also partake in these activities. Youth stated that these conditions are connected to low self-esteem, self-worth, feelings of hopelessness

resulting in a lack of motivation and empowerment to get involved in activities and programs. This problem is further exacerbated by drug and alcohol abuse and violence being seen as a social norm in many of the ISR communities (Youth and Resource Manager pers comm. 2003).

Many youth said that they often feel abandoned and forgotten. Youth in communities other than Inuvik expressed that they feel forgotten by other Canadians and abandoned by their own people in Inuvik where their government is based. Their communities are isolated and they feel very isolated from other Inuvialuit and the rest of Canada. Many youth also feel abandoned by their parents and family (Youth pers comm. 2002). Youth in the communities outside of Inuvik felt especially abandoned because of the lack of opportunities available to them, which they believe demonstrates that no one cares about them. Some youth said that they felt as if they were being punished for staying in their home communities where opportunities to get involved in oceans stewardship are very few (Youth pers comm. 2003). Youth are also aware of the negative attitudes towards them held by some resource management professionals in the ISR and said that this further lowers their self-esteem and adds to their sense of hopelessness (Youth pers comm. 2003).

Ethnicity

The issue of ethnicity was brought up repeatedly throughout the research by youth in Inuvik and Aklavik but never mentioned by adults. Ethnicity is an issue of concern in

Aklavik where there is significant numbers of both Inuvialuit and Gwich'in and in Inuvik where the population is comprised of Inuvialuit, Gwich'in, and non-native peoples. The concern is that other northerners that are not Inuvialuit may have the same concerns and interests but are excluded from oceans stewardship programs based on ethnicity. The concern goes the other way as well, for example in Aklavik the Gwich'in may run programs and workshops but Inuvialuit youth are excluded from participating based on ethnicity. Youth felt that people could work together instead of always being divided based on ethnicity (Youth pers comm. 2002). It is recognized that the oceans stewardship programs in the ISR are largely limited by the legal and structural constraints of the Inuvialuit and Gwich'in land claim agreements which specify that only beneficiaries in each agreement can receive funding made available through these agreements.

Communication Between Agencies, Groups, and Organizations

Currently there is a fragmented approach to oceans stewardship program development and delivery. There is virtually no communication between agencies that provide oceans stewardship opportunities to youth or between these agencies and the schools (Teacher and Resource Manager pers comm. 2002). Poor communication has led to conflicts between groups, competition for youth, and a lack of awareness of programs. The lack of collaboration has led in some instances to a turf war and competition for a small pool of youth participants. Agencies want to offer their own programs rather than

working collaboratively to provide the best opportunities to youth (Resource manager pers comm. 2002).

The lack of co-operation has also caused concern among leaders of educational institutions. Typically schools are not approached to provide input into program development to ensure that it meets the needs of the schools and youth. This is of great concern to the schools because they want to provide youth with the best possible opportunities and experiences (Teachers pers comm. 2002/2003). Instead they are approached with ready-made programs, which may not fit with the school curriculum or into the school year (Teacher pers comm. 2002). For example, the schools are asked to promote and suggest students for the FJMC Student Mentoring Program but the program is inconsistent with the school year in the coastal communities and therefore excludes those youth from participating (Teacher pers comm. 2002). The schools stated that they would like to be consulted in the program development and design stage (Teacher pers comm. 2002). The schools felt that a collaborative process would help ensure that the best possible oceans stewardship opportunities are made available to students.

This poor communication between agencies has significant implications for youth participation in oceans stewardship. It can lead to low-quality oceans stewardship opportunities being made available to youth. More importantly it can result in youth not receiving information about the oceans stewardship opportunities available to them.

Attitudes of Resource Managers

Resource management professionals (i.e. government staff) in the ISR tended to have a pessimistic attitude toward youth. Many saw youth as a lost cause and have concluded that there is no point in trying to involve them in oceans stewardship activities. Some felt that it would be more beneficial to target a younger age group and work with them to instil an ethic of social responsibility to protect the environment (Resource Managers pers comm. 2003). In some agencies attitudes varied among staff, with some more willing than others to take the initiative to involve youth. Many resource management professionals failed to recognize the value and importance of involving youth in oceans stewardship and see it as 'slowing them down'. Some resource management professionals expressed that they felt obliged to involve youth in oceans stewardship activities but personally were not interested working with them (Resource Manager pers comm. 2003).

Techniques to Engage Youth

All Youth Environmental Stewardship Program Administrators stated that it is essential to provide youth with hands on interactive opportunities to reawaken their wonder of the natural environment and to inspire them to take responsibility for its well-being. They also stated that youth should be taught about the environment and stewardship outdoors. These teachings should begin at an early age (i.e. kindergarten) to

lay the foundation for continual learning about the natural world. They also thought that it is important for older students to teach younger students, which allows them to share their knowledge with the next generation and makes them feel as if they have important contributions to make (Environmental Program Administrators pers comm. 2003).

Youth Environmental Stewardship Program Administrators used a variety of methods to recruit youth participants including: schools, word of mouth, contacts made at local universities and colleges, local media, youth science fairs and conferences, web sites and emails. All of these methods were seen to have merit in participant recruitment; however, they felt that email was the least effective recruitment method (Environmental Program Administrators pers comm. 2003).

All Youth Environmental Stewardship Program Administrators saw formal recognition for youth's achievements as important to help youth develop a sense of pride and improve their self-esteem. They stated that youth should be recognized not only by stewardship organizations but also the community leaders. Environmental stewardship organizations have recognized youth participants by presenting them with organization paraphernalia such as vests, hats, and sweatshirts; certificates and awards; and school credits through career preparation programs (Environmental Program Administrators pers comm. 2003).

Common barriers to participation identified by Youth Environmental Stewardship Program Administrators include: lack of time of youth outside of the school structure, having to compete with other interests (i.e. sports etc.), peer pressure (activities not seen as 'hip' by peer group), and difficulties involving youth in remote communities. All

Youth Environmental Program Administrators identified a lack of awareness of stewardship opportunities as the primary barrier to youth participation (Environmental Program Administrators pers comm. 2003).

Participant Recommendations

The research participants were asked to make recommendations for a strategy to engage youth in oceans stewardship. These recommendations have been summarized below.

1. There should be efforts made to increase the number and quality of oceans stewardship opportunities available to youth.
2. The HTC's should make a greater effort to involve youth in oceans stewardship.
3. Organizations, agencies, and schools need to work improve communication and work collaboratively to ensure that the best possible opportunities are made available to youth.
4. Increase awareness of opportunities and career paths related to oceans stewardship.
5. Larger social issues should be addressed by the community and community leaders. Issues related to drugs, alcohol, violence etc. need to be addressed by the community and community leaders. They also need to encourage beneficiaries to complete their education, to pursue

post-secondary education where desired, and to get involved in programs.

6. The schools should play a greater role in teaching youth about oceans stewardship – the Oceans 11 course can be the takeoff point for this. Educational institutions also need to stop lowering the bar and graduating students who lack basic skills.
7. Industry should support educational programs to assist with preventing youth from dropping out of school to pursue unskilled labour positions within industry.

CHAPTER FIVE – A PROPOSED STRATEGY TO ENGAGE INUVIALUIT YOUTH IN OCEANS STEWARSHIP

Components of a successful strategy were identified as part of the research. The components include having clear objectives, a wholistic approach, and that youth for whom the proposed strategy is intended be directly involved in its development. The components of a strategy were identified in the literature review of strategies and plans aimed at Aboriginal youth, as well as other government strategies such as Canada's Oceans Strategy.

The strategy to engage Inuvialuit youth in oceans stewardship outlined in this chapter is based on the research findings and attempts to address the issues that were identified as barriers to youth participation. The strategy was developed through incorporating the thoughts and recommendations of the research participants and techniques and concepts identified in the literature. Because there are so many issues that underlie youth participation in oceans stewardship such as education, social conditions, attitudes of local resource managers etc. a wholistic approach was used to develop the strategy. There are far more people who need to be involved in a strategy to engage youth in oceans stewardship than just youth and an attempt has been made to involve all interested parties in the research as well as to define their roles and responsibilities in the strategy to engage Inuvialuit youth in oceans stewardship. All participants of the research were asked how to motivate youth to participate, what skills youth require to be good ocean stewards of the ocean, and to make recommendations for

a strategy to engage youth in oceans stewardship. The recommendations made by the research participants have been incorporated into the strategy to ensure that it meets the needs of the youth and those of community leaders, local resources managers, schools, elders, and parents.

The amount of interest and support for this project varies in each of the ISR communities. Interest and support for the project is weakest from the IRC and local Federal and Territorial government agencies. Buy-in from these groups is critical because of the significant role they will play in the implementation of the proposed strategy. The strongest interest and support for the project is at the grassroots level. Interest is strongest in the community of Paulatuk where the local municipal government, HTC, Elders Committee, and individual community members began discussing what initiatives they would like to pursue and the resources required. They wanted to take action immediately to address the concerns of youth instead of waiting for this strategy to be developed.

The proposed strategy to engage Inuvialuit youth in oceans stewardship consists of a vision, objectives, recommendations, suggested initiatives, and the roles and responsibilities of interested parties in the implementation. The objectives are consistent with the Tbilisi Declaration (1977) framework, which is accepted by practitioners as essential to any successful environmental education programs designed to change the behavior and attitudes of participants (UNESCO 1978).

The proposed strategy identifies key activities that need to be undertaken in the communities. Implementation of this strategy requires the collaborative efforts of the

BSIMPI, local resource management committees, community leaders and members, educators, elders, and local resource managers. The strategy includes all six Inuvialuit communities and focuses on the issues of participation, the need for expanding and developing new programs, improved communication, the need to teach youth more about stewardship in the schools, and the urgent need to take youth on the land and ocean for extended periods of time. The proposed strategy also outlines roles for BSIMPI, educators, FJMC, HTC's, elders, local resource managers, the IRC, and industry. What is being proposed requires a new way of thinking and doing things related to youth in the ISR. If fully implemented, youth will rise to the challenge of being tomorrow's ocean resource stewards and community leaders. The benefits achieved will far exceed their active participation in oceans stewardship.

The Vision of the Strategy

The vision of the strategy is to develop an Inuvialuit youth population that is aware and concerned about the health of the ocean and that has the necessary skills, knowledge, attitudes, motivation, and commitment to take action through stewardship activities to ensure that the ocean ecosystems of the ISR remain healthy for future generations.

The Objectives of the Strategy

There are five objectives of the strategy. They include:

1. Providing youth with an awareness of oceans stewardship opportunities and how to get involved;
2. Assisting youth in acquiring knowledge about the social and economic importance of the ocean as well as the importance of oceans stewardship;
3. Assisting youth in developing the values, attitudes, concerns about the ocean and the motivations to participate in oceans stewardship;
4. Helping youth identify and acquire the skills required to participate in ocean stewardship; and
5. Providing youth with opportunities to be engaged in oceans stewardship activities.

Strategy Components

1. Continue to participate in existing oceans stewardship opportunities

Youth should continue to participate in existing ocean stewardship opportunities as described earlier in Chapter Four. Existing oceans stewardship opportunities should be regularly evaluated by both program administrators and participants to ensure that they

meet the needs of youth and the administering organization. Where possible, existing programs such as the FJMC Student Mentoring Program should be expanded to provide opportunities to engage youth in all of the ISR communities.

Suggested Initiatives:

- Expand the FJMC Student Mentoring Program to all ISR communities.
- Conduct regular evaluations of current stewardship programs to ensure that they are interesting and challenging for youth and that they meet the needs of the administering body. Pre and post program evaluations, such as surveys or questionnaires can be used to determine the impact of the program on youth participants.

2. Hire an Oceans Stewardship Youth Coordinator to facilitate oceans stewardship programs in the ISR.

An Oceans Stewardship Youth Coordinator would remove much of the burden felt by local resource management professionals in involving youth in oceans stewardship activities. Involving youth in oceans stewardship is time consuming and requires a great deal of commitment by the program administrator. Many of the local resource managers do not have the human resources to commit the required amount of time an effort to provide youth with meaningful opportunities to participate in oceans stewardship activities. It is felt that an Oceans Stewardship Youth Coordinator could take on the

responsibility for many of the time consuming tasks such as program organization, seeking work placements etc. An Oceans Stewardship Youth Coordinator would be responsible for program evaluation and development, which would reduce duplication of programs and be able to fill the current gaps in oceans stewardship opportunities in the ISR. An Oceans Stewardship Youth Coordinator would also assist in improving communication between agencies, boards, and schools.

Suggested Initiative:

- Hire an Oceans Stewardship Youth Coordinator to develop, administer, promote, and evaluate all youth oceans stewardship opportunities in the ISR, to develop new programs, and facilitate communication between interested parties.

3. Develop new stewardship opportunities and encourage participation

Youth in collaboration with local resource managers should develop new opportunities for youth participation in oceans stewardship. This process should be facilitated by an Ocean Stewardship Youth Coordinator as described in #2. New opportunities should provide youth with hands-on, participatory experiences that are both interesting and challenging (Youth pers comm. 2003, FedNor 1994). Youth should be involved in the program design and development to ensure that opportunities are interesting and attractive to youth. Youth should also be provided with incentives and

recognition for their participation in oceans stewardship activities (Environmental Program Administrator pers comm. 2003, Government of Canada 2002c). These measures will increase the likelihood of youth staying involved in oceans stewardship programs over time.

Suggested Initiatives:

- Hire an Oceans Stewardship Youth Coordinator as described in #2 to develop, administer, promote, and evaluate all youth oceans stewardship opportunities in the ISR.
- Set up a committee of youth to assist in new program development. Local youth committees and schools could be utilized to suggest interested youth.
- BSIMPI should host a workshop with the youth committee to determine their priorities for new oceans stewardship program development – the information gathered could be used by BSIMPI members in new program development.

4. Increase youth awareness of oceans stewardship opportunities

Increasing awareness of oceans stewardship opportunities and how to get involved is critical to the success of a strategy to engage youth in oceans stewardship. Currently, only individual program providers tend to have information about their

program. One-stop shopping to access information would be helpful because youth are less likely to seek out information if they must go to a number of different locations. Information should be located in convenient places easily accessible to youth such as schools and youth centres (FJMC 2000). It is very important that a strong effort be made in the smaller coastal communities to increase awareness of oceans stewardship opportunities. A variety of media could be used to inform youth about opportunities such as television, newspapers, newsletters and websites. Involving youth in the design and development of promotional materials will help ensure their effectiveness (FedNor 1994). An awareness plan should be developed that strives to reach youth in all the communities.

Suggested Initiatives:

- Develop a website to that is directed towards youth that provides information about all oceans stewardship opportunities available to Inuvialuit youth in the ISR.
- Develop an awareness plan in consultation with Inuvialuit youth to outline how promotion of oceans stewardship opportunities will be conducted. To increase effectiveness of the plan consult with local youth to ensure that the messages and media used are youth friendly and will reach the youth audience. Also ensure that a variety of media is used and that information is easily accessible to youth (i.e. in the schools, youth centres etc.).

5. Improve communication between groups

Currently there is a fragmented approach to providing oceans stewardship opportunities to youth due to a lack of communication between agencies, groups, and schools. A fragmented approach increases the likelihood of duplication and gaps in oceans stewardship programs (NRTEE 2001). Better cross-communication between these groups when developing oceans stewardship programs will help ensure that there is no duplication of opportunities and that gaps are filled. This approach will also help ensure that oceans stewardship programs are relevant to the school curriculum and that they are consistent with the school year. A co-ordinated approach requires that groups work collaboratively to make certain that youth are provided with the opportunity to participate in the best possible oceans stewardship activities, and that competition for the same pool of youth participants is reduced. The hiring of an Oceans Stewardship Youth Coordinator as described in #2 would be a very positive step in improving communication between interested parties. This Oceans Stewardship Youth Coordinator would be responsible for collaborating with interested parties, developing new initiatives, and promoting existing and future programs.

Suggested Initiatives:

- Hire an Oceans Stewardship Youth Coordinator as described in #2 to facilitate communication between the different stewardship program administering bodies.

- Create a steering committee of stewardship program administrators that has meetings to discuss youth oceans stewardship programs to reduce duplication and fill gaps.

6. Schools should teach youth more about the oceans and stewardship

The schools should aim to teach youth about ocean ecology, governance, and the importance of the ocean to the Inuvialuit culture and other local cultures through a variety of initiatives. These concepts could be incorporated into other subjects such as biology and social studies. The schools can teach all of these concepts through the Oceans 11 Arctic marine science curriculum. The schools should also offer more opportunities for youth to participate in oceans stewardship activities. Schools should look at teaching about oceans stewardship earlier than grade eleven because many students have already dropped out by this point.

Suggested Initiatives:

- Invite local resource managers to guest speak about the ocean environment in the ISR.
- Have an oceans related science fair or school projects.
- Expand the Oceans 11 Arctic Marine Science curriculum to Aklavik and Tuktoyaktuk.

- Provide extra curricular activities related to the ocean where there is sufficient student interest.
- Develop oceans stewardship lessons and/or curriculum aimed at younger youth (elementary and junior high) to capture those who would have dropped out before they could take the Oceans 11 marine science course.

7. Increase youth capacity in traditional skills and knowledge

Inuvialuit youth must also increase their capacity in traditional skills and knowledge. Youth gain these skills and knowledge through experiencing the land and ocean first-hand and learning from their family and elders. Currently the Community Corporations and Brighter Futures offer cultural camps on the land but youth stated that wanted more of these types of opportunities. Youth also stated that the current cultural camps often focus on younger youth and youth who were not enrolled in school. Therefore, more on the land and ocean programs should be offered, especially targeting older youth. These new on the land and ocean programs should be designed to allow youth who are still in school to participate. The skills and knowledge gained from on the land and ocean programs will provide youth with an understanding of the environment, respect for the land and ocean, and help develop a sense of connection to the earth. It is important that opportunities offered to youth be culturally relevant. Youth need to understand how what they are doing and learning is relevant to them and the Inuvialuit

culture. It must be recognized that there has been a constant struggle in the North to balance both formal and traditional educational demands and as yet educators have not found a balance.

Suggested Initiatives:

- Co-management bodies, local government, and elders committees should conduct presentations in the schools to teach youth about the ocean environment and their roles and responsibilities as stewards.
- Invite youth to attend meetings so that they can see how co-management bodies operate and how resource management decisions are made.
- Elders committees and local government should offer more cultural camps and extended field trips on the land and ocean to teach youth TEK and stewardship values. Any new and additional cultural camps offered should target older youth and allow youth enrolled in school to participate without having to miss classes.

8. Provide youth in the ISR with the supports needed to stay in school

The families, communities, older youth, industry, and local resource managers must all provide youth with encouragement and support to graduate from high school and to pursue a post secondary education. This will require the local and regional

governments as well as all the community members to address the many social issues that plague these communities. In addition to emotional support, students who attend a post secondary educational institution may also require financial support. The IRC through the IEF does provide post secondary students with variety of financial and other supports and these practices should continue.

Suggested Initiatives:

- Industry should ensure that their hiring policies encourage youth to complete their education.
- Industry and the Inuvialuit government should continue to provide youth with scholarships and bursaries for post-secondary education.
- Industry should conduct presentations about their role in oceans stewardship and the benefits of staying in school.

9. Resource Management Agencies and Boards should raise the profile of oceans and their role in oceans stewardship.

Many Inuvialuit youth are unaware of which agencies were involved in oceans stewardship in the ISR and what their responsibilities are. Youth are also often unaware of the opportunities that local resource management agencies and boards provide for youth to participate in oceans stewardship activities. As a result these agencies and

boards must raise the profile of the ocean, their role in oceans stewardship, and the opportunities they provide to youth to participate in oceans stewardship activities.

Suggested Initiatives:

- Make presentations at all the ISR schools about the ocean, their stewardship and management responsibilities, and what opportunities they provide for youth to participate in oceans stewardship.
- Sponsor events such as Oceans Day to raise the profile of the ocean and the work that they do.
- Provide youth with competitive summer employment opportunities to participate in oceans stewardship.
- Involve youth in scientific research whenever possible i.e. make youth involvement in research a requirement of scientific research license.
- Work collaboratively with the schools to provide youth with opportunities to attend oceans related conference across Canada. Students should not be handed these opportunities but should be required to earn the opportunity. Selection criteria could be a winning project as part of regular course curriculum etc. Youth stated that essay writing and poster contests are not effective ways to select participants.

10. Examine the issue of ethnicity

The Inuvialuit are not the only users of the ocean environment in the ISR and program administrators should further examine the idea of removing ethnicity as a prerequisite for youth participation in oceans stewardship programs. Youth in Inuvik and Aklavik felt that it was a form of racial discrimination and that it should not continue (Youth pers comm. 2002). Instead of separating people based on ethnicity efforts should be made to bring different youth together to work collaboratively in oceans stewardship programs. However, it is important to recognize that many oceans stewardship program administrators are limited by the legal and structural constraints of the Inuvialuit and Gwich'in land claim agreements. These land claim agreements specify that only beneficiaries of each agreement are eligible to receive funding through monies made available through these agreements. If oceans stewardship programs are to be expanded to include all youth in the ISR funding for these projects would have to come from sources outside of land claim agreements.

Suggested Initiative:

- Expand the strategy to engage Inuvialuit youth in oceans stewardship to engage all youth in the ISR.

Strategy Implementation

BSIMPI has a key role to play in implementing this strategy to engage Inuvialuit youth in oceans stewardship. Along with other interested parties, this group will be responsible for promoting the knowledge gathered from this study in ways that will encourage community leaders, elders, educators, resource managers, and others in identifying ways to make the changes needed to ensure the effective implementation of the strategy. BSIMPI is the ideal group to carry out these functions because it represents a cross-section of interested parties in the ISR. In order to fully implement the strategy additional financial and human resources will be required.

The above ten recommendations are all important to engaging youth in oceans stewardship. However, the above recommendations have not been presented in any particular order. The first priority should be to make youth aware of oceans stewardship issues and the stakeholders involved. Youths' level of awareness should be raised before asking youth to participate in existing oceans stewardship programs and to assist in the development of new programs. Therefore, recommendations related to raising the profile of oceans and organizations involved in oceans governance and stewardship should be the first priority. This can be achieved through guest speakers and the development of a website and other promotional material dedicated to oceans stewardship in the ISR etc. Once the awareness campaign is underway, the second priority is to inform youth of how they can currently participate in oceans stewardship activities in their own community and the ISR. The third priority should be the development of new opportunities for youth

to participate in oceans stewardship activities that fill the gaps between existing oceans stewardship programs. An Oceans Stewardship Youth Coordinator should ideally facilitate all three priorities.

Roles and Responsibilities

A critical responsibility for BSIMPI is to continue discussions with local resource managers and the IRC to ensure their buy-in into the strategy. The roles and responsibilities of interested parties are outlined below.

The Formal Education System

Educators are responsible for teaching Inuvialuit youth about ocean ecology and management. The Oceans 11 marine science curriculum course is a takeoff point for this and could be used by the schools to fulfill their responsibility. The schools should also make an effort to ensure that stewardship opportunities are available to youth from all six ISR communities. The schools have a great opportunity to promote oceans education and stewardship through class projects and oceans related science fairs. The school system must also ensure that students receive a high quality education that adequately prepares them (i.e. proficiency in reading, writing, science) for participating in oceans stewardship.

The Fisheries Joint Management Committee

The FJMC has a crucial role in implementing the strategy as they currently provide the best opportunity for youth to participate in oceans stewardship in the ISR. The FJMC Student Mentoring Program is viewed by local governments, resource managers, and youth as the best ocean stewardship opportunity currently available to youth because the program provides them with a variety of job placements and strives to teach them both scientific and traditional knowledge. As a result, it is imperative that the FJMC continue to offer the Student Mentoring Program and improve upon it so that youth from all the ISR communities can benefit from the program.

Hunter and Trapper Committees

Members of HTC's should play a much greater role in teaching and engaging youth in oceans stewardship at the local level. The HTC's acknowledge this responsibility and suggested that they could invite youth to attend HTC meetings, host workshops, and conduct school presentations to teach youth about oceans stewardship and the importance of the ocean environment and resources to the Inuvialuit (Resource Managers pers comm. 2002/2003).

Elders' Committees

Elder's committees also have a very important role to play in implementing this strategy. Elders have the responsibility to pass on their knowledge of the land, oceans, and animals on to younger generations. Some suggested initiatives Elders Committees could pursue to engage youth in oceans stewardship include hosting field trips to take youth out on the land and ocean to teach them traditional skills and knowledge; and conducting workshops in the community about ocean related issues, and teaching youth traditional skills.

Local Resource Managers

Local resource managers have perhaps the most important role in implementing the strategy because they currently provide the majority of oceans stewardship opportunities to youth. This group includes DFO, Parks Canada, and the Territorial Department of Resources Wildlife and Economic Development. Each of these agencies has taken steps to engage youth in resource management activities. They are capable of doing much more. These agencies should make regular school presentations in all of the ISR communities, host or sponsor community events such as Oceans Day to raise the profile of oceans and create awareness of their role in oceans stewardship. These agencies can also provide competitive summer employment opportunities for youth, assist youth in attending oceans related conferences, and involve youth in scientific

research. These agencies must also internally deal with the negative attitudes of some staff members towards youth, and their lack of interest in engaging youth in oceans stewardship activities.

Industry

Industry has a role to play in the successful implementation of this strategy. Youth stated that the low skill requirements and relatively high wages for some industry positions could discourage youth from completing or returning to school. Industry should therefore pursue initiatives that encourage youth to stay in school and complete their education (Youth pers comm. 2002/2003). This can be achieved through hiring policies that encourage youth to complete their education and pursue a post secondary education, providing scholarships to support students' pursuit of post secondary education, and conducting presentations at schools about their role in oceans stewardship and the benefits of staying in school.

The Inuvialuit Regional Corporation

The IRC, including its Community Corporations, Brighter Futures, and IEF, have a crucial role to play in the implementation of the strategy. They must continue to offer cultural camps and expand the program to include older youth and those enrolled in school. The IRC needs to show leadership in supporting existing oceans stewardship

opportunities and in developing new initiatives to engage youth in oceans stewardship. The IRC also has a responsibility to encourage youth to complete and pursue post secondary education. This can be done through continuing the educational supports provided by IEF. The most important role IRC has is to support and promote the implementation of the strategy. As the umbrella governing body of the ISR, they have a tremendous impact on the programs and priorities of their subsidiaries.

Evaluation and Monitoring

In order to determine the success of the proposed Strategy to Engage Inuvialuit Youth in Oceans Stewardship a systematic assessment must be conducted. The assessment should measure the outcomes of the strategy to see if the objectives have been fulfilled. Evaluation of the overall strategy should be conducted as well as assessments of each of the oceans stewardship programs. Evaluations of both the strategy and programs should be conducted with some regularity and formality. It is important that BSIMPI and program administrators recognize that evaluation is time consuming and can be expensive, and therefore needs to be addressed in their budgeting.

The success of the strategy can be assessed through measuring outcomes. These outcomes include what BSIMPI sees and hears that would suggest that progress is being made. They will want to look at the benefits, impacts, and changes that have resulted from the strategy. Surveying program administrators and other interested parties identified earlier in the strategy can assess these benefits, impacts, and changes. Pre and

post program surveys of participants would provide the most useful information to program administrators and BSIMPI. This method allows program administrators to determine the amount of impact the program has had on changing the views, values, and causing changes in behaviors, skills level, knowledge etc. It would also be helpful to have program administrators assess the performance of youth participants and their own thoughts on the effectiveness of the oceans stewardship program. Indicators of a successful strategy that can be expected within the first five years following implementation would include, but are not limited to:

- An increase in the number of youth participating in oceans stewardship activities;
- An increase in the number and types of skills youth have;
- An increase in knowledge of ocean ecology, stewardship, the roles and responsibilities of local agencies and boards in oceans stewardship;
- Increase in knowledge of the cultural importance of the ocean, traditional skills, and traditional knowledge.
- An increase in communication between agencies, boards, and schools.
- Improved communication between youth and elders.
- Increased self-esteem and self-confidence.

If fully implemented the proposed Strategy to Engage Inuvialuit Youth in Oceans Stewardship will also likely have a number of indirect benefits that will be seen over the long-term. These potential benefits include, but are not limited to:

- Preparing youth for future employment. Increased high school graduation rates and attendance at post secondary educational institutions as a result of emotional and financial support for youth to complete their education. Higher education levels provide youth with increased technical skills, improved communication, problem-solving skills, and the ability to think critically and analytically - all of which help prepare youth for future employment in any field.
- Addressing the issue of social fracturing. Currently the elders have a traditional worldview, Canadian society generally has a western scientific worldview, and Inuvialuit youth are in a state of flux falling somewhere in the middle. The proposed strategy aims to reconcile the two competing worldviews through improved communication between elders and youth, and resource management professionals and youth.
- Strengthening of cultural values. Cultural values will be strengthened as Inuvialuit youth begin to see their place in the world relative to others and become empowered to begin a process of change by lifting people up and improving their quality of life.

CHAPTER SIX – SUMMARY AND CONCLUSIONS

Summary

Stewardship is a term that is increasingly being used by many industries, government agencies, and community groups to describe their natural resource use and management philosophy of caring for the earth, assuming responsibility, and taking action to ensure that healthy ecosystems are passed on to future generations. In Canada, stewardship is being expanded to include the oceans because of their importance socially, environmentally, and economically to Canadians. Stewardship is also being extended to include the oceans because over the past decade the Government of Canada has moved to assume the management responsibilities for 2.9 square kilometres of marine waters.

In the Western Canadian Arctic, the Inuvialuit people have been practicing stewardship of the land and ocean for generations through their ability to balance resource use and preservation, their use of TEK, and their respect for the natural environment. Youth involvement in oceans stewardship in the ISR is currently critical due to the industrial development that is going to take place as a result of the petroleum industry and potentially the mining sector as well. It is important that Inuvialuit play a role in this change that is going to happen in the ISR.

This research project was initiated by the BSIMPI Working Group due to a concern expressed by Inuvialuit elders about the lack of interest and necessary skills

being acquired by Inuvialuit youth to take on leadership roles in oceans stewardship and management in the ISR. This research project addresses the issue of engaging Inuvialuit youth in oceans stewardship, which is one of the key priorities of the BSIMPI three-year work plan.

The objective of this research project was to develop a proposed strategy to engage Inuvialuit youth in oceans stewardship in collaboration with the BSIMPI Secretariat and Inuvialuit youth. The objectives of this research project are to:

- Identify trends in youth participation in oceans stewardship activities;
- Assess the reasons for these trends;
- Identify components of a successful strategy to engage Inuvialuit youth in oceans stewardship;
- Examine youth environmental stewardship programs across Canada to identify techniques to engage youth; and
- Develop a proposed strategy to engage Inuvialuit youth in oceans stewardship.

Prior to the field research a literature review was conducted and can be found in Chapter Two. The literature review introduces the concepts of stewardship, oceans governance in the ISR, co-management, TEK, education and training in the North, and other strategies that have been developed to engage Aboriginal youth in the economy and environmental sector. The literature review examines the concept of oceans stewardship, which is caring for the land, ocean, and associated resources so that healthy ecosystems can be passed on to future generations. The review identifies the two structures that

govern the ocean in the ISR - the IFA and federal legislation. The literature review also identifies the four agencies with oceans governance and stewardship responsibilities in the ISR: two federal government agencies, DFO and INAC; and two co-management bodies, FJMC and BSIMPI. The review demonstrates that co-management, the sharing of renewable resources management responsibilities between the government and the Inuvialuit, and TEK, the collection of knowledge and values that have been acquired through observation and experiences and passed down from one generation to the next, are components of stewardship and not separate from it. The review examines the low educational attainments of the North and specifically the ISR that can result in youth reaching adulthood without the knowledge and skills to take leadership roles in their communities. The literature review concludes with introducing two strategies that have been designed to engage Aboriginal youth in the economy and environmental sector: NAYS and BEAHR. The engagement of Aboriginal peoples in the Canadian labour force has recently become a priority of the Federal Government because the Aboriginal population is young and rapidly growing and will have the potential to fill anticipated labour shortages. Background research also examined methods for conducting scientific research in Aboriginal communities. Through this examination and analysis a research methodology of best practices, applicable to and tailor-made for the Inuvialuit Settlement Region was developed and is described in detail in the Chapter three – Research Methods.

This research project on engaging Inuvialuit youth in oceans stewardship was conducted using a qualitative approach. The specific research methods used include a

preliminary site visit, visiting community leaders and members, attending local resource management meetings (i.e. HTC meetings etc.), participation, youth focus groups, interviews with Inuvialuit elders, parents, local past and present teachers, local resource managers, and Youth Environmental Stewardship Program Administrators from across Canada, and verification of results. Critical to the success of the research was the age of the researcher, which falls within the range of youth (14 to 29), resulting in the ability to relate to the youth participants in a way that an older adult researcher would not have been able to. Visiting, attending meetings, and participating in youth and community activities were all part of the relationship building portion of the research which was essential and central to the research methodology. The theory of best practices was applied to the interviews and focus groups portion of the research. Also, underpinning the research was a respect for all the participants and the knowledge that they hold. For many youth this research project was unique and important because it was the first time that they were formally asked to provide their thoughts and opinions on their participation in oceans stewardship activities.

This research project presents how oceans governance is carried out in the ISR, the quality formal education and its' under appreciated value by the Inuvialuit, and the importance of TEK to stewardship and to the Inuvialuit people. Currently there are a number of oceans stewardship programs open to youth in the ISR, however, each program only allows for a small number of youth participants. Opportunities for youth to participate in oceans stewardship in the ISR include: the FJMC Student Mentoring Program, Tariuq Monitoring Program, scientific research, Oceans 11 Arctic marine

science curriculum, Oceans Day festivities, and cultural camps. The research findings also demonstrate youths' feelings of abandonment by their families, communities, regional government, and the rest of Canada. Perhaps most importantly this research demonstrated Inuvialuit youths' desire, especially in the communities of Holman, Paulatuk and Sachs Harbour to participate in both formal and traditional oceans stewardship activities.

This research project has resulted in a proposed strategy to engage Inuvialuit youth in oceans stewardship activities in the ISR. The strategy has been designed using a wholistic approach to ensure the inclusion of youth from all six Inuvialuit communities, not just youth from the communities of Inuvik, Tuktoyaktuk, and Aklavik. The proposed strategy is designed to be sensitive to the needs of the Inuvialuit people, the formal education system, as well as local resource managers. The proposed strategy to engage Inuvialuit youth in oceans stewardship attempts to address many of the issues discussed in Chapter Four including youths lack of awareness of:

- Organizations involved in oceans stewardship;
- Opportunities to participate in oceans stewardship activities; and
- How to get involved in current oceans stewardship programs.

The proposed strategy to engage Inuvialuit youth in oceans stewardship incorporates many of the recommendations made by research participants that are listed in Chapter Four including improving communication between oceans stewardship program administrators and the schools, and that the schools and HTC's should be playing a greater role in teaching youth about oceans stewardship. The resulting proposed strategy

to engage Inuvialuit youth in oceans stewardship includes a vision, objectives, ten recommendations, suggested initiatives, and outlines the roles and responsibilities of stakeholders in the strategy implementation. Evaluation and monitoring techniques to determine the success of the proposed strategy to engage Inuvialuit youth in oceans stewardship are also discussed in Chapter Five.

Conclusions

There are a number of interesting findings, conclusions, and lessons to be learned from this research on engaging Inuvialuit youth in oceans stewardship. The research participants had complex opinions and viewpoints on both formal and traditional education, the 'necessary' skills that youth require to be involved in oceans stewardship activities and be future community leaders, and the best ways to involve youth in oceans stewardship activities. Key conclusions can be made about youths' preparedness to assume leadership roles in oceans stewardship; trends in oceans stewardship participation and the reasons for these trends; the components of a successful strategy to engage Inuvialuit youth in ocean stewardship; principles and techniques to engage youth in stewardship activities; and a proposed strategy to engage Inuvialuit youth in ocean stewardship.

One key finding of the research is that Inuvialuit youth share the feeling with elders, community leaders, and local resource managers that they are not prepared to take on oceans stewardship and management responsibilities from their elders. Inuvialuit

youth feel that they are not receiving a high quality formal education and that they do not have enough opportunities to be taken out on the land and ocean for extended periods of time to learn traditional knowledge and skills taught by their elders. These findings are similar to those of other northern communities where educators struggle to balance the demands for both a formal and traditional education. Inuvialuit youth are unprepared but not uninterested in participating in oceans stewardship activities. Youth showed strong interest in participating oceans stewardship activities and learning more about the oceans, especially in the smaller coastal communities of Holman, Paulatuk, and Sachs Harbour. It is evident from the research findings discussed in Chapter Four that Inuvialuit youth want to acquire the knowledge and skills required to play meaningful roles in their society.

The research findings indicate that youth participation in traditional oceans stewardship activities has steadily decreased since the implementation of the formal education system in the ISR. Youth now spend their time in school learning, rather than spending extensive periods of time on the land and ocean learning from their family and elders. Almost all of the families in the ISR spend at least some time on the land and ocean harvesting marine species but youth often do not participate in these trips because of the lack of equipment, high costs of supplies, and the lack of allowances made by the schools for missing classes due to these types of trips. The research findings show that youth participation in traditional oceans stewardship activities is lowest in the community of Inuvik. Youth in the communities of Holman, Tuktoyaktuk, Aklavik, Sachs Harbour, and Paulatuk would like to have more opportunities to spend extended periods of time on

the land and ocean with their families, elders, and peers to learn traditional skills and knowledge.

Youth participation in formal oceans stewardship activities has increased over time but only as new programs have been introduced. These formal oceans stewardship opportunities tend to be based in the communities of Inuvik, Aklavik, and Tuktoyaktuk. Youth in all six of the ISR communities want more opportunities to participate in formal oceans stewardship activities such as the FJMC Student Mentoring Program that provides them with a variety of work placements and wage employment. Youth interest in participating in both formal and traditional oceans stewardship opportunities appears highest in the coastal communities of Holman, Sachs Harbour, and Paulatuk; there appears to be moderate interest among youth in Aklavik and Tuktoyaktuk; and interest appears lowest among youth in the community of Inuvik. Even more important is that the demand to participate in oceans stewardship activities far outweighs the current supply of opportunities; there are too few oceans stewardship opportunities for the Regions' 1700 youth.

There are a number of reasons why youth are not participating in traditional oceans stewardship activities as often as in the past. The main reasons youth identified for the reduction in participation in traditional oceans stewardship activities include finances, program targets, the lack of allowance made by schools, and southern influences. Many youth, parents, and elders stated that youth do not participate in family trips on the land and oceans because of the high costs of equipment, fuel, and groceries; as a result of these high costs only the youngest children are taken along. Programs

designed to take youth out on the land and ocean tend to focus on younger youth (under 15yrs) and/or youth who have dropped out of school resulting in the exclusion of older youth and those youth enrolled in school from participating cultural camps and on the land and ocean programs. A balance in the struggle between formal and traditional education has not yet been found but perhaps oceans stewardship could be an issue that helps to improve the situation. It must also be recognized that some youth aspire to be like youth in the South and are more interested in satellite television, video games, and the Internet than in participating in traditional oceans stewardship activities.

Components of a successful strategy were identified as part of the research. The components include having that the holders of the strategy have a vision, clear objectives, and actions to be taken. A wholistic approach to design and development should also be utilized, for examples in this situation Inuvialuit youth were directly involved in the development of the proposed strategy to engage Inuvialuit youth in oceans stewardship. The components of a strategy were identified in the literature review of strategies and plans aimed at engaging Aboriginal youth in the Canadian labour force, as well as government strategies such as Canada's Oceans Strategy. The objectives of the strategy must be clearly defined. The objectives of the proposed strategy to engage Inuvialuit are clearly defined and include: providing youth with awareness of opportunities; teaching youth about the importance of the ocean: developing the values, attitudes, motivation; acquiring the knowledge and skills; and providing youth with opportunities to participate in ocean stewardship activities. Due to the multitude of issues that underlie Inuvialuit youth participation in ocean stewardship activities such as the under appreciated value of

formal education, disruptive social conditions that are seen as the 'norm' (i.e. substance abuse, violence etc.), and the negative attitudes of local resource managers towards youth etc. a wholistic approach to developing the strategy to engage Inuvialuit youth in oceans stewardship was required. There are far more people who need to be involved in a strategy to engage youth than just youth and an attempt was made to involve all interested parties in the research as well as to define their roles and responsibilities.

The techniques used to engage youth in environmental stewardship by other Youth Environmental Stewardship Program Administrators from around Canada include tapping into youths' passions, providing hands-on experiences, recognition for their participation, wage employment, and effective program promotion. Youth Environmental Stewardship Program Administrators stated that the best way to motivate youth is to develop stewardship opportunities around their individual passions. This is important because youth are likely only to be motivated to participate in oceans stewardship activities if they are interesting and important to them. Youth like environmental stewardship programs that provide them with hands-on experiences particularly in the outdoors. This is consistent with the types of oceans stewardship experiences Inuvialuit youth said that they wanted. Youth also want recognition for their efforts and participation in oceans stewardship activities. Youth like to feel that they are making a valuable contribution to a stewardship project, program, their community etc. Youth Environmental Stewardship Program Administrators stated that if youth feel important and valued they are more likely to participate in stewardship activities on a continual basis. Youth also like to participate in stewardship through wage employment;

this is already being done in the ISR in programs such as the FJMC Student Mentoring Program. Effective program promotion is paramount because youth will never participate in oceans stewardship if they are unaware of the opportunities for participation that are available to them. As a result, program promotion must specifically target the youth audience for example messages must be designed for youth, a variety of media should be utilized, and program information must be made available in convenient locations for youth such as the schools. All of the techniques identified by Youth Environmental Stewardship Program Administrators to engage youth in stewardship outlined above can easily be adapted to the ISR if they have not been implemented already.

A proposed strategy to engage Inuvialuit youth in oceans stewardship has been developed as part of this research. The strategy attempts to address both directly and indirectly many of the issues that youth face including a lack of support to complete their formal education, lack of opportunities available to youth to spend extended periods of time out on the land and ocean, ethnicity, and negative attitudes of local resource management professionals as described earlier in Chapter Four. The goal of the proposed strategy to engage Inuvialuit youth in oceans stewardship is to increase the number of Inuvialuit youth participating in oceans stewardship activities and to provide them with increased oceans related knowledge and skills in order to effectively participate in oceans stewardship activities. The implementation of the suggested initiatives in Chapter Five will require the support of stakeholders as well as human and financial resources. This research on engaging youth in oceans stewardship has received

strong support at the community level; however, the proposed strategy to engage Inuvialuit youth in oceans stewardship requires the support, buy-in, and promotion by the IRC and local resource management professionals. This proposed strategy to engage Inuvialuit youth in oceans stewardship is just the beginning and will need to be further refined and developed by the BSIMPI Working Group and other stakeholders.

There are also a number of important lessons to be learned from this research on engaging Inuvialuit youth in oceans stewardship. Perhaps most important lesson learned is that there is a great opportunity to involve Inuvialuit youth in oceans stewardship activities that is being missed. Youth in the ISR have expressed a desire to be involved in oceans stewardship activities and to learn more about the ocean environment but to date there have been limited opportunities for youth involvement. There have also been important lessons learned regarding formal and informal education. It is evident that higher formal education attainment levels lead to a better quality of life - this includes access to increased income and being able to make better life choices (Castellano et al. 2002, City of Calgary 2002, NRTEE 2001). Another important lesson learned is that most Inuvialuit youth are not being given the chance to spend time on the land and ocean even though they want this very much. Spending time on the land and ocean allows youth to acquire traditional knowledge and skills, develop a sense of moral values of respect for the earth, self-confidence, and a sense of pride and connection with their culture. Acquiring this knowledge will allow youth not only to become better stewards of the land and ocean environment but also leaders of their communities.

This research focused on Inuvialuit youth. The findings regarding education and engaging youth are similar to other research findings about Aboriginal youth in Nunavut and Northern Ontario (Makokis 2000, FedNor 1994). Continued research on engaging youth in stewardship activities in other Northern and Aboriginal communities is needed to determine the wider applicability of the findings of this research.

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APPENDICES

- A- Aurora Research Institute Licenses
- B- University of Manitoba Ethics Review Board Approval
- C- Focus Group Questions, Consent and Confidentiality Forms
- D- Interview Schedules and Consent Forms
- E- Public Summary Document

Appendix A – Aurora Research Licenses

SCIENTIFIC RESEARCH LICENCE

Licence # 13384N

File # 12 410 592

ISSUED BY: Aurora Research Institute - Aurora College
Inuvik, Northwest Territories

ISSUED TO: Ms Michelle Schlag
303-70 Dysart Road
Natural Resources Institute
University of Manitoba
Winnipeg, MB R3T 2N2
204-453-3697

ON: 10-Oct-02

TEAM MEMBERS: Self

AFFILIATION: University of Manitoba

FUNDING: Department of Fisheries and Oceans; Natural Resources Institute, University of Manitoba; Oceans Integrated Management Node; Fisheries Joint Management Committee

TITLE: Development of a Strategy to Engage Inuvialuit Youth in Oceans Stewardship

OBJECTIVES OF RESEARCH:

Inuvialuit elders and the Fisheries Joint Management Committee are concerned regarding the lack of necessary skills being acquired by youth to take leadership roles in the Inuvialuit Settlement Region communities; however, to date no formal youth vision for the ISR has been developed. The Beaufort Sea Integrated Management Planning Initiative Working Group is seeking ways to engage youth in the management of marine resources. The purpose of this research is to develop a youth strategy that will foster increased Inuvialuit youth interest and participation in oceans stewardship activities in the ISR. The specific research objectives are; 1) to assess the trends related to the level of Inuvialuit youth participation in oceans stewardship activities; 2) evaluate reasons for the trends of participation in oceans stewardship activities; 3) identify components of a successful Inuvialuit youth oceans stewardship strategy; 4) examine youth programs outside the ISR related to environmental stewardship to identify principles and techniques to encourage youth involvement; and 5) make recommendations for a strategy to increase Inuvialuit youth participation in oceans stewardship activities in the ISR.

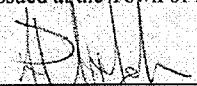
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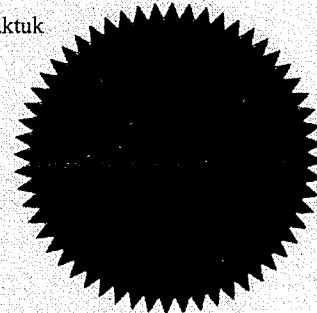
DATE(S): October - December 2002

LOCATION: Inuvik, Aklavik, Holman, Paulatuk, Sach's Harbour, and Tuktoyaktuk

Licence# 13384 expires on December 31, 2002.

Issued at the Town of Inuvik on Thursday, October 10, 2002


Andrew Applejohn
Science Administration Officer (Acting)



SCIENTIFIC RESEARCH LICENCE

Licence # 13390R

File # 12 410 592

ISSUED BY: Aurora Research Institute - Aurora College
Inuvik, Northwest Territories

ISSUED TO: Ms Michelle Schlag
303-70 Dysart Road
Natural Resources Institute
University of Manitoba
Winnipeg, MB R3T 2N2
204-453-3697

ON: 10-Oct-02

TEAM MEMBERS: self

AFFILIATION: University of Manitoba

FUNDING: Department of Fisheries and Oceans; Natural Resources Institute, University of Manitoba; Oceans Integrated Management Node; Fisheries Joint Management Committee

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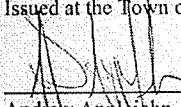
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DATE(S): January 2003

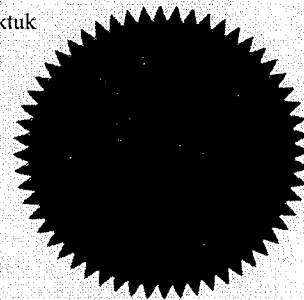
LOCATION: Inuvik, Aklavik, Holman, Paulatuk, Sach's Harbour, and Tuktoyaktuk

Licence# 13390 expires on December 31, 2003.

Issued at the Town of Inuvik on Thursday, October 10, 2002



Andrew Applejohn
Science Administration Officer (Acting)



Appendix B – Ethics Review Board Approval



UNIVERSITY
OF MANITOBA

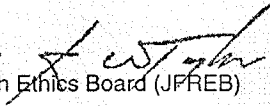
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APPROVAL CERTIFICATE

8 July 2002

TO: Michelle Schlag
Principal Investigator

FROM: Wayne Taylor, Chair 
Joint-Faculty Research Ethics Board (JFREB)

Re: Protocol #J2002:071
"Development of a Strategy to Engage Inuvialuit Youth in Oceans
Stewardship"

Please be advised that your above-referenced protocol has received human ethics approval by the **Joint-Faculty Research Ethics Board**, which is organized and operates according to the Tri-Council Policy Statement. This approval is valid for one year only.

Any significant changes of the protocol and/or informed consent form should be reported to the Human Ethics Secretariat in advance of implementation of such changes.

Get to know Research ... at your University.

Appendix C – Focus Group Questions, Consent, and Confidentiality Forms

Development of a Strategy to Engage Youth in Oceans Stewardship in the Inuvialuit Settlement Region Focus Group Consent Form

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The purpose of this study is to develop a strategy to engage Inuvialuit youth, between the ages of 14 and 29, in oceans stewardship (traditional harvesting and formal oceans resources management activities). The information gathered as part of this study will provide direction to the Beaufort Sea Integrated Management Planning Initiative Working Group, the Fisheries Joint Management Committee, the Department of Oceans, and the Inuvialuit Game Council for a well-defined and integrated youth strategy. The Department of Fisheries and Oceans, Oceans Integrated Management Node, Fisheries Joint Management Committee, and the Natural Resources Institute are funding this study.

I would like to find out more about how you participate in traditional harvesting activities and/or formal ocean resources management, and how you feel about youth involvement in these activities. The focus group interview will provide some background information about past, present and future participation in hunting, trapping, fishing, and other traditional harvesting activities as well as formal oceans resources management activities.

The focus group interview will take between 2 and 4 hours and you can withdraw at any time. The focus group interview will be conducted in groups of 8, with a mix of males and females between the ages of 14 and 29. The information you give me will be kept confidential - your name will not appear in any documents that result from this study. Feedback will be provided to you in the form of a short summary report and presentations to be conducted after the research has been concluded. Monetary honoraria will be provided to each participant of the study.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be

as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Researcher: Michelle Schlag (204) 453-3697
Academic Advisor: Thomas Henley (204) 474-6169

This research has been approved by the Natural Resources Institute Research and Ethics Approval Committee. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122. A copy of this consent form has been given to you to keep for your records and reference.

Participant: _____ Date: _____

Thank You,

Michelle Schlag, Researcher
Natural Resources Institute, University of Manitoba

Development of a Strategy to Engage Youth in Oceans Stewardship in the Inuvialuit Settlement Region Focus Group Confidentiality Form

This form is intended to further ensure confidentiality of data obtained during the course of the study. All persons involved in the focus groups, are asked to read the following statement and sign their names indicating that they agree to comply.

I hereby confirm that I will not communicate or in any manner disclose publicly information discussed during the focus group interview. I agree not to talk about material relating to this study or interview with anyone outside my fellow focus group members and the researcher.

Participant: _____

Date: _____

Thank You,

Michelle Schlag, Researcher
Natural Resources Institute, University of Manitoba

Focus Group Questions

Oceans Stewardship

1. Is the land, ocean, and ocean resources important you? Why?
2. What groups, organizations, and agencies are involved in oceans stewardship?
3. Do you think that it is important for youth to be involved in Oceans Stewardship? Why?
4. What skills (both traditional and formal) do you need to learn to be good stewards 'caretakers' of the ocean?

Youth Participation

1. What types of oceans stewardship activities are you involved in?
2. Who do you learn about oceans stewardship from?
 - a. Who do you think should teach you about oceans stewardship?
3. What prevents you from participating in oceans stewardship activities?
4. What would encourage and motivate you to participate in oceans stewardship?

Recommendations

1. What type of oceans stewardship activities would you like to be involved in?
2. What level of involvement would you like – observe, participate, advisory, decision-making?
3. Do you prefer to learn about oceans stewardship through traditional teachings or formal education?
4. Any final comments, questions or recommendations about youth involvement in oceans stewardship?

Appendix D – Interview Schedules and Consent Forms

Development of a Strategy to Engage Youth in Oceans Stewardship in the Inuvialuit Settlement Region Interview Consent Form

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

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The interview will take between 1 and 2 hours and you can withdraw at any time. With your permission I would like to tape record the interview, if you are not comfortable with being recorded I will take hand-written notes. The information you give me will be kept confidential - your name will not appear in any documents that result from this study. Feedback will be provided to participants in the form of a short summary report and presentations to be conducted after the research has been concluded. Monetary honoraria will be provided to each participant of the study.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Researcher: Michelle Schlag (204)453-3697
Academic Advisor: Thomas Henley (204) 474-6169

This research has been approved by the Natural Resources Institute Research and Ethics Approval Committee. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122. A copy of this consent form has been given to you to keep for your records and reference.

Please check one of the following:

I prefer the use of tape recorder: _____ Hand written
notes: _____

Participants Signature: _____ Date: _____

Thank You,

Michelle Schlag, Researcher
Natural Resources Institute, University of Manitoba

Interview Schedules

For the purposes of this research:

- Inuvialuit youth means beneficiaries under the Inuvialuit Final Agreement between the ages of 14 to 29.
- Oceans Stewardship means caring for the land, ocean and associated resources so that healthy ecosystems can be passed to future generations. This can include both traditional hunting, trapping, fishing, and harvesting activities, traditional knowledge as well as any formal ocean resources management activities typically carried out by government agencies and co-management bodies.

Inuvialuit Elders Interview Schedule

1. Is the ocean and ocean resources important to you? Why?
2. Are you involved in hunting, fishing, or harvesting of ocean resources?
3. If on a management committee:
 - a. What activities are you involved in?
 - b. Does the committee support the idea of caring for the ocean resources?
 - c. Are there youth involved in the committee?
 - i. If yes, what is their role?
 - ii. If not, would you like youth to be involved?
 - iii. Have you made efforts to involve youth?
 - iv. Do you have any suggestions on how youth can be involved?
4. What do you know about the Beaufort Sea Integrated Planning Initiative?
5. Do you think it is important to help youth learn to care for the land and water?
6. Do you feel that the youth are prepared to take over the management of oceans resources?
7. Do you think that there is a need to create a strategy to involve youth in oceans stewardship (caring for the land and ocean resources)?
8. What preparations do you think youth need to be good stewards (care takers) of ocean resources?
9. Can you think of reasons why youth may not be involved in caring for the land and ocean resources?
10. Is it important for young people to spend time out on the land and ocean? If yes, why?
11. Do you think it is important for youth to have traditional skills to be good stewards of the land and ocean resources? If yes, why?
12. How many youth are active in hunting and trapping and fishing?
 - a. Is this a good number?

- b. Has this number been going up or down over the years?
13. What role can youth play in traditional activities out on the land and ocean?
 14. What training could elders provide to help students learn to care for the land and water?
 15. Do you think that youth involvement in formal oceans resources management is important? Why, why not?
 16. What role do you think youth can play in formal oceans resources management?
 17. What level of participation do you think youth should have in ocean resources management (i.e. observatory, advisory, decision-making etc)?
 18. Who do you think is responsible to teach youth about ocean stewardship (caring for the land and ocean resources)?
 19. Do you think that youth must have a formal education (university or college) to be good caretakers of ocean resources?
 - a. If yes, what do you think the implications are of youth leaving the Inuvialuit Settlement Region to get a higher education?
 20. Do you go out on the land?
 21. Do your children and grandchildren go out on the land with you?
 22. Do you have any other thoughts and recommendations to encourage youth involvement in traditional harvesting and/or formal oceans resource activities?

Parent Interview Schedule

1. Is the ocean and ocean resources important to you? Why?
2. Are you involved in oceans stewardship (hunting, fishing, or harvesting of ocean resources, on management committee etc.)?
3. What do you know about the Beaufort Sea Integrated Management Planning Initiative?
4. Do you think it is important to help youth learn to care for the land and water? Do you think that youth involvement in Oceans stewardship is important?
5. Do you feel that the youth are prepared to take over the management of oceans resources?
6. Do you think that there is a need for a strategy to involve youth in oceans stewardship?
7. What preparations do you think youth need to be good caretakers of ocean resources?
8. Are you aware of the opportunities available to youth to participate in oceans stewardship through the Fisheries Joint Management Committee mentoring program?
9. Do you think it is important for youth to have traditional r skills to care for the land and ocean resources?
10. Do you think that it is important that youth participate in formal oceans management (i.e. government/scientific) activities?
11. Do you think that it is necessary for youth to have a formal education (high school, college, university) to care for the land and ocean resources?
12. Who do you think is responsible to teach youth about oceans stewardship (caring for the land and ocean resources, traditional and formal oceans management)?
13. What are the implications of youth having to leave the Inuvialuit Settlement Region to get a higher education?
14. Can you think of reasons why youth may not be involved in oceans stewardship (caring or managing of the land and ocean resources, traditional or formal – scientific activities)?
15. What could you as a parent do to help youth learn to care for the land and water?
16. Do you go out on the land?
 - a. If yes, what activities do you participate in?
17. Do your children go out on the land?
 - a. If yes, what activities are they involved in?
18. Do your parents go out on the land?
 - a. If yes, what activities did they participate in?
19. Do you have any other thoughts and recommendations to encourage youth to become involved in oceans stewardship (care for the land and ocean resources, traditional and formal activities)?

Teachers (Past and Present) Interview Schedule

1. Where are you originally from?
2. What grade(s) do you currently teach?
3. How long have you been teaching in the ISR?
4. Has the topic of oceans ever been taught in class?
5. Has there been any discussion about oceans stewardship (caring for the land and ocean resources)? If not why not?
6. Have you heard about the Arctic science (oceans 11) curriculum being piloted in Paulatuk, Inuvik, and Holman this spring?
7. Does the school offer any extra-curricular activities related to oceans stewardship (caring for the land and oceans resources)?
8. What do you know about the Beaufort Sea Integrated Management Planning Initiative?
9. Are you aware of the oceans stewardship opportunity available to youth through the FJMC student-mentoring program?
10. Do you think it is important to help students learn to care for the land and water?
11. What preparations do you think youth need to be effective stewards of ocean resources?
12. Do you think that there is a need for a strategy to involve youth in oceans stewardship?
13. What training could schools provide to help students learn how they can help care for the land and water?
14. Can you think of reasons why students may not be involved in oceans stewardship (caring for the land and ocean resources)?
15. Do you think the school could help identify students who would like to learn to care for the land by taking part in activities such as:
 - BSIMPI WG meetings;
 - talking with hunters;
 - going on the land and ocean;
 - meeting with elders; etc
16. How can youth be motivated to become involved in activities that teach them to care for the land and ocean resources?
17. What do you think the implications are for the students who must leave the Inuvialuit Settlement Region to get a higher education?
18. Do you have any other thoughts and recommendations to encourage youth involvement in oceans stewardship (caring for the land and ocean resources)?

Local Resource Management Professionals Interview Schedule

1. What is your position?
2. Where are you originally from?
3. What is the level of education do you have?
4. How is the organization involved in oceans resources management and stewardship?
 - a. What type of oceans management activities does the organization conduct?
 - b. In what capacity (regulatory development, enforcement, advisory etc)?
5. What are the educational requirements of oceans resource management positions within your organizations?
6. What are the TK requirements of resource management positions within your organization?
7. Do you think it is important for youth to be involved in oceans stewardship?
8. Do you feel that the youth are prepared to take over the management of oceans resources?
9. Do you think that there is a need for a strategy to involve youth in oceans stewardship?
10. Are there any opportunities for Inuvialuit youth to become involved in oceans resources management within your organization?
 - a. If yes, how are they involved?
 - b. How many are involved?
11. What are the educational requirements of youth participants (enrolled in school, high school, college, university)?
12. Does your organization provide more opportunities for youth involvement now than in the past? Please explain?
13. Is it possible to increase the number of opportunities for Inuvialuit youth involvement within your organization?
14. What do you see as barriers to youth involvement in oceans resources management and stewardship?
 - a. What needs to be done to over come these barriers?
15. What role can your organization play in increasing Inuvialuit youth interest and involvement in oceans stewardship activities?
16. How can youth be best prepared to become effective managers and caretakers of oceans resources?
17. Do you have any final comments or recommendations to increase youth involvement in oceans stewardship?

Local Resource Managers (boards and committees) Interview Schedule

1. What is your position?
2. Where are you originally from?
3. How is the committee involved in oceans stewardship?
 - a. What type of oceans stewardship activities does the organization conduct? (Regulatory development, enforcement, by-law development, research, monitoring etc)?
4. What are the educational requirements for committee members if any?
5. What are the TK requirements of resource management positions within your organization?
6. What do you know about the Beaufort Sea Integrated Management Planning Initiative (BSIMPI)?
7. Do you think it is important for youth to be involved in oceans stewardship?
8. Do you feel that the youth are prepared to take over the management of oceans resources?
9. Do you think that there is a need for a strategy to involve youth in oceans stewardship?
10. Are there any opportunities for Inuvialuit youth to become involved in the HTC?
 - i. If yes, what is their role?
 - ii. If not, would you like youth to be involved?
 - iii. Have you made efforts to involve youth?
 - iv. Do you have any suggestions on how youth can be involved?
11. What are the educational requirements of youth participants (enrolled in school, high school, college, university)?
12. Does your organization provide more opportunities for youth involvement now than in the past? Please explain?
13. Is it possible to increase the number of opportunities for Inuvialuit youth involvement within your organization?
14. What do you see as barriers to youth involvement in oceans stewardship?
 - a. What needs to be done to overcome these barriers?
15. What role can your organization play in increasing Inuvialuit youth interest and involvement in oceans stewardship activities?
16. How can youth be best prepared to become effective stewards of oceans resources?
17. Do you have any final comments or recommendations to increase youth involvement in oceans stewardship?

Youth Environmental Stewardship Program Administrators Consent Form

Development of a Strategy to Engage Youth in Oceans Stewardship in the Inuvialuit Settlement Region Interview Consent Form

The purpose of this study is to develop a strategy to engage Inuvialuit youth, between the ages of 14 and 29, in oceans stewardship (traditional harvesting and formal oceans resources management activities). The information gathered as part of this study will provide direction to the Beaufort Sea Integrated Management Planning Initiative Working Group, the Fisheries Joint Management Committee, the Department of Fisheries and Oceans, and the Inuvialuit Game Council for a well-defined and integrated youth strategy. The Department of Fisheries and Oceans, Social Sciences and Humanities Research Council, the Natural Resources Institute, and the S.M. Blair Family Foundation are funding this study.

I would like to find out more about how you involve youth in environmental stewardship activities, why you feel youth involvement is important, how to encourage and motivate youth to become involved, and the barriers you see to youth participation.

The information you give me will be kept confidential - your name will not appear in any documents that result from this study. Feedback will be provided to participants in the form of a short summary report.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Researcher: Michelle Schlag (204) 453-3697
Academic Advisor: Thomas Henley (204) 474-6169

This research has been approved by the Natural Resources Institute, the University of Manitoba Research and Ethics Approval Committee, and the Aurora Research Institute. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122.

Participants Signature: _____ Date: _____

Thank You,

Michelle Schlag, Researcher
Natural Resources Institute, University of Manitoba

Youth Environmental Stewardship Program Administrators Interview Schedule

Name and position:

Program Name:

Location:

1. How many years has the program been running?
2. What type of environmental stewardship opportunities does the program provide youth?
3. Why do you think that it is important for youth to get involved in environmental stewardship?
4. How are youth being recruited to participate in the program?
5. What techniques have been used to motivate and encourage youth to become involved in the program?
 - a. Which techniques worked best?
 - b. Which techniques worked least?
6. How can youth be motivated to become involved in activities that teach them to care about the environment?
7. What are some of the barriers you see preventing youth from becoming involved in stewardship activities?
 - a. What needs to be done to overcome these barriers?
8. Do you have any other final thoughts and recommendations to encourage youth involvement in environmental stewardship?

Appendix E – Public Summary Document

Development of a Strategy to Engage Inuvialuit Youth in Oceans Stewardship

- Summary Report -

Introduction

The study 'Development of a Strategy to Engage Inuvialuit Youth in Oceans Stewardship' was designed to gather information about past and present youth involvement as well as potential ways to involve youth in oceans stewardship activities in the future. Over 80 people in the ISR participated in the study. The project involved interviewing natural resource managers, local teachers, Inuvialuit elders, and parents. Youth participated in the study through focus groups held at the five high schools in the Inuvialuit Settlement Region (ISR). I also spent time socializing with youth and learning from them. The information collected in the study will be used to create a strategy to involve Inuvialuit youth in oceans stewardship.

In the interviews I asked people about the importance of ocean stewardship and how they were involved in now and in the past. I asked what they thought prevents youth from becoming involved in both traditional and formal oceans activities. I asked how to best prepare youth to become good stewards of the ocean to determine what knowledge and skills are important for youth to learn and who



Oceans stewardship means caring for the ocean and associated resources so that healthy ecosystems can be passed on to future generations. This includes hunting, fishing. Traditional knowledge as well as any formal oceans management activities typically carried out by government agencies and co-management bodies.

should be teaching them. I also asked for suggestions on how to involve youth in oceans stewardship activities.

I conducted focus groups with youth. Each focus group included a short presentation about the oceans, oceans management, stewardship, and the importance of youth involvement. After the presentation there was a discussion on oceans stewardship, youth involvement, and recommendations for a strategy to engage youth.

The following is a summary of participants comments and opinions.

Trends

Youth participation in traditional activities has decreased since the implementation of the formal education system. However, with regards to the recent past, there were no clear trends of youth involvement identified for the ISR as a whole as responses seemed to differ in each community.

Youth participation in formal oceans stewardship activities has increased due to an increase in opportunities such as the FJMC student mentoring program, scientific research, and the tariuq monitoring program. Opportunities have increased the most in Inuvik. Opportunities have increased but not in the same number or frequency in the other communities.

There is considerable interest among the youth to participate in both traditional and formal oceans stewardship activities. Interest is strongest in coastal communities. However, many participants believe that currently there are not enough opportunities available.



Education

Everyone in the study recognized the importance of traditional knowledge. It would be ideal for youth to possess both formal and traditional knowledge sets. There is great concern among Inuvialuit participants about the lack of traditional knowledge being taught to youth. It was expressed that youth could not be good stewards of the ocean without having respect for the ocean and having some traditional knowledge.

It was also found that there is a lack of value of a formal education. This is reinforced by the fact that many people can make a decent living without an formal education. Formal education is not seen as a high priority in the ISR and is also not often talked about in families and the community. Students receive little encouragement to graduate from high school and minimal guidance with regards to attending post secondary institutions.

The low and decreasing educational standard is also of great concern. There is a concern that high school graduates lack the capacity and proficiency of skills (reading and writing) to work at a professional level. There is also a concern that educational institutions in the ISR are under pressure to advance students who lack these basic skills.

Participants believe that youth who wish to have management jobs should continue their education beyond high school to college or university. Concerns were raised regarding the lack of jobs available to youth that attend post secondary institutions; this concern was greatest in the smaller communities. Formal education is not seen as important for youth who want to participate in traditional oceans stewardship. Rather, these youth should focus on traditional skills and knowledge.

Responsible for Teaching about Oceans and Oceans Stewardship

A wide variety of people are seen to have the responsibility to teach youth about the ocean and oceans stewardship. Elders, parents, and the schools are seen as having the primary responsibility to teach youth. Resource managers, scientists, government agencies, the community at large, other/older youth, and Industry also have some responsibility to teach youth. It was also recognized that the Hunters and Trappers Committee's (HTC) need to play a much greater role in educating youth about the ocean and wildlife.

Communication

It was found that there is poor communication between agencies, groups, and schools. Poor communication has led to conflicts and competition between programs and between organizations. Educational institutions are hesitant to assist with programs that are inconsistent with the school year. Also, it was felt that agencies and groups come to the schools with programs already created and fail to ask the schools - what type of program would you like?

"We must all work together, those with an education and those with traditional knowledge, each knows what the other doesn't and we must understand both ways today." - Inuvialuit Elder

Attitudes

It was found that resource managers tend to have a pessimistic attitude towards youth. Many see youth as a lost cause and that there is no point in trying to involve them. Some participants felt that it would be more beneficial to target a younger age group.

Awareness

There is a lack of awareness of opportunities for youth to get involved with oceans stewardship. There is a lack of awareness of who to contact if youth would like to get involved in oceans stewardship activities. There is also a lack of awareness of careers related to the oceans. Scientists are not visible in communities, therefore youth do not recognize the contributions that they make.

Social

Social issues such as drugs, alcohol, violence etc. prohibit youth from getting involved in activities and programs. There is also lack of family and community support to get involved in activities. There is a lack of role models and mentors setting examples for youth. There is also no peer pressure from other youth to get involved and no youth driven activities (i.e. clubs or projects) in the communities.

Other Issues

Some youth have a lack of interest in oceans stewardship and it does not fit with their career aspirations.

There is also a concern that other northerners who are not Inuvialuit may have the same concerns and interests but are excluded from programs based on ethnicity.



Level of Participation

Youth would like to have hands-on, participatory experiences. They would also like to be involved in oceans stewardship through observing others and providing input and advice to boards and committees. Youth were generally not interested in having any decision-making power regarding oceans stewardship (i.e. voting member on board or committee).

Recommendations

There were a number of recommendations and suggested initiatives made by the research participants. They include:

1. There should be efforts made to increase the number and quality of oceans stewardship opportunities available to youth.

Suggested initiatives:

- ⇒ More on-the-land programs run by Elders, HTC's and Community Corporations.
- ⇒ Expand FJMC student mentoring program to coastal communities.
- ⇒ Have youth involvement as a criteria for project funding.
- ⇒ More opportunities for youth to attend oceans related conferences and workshops.
- ⇒ Have youth representatives on boards and committees.

“The FJMC has attempted to involve youth and for the most part they have been successful. They have been lucky to get a group who is interested and remain interested. But the FJMC haven't used the best way to recruit students and many still don't know about the program.” - Resource Manager

2. The HTC's should make a greater effort to involve youth.

Suggested initiatives:

- ⇒ Invite youth to meetings.
- ⇒ Conduct school presentation about the role of the HTC.

3. Organizations, agencies, and schools need to improve communication and work collaboratively to ensure that the best possible opportunities are made available to youth.

4. Increase awareness of opportunities and career paths related to oceans stewardship.

Suggested initiatives:

- ⇒ Have youth participants promote the FJMC student mentoring program.
- ⇒ Oceans related agencies and boards could support community events such as Oceans Day to foster awareness and increase visibility.

5. Larger social issues should be addressed by the community and community leaders. Issues related to drugs, alcohol, violence etc. need to be addressed by the community and community leaders. They also need to encourage beneficiaries to complete their education, to pursue post-secondary education where desired, and to get involved in programs.

6. The schools should play a greater role in teaching youth about oceans stewardship – the Oceans 11 course can be the takeoff point for this. Educational institutions also need to stop lowering the bar and graduating students who lack basic skills.

Suggested initiatives:

- ⇒ Expand the Oceans 11 course to all ISR high schools.
- ⇒ Have extra curricular activities related to the oceans where demand permits.
- ⇒ Have an 'oceans' science fair.

7. Industry should support educational programs to assist with preventing youth from dropping out of school to pursue unskilled labour positions within industry.

Conclusions

Engaging youth in oceans stewardship is a complex issue that requires a variety of agencies work together in cooperation. There are a number of larger issues (i.e. the education system, social conditions etc.) that directly affect youth involvement in oceans stewardship. However, youth are interested in becoming involved in oceans stewardship. Youth need support, encouragement, and nurturing in order to prepare them for the increasing complexities in oceans stewardship.

Report produced by Michelle Schlag, a graduate student at the Natural Resources Institute. The final report will be completed Summer/Fall 2003. If you have any comments, questions, or concerns please contact Marlene Bailey at the Department of Fisheries and Oceans at (867) 777-7502. I will be in the ISR from May 2nd to 28th.

**For more information please contact:
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