

*Opportunities for Integrated Management:  
A Perspective on Inuvialuit Attitudes Towards Development and  
Subsistence Land Use in the Husky Lakes Area*

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**OPPORTUNITIES FOR INTEGRATED MANAGEMENT:  
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**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University  
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**MASTER OF NATURAL RESOURCES MANAGEMENT**

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## ABSTRACT

This case study examined land use, development, and management issues for the Husky Lakes area, Northwest Territories. The application of integrated management to address concerns regarding the balance of values and socio-economic needs was explored within the constraints of the environment and political-administrative context. Methods used in the research included semi-directed interviews, mapping, visiting, participant observation, participation, and attendance at meetings. Results are presented through maps showing subsistence land use (camping, trapping, hunting, fishing, berry-picking, and wood-harvesting) and quotes from interviewees regarding land use, development, and management. A large land base is used for harvesting, although concentration of use has declined in recent decades. Economic development (petroleum exploration and extraction, reindeer herding, tourism, and road construction) is causing conflict with subsistence harvesters, as industrial use displaces traditional and subsistence land use.

The report concludes that integrated management is a suitable approach for land and resource management in the Husky Lakes area. The Inuvialuit place a high value on sustainability, through their interest in maintaining a healthy environment for future generations. An effective methodology for this type of research in the Western Arctic holds relationships to be central to the success of the study, and uses methods and timelines that are responsive to local interests and realities.

This research provides a framework for planning and the technical basis for integrated management planning in the Husky Lakes area. Recommendations indicate the need for strategic planning for the petroleum and tourism industries, and suggest that local power balance and subsistence use issues be addressed openly and transparently. Further, enforcement roles and responsibilities must be clarified and co-operation and communication between decision-making and advisory bodies promoted. An integrated management plan could address concerns raised in the course of this research, and create an inclusive and comprehensive process, encouraging participation and building capacity in the community.

# DEDICATION

*TO DEVALYNN POKIAK*

*WHO CREATES JOY WHERE SHE GOES, AND TAUGHT ME MUCH.*

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Although I received assistance and guidance from many, many people, all interpretations are mine, and I remain solely responsible for any and all shortcomings.

Taigu and quyanainni.

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## ACRONYMS AND DEFINITIONS

### *Acronyms*

CAPP	Canadian Association of Petroleum Producers
COPE	Committee for Original Peoples' Entitlement
DFO	Department of Fisheries and Oceans
DIAND	Department of Indian Affairs and Northern Development
EIRB	Environmental Impact Review Board
EISC	Environmental Impact Screening Committee
FJMC	Fisheries Joint Management Committee
GIS	Geographical Information System
GNWT	Government of the Northwest Territories
HTC	Hunters and Trappers Committee
IFA	Inuvialuit Final Agreement
ILA	Inuvialuit Land Administration
ILAC	Inuvialuit Land Administration Commission
ITC	Inuit Tapirisat Canada
IRC	Inuvialuit Regional Corporation
ISR	Inuvialuit Settlement Region
NWT	Northwest Territories
RCAP	Royal Commission on Aboriginal Peoples
RCMP	Royal Canadian Mounted Police
RWED	Department of Resources, Wildlife and Economic Development
TCC	Tuktoyaktuk Community Corporation
TCCP	Tuktoyaktuk Community Conservation Plan
TEK	Traditional ecological knowledge
WCED	World Commission on Environment and Development
WMAC(NS)	Wildlife Management Advisory Council (North Slope)

WMAC(NWT)	Wildlife Management Advisory Council (Northwest Territories)
YTG	Yukon Territorial Government

### ***Definitions***

Aboriginal	The term aboriginal includes the First Nations (Amerindians) and Inuit; aboriginal and indigenous are used interchangeably in this document.
Best practices	The distilled, accumulated knowledge of practitioners, usually gained by experience; the continuous process of learning, feedback, reflection and analysis of what works (UNAIDS, 2001)
Capacity-building	Capacity building is the broad-based enhancement of skills, knowledge and institutional capabilities to facilitate the achievement of sustainable development (Atchia, 2001)
Co-management	The sharing of authority, responsibility, and accountability for results for resource management between levels of government and resource users (DFO, 2001)
Community Corporation	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 a Community Corporation (IFA, 1984)

Comprehensive land claim agreement	Binding agreement between the federal (and usually territorial or provincial) government and an aboriginal group which exchange claims of undefined aboriginal rights for a clearly defined package of rights and benefits, set out in a settlement agreement. Land claims may be negotiated with aboriginal groups in areas where no treaties or other legal agreements have already been made (DIAND, 2001)
Ecosystem	A system of interacting organisms in a particular habitat; encompasses the species, relationships, energy flows, and non-living entities which create the environment
Geographical information system (GIS)	A computer system which assembles, stores, manipulates, and displays geographically-referenced information; georeferenced information is data identified according to their locations (USGS, 2001)
Husky Lakes area	Husky Lakes (also known as Eskimo Lakes or <i>Imaryuk</i> ), plus Liverpool Bay, and including the shorelines and coastal areas; see Map 1: Husky Lakes area, on page 3
Integrated management	A management approach which acknowledges the interrelationships among environmental elements, institutional arrangements, and land and resource uses and users. Integrated management is inclusive of issues and people and large in scope, temporal and geographical (Cicin-Sain and Knecht, 1998)
Integration	The establishment of bonds, or links, in the context of any larger systematic objective (Firedance, 2001).
Inuvialuit	Inuvialuit is used to denote only the Inuit of the Western Arctic, based in the communities of Aklavik, Inuvik, Tuktoyaktuk, Sachs Harbour, Holman, and Paulatuk

Land use and occupancy	Geographical extent of land base used by subsistence harvesters to hunt, fish, trap, berry-pick, etc. to provide for their needs (land use), and the land base used continually, in which harvesting is sporadic but travel may be extensive (occupancy) (Usher, cited in Tobias, 1999)
Paradigm	A framework of beliefs and standards which defines what a given individual is willing to accept of his or her field, and how they perform their own work within it (McCaughan, 2001)
Strategic	Strategic planning is a disciplined effort to produce fundamental decisions and actions that shape and guide management decisions, with a focus on the future; this process involves preparing the best way to respond to dynamic conditions, through goal-setting and developing an approach to achieve these goals (adapted from INC, 2000)
Subsistence	Harvesting and direct consumption of harvests for food, fuel, etc., including making articles out of non-edible by-products (Alaska Outdoor Council, 1995)
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 (TEK)	The collective body of knowledge, practice, and belief, developed through adaptation, and handed down through generations regarding the relationship of human beings with each other and their environment (Berkes, 1999)
Western Arctic	Roughly defines the area of the Northwest Territories north of the Arctic Circle: the Inuvialuit Settlement Region and Gwich'in Settlement Region.

## Wholism

Wholism is a theory or belief that everything exists in relationship to everything else, in a context of connection and meaning; this idea leads us to seek large frameworks of understanding, and multiple interconnections among events (adapted from Romberger, 2001). Holistic and wholistic are synonymous.

## CHAPTER 1: INTRODUCTION TO THE HUSKY LAKES INTEGRATED MANAGEMENT STUDY

Husky Lakes<sup>1</sup>, called *Imaryuk* in Inuvialuktun, is a semi-saline estuarine lake system in the Canadian Arctic. The Lakes cover approximately 2100 square kilometres and are located east of Tuktoyaktuk, Northwest Territories. The area is important to subsistence users, who hunt, fish, trap, pick berries, and recreate on the Lakes and the surrounding land. There is growing pressure for industrial development in this area. Oil and gas exploration is experiencing a recent renaissance. Discussion of a proposed all-weather road between Inuvik and Tuktoyaktuk (west of Husky Lakes) continues. There is interest from Inuvialuit operators as well as visitors in increased tourism opportunities. The Husky Lakes area is shown on Map 1 (page 3).

The land around Husky Lakes belongs (fee simple absolute) to the Inuvialuit, the indigenous people of the area. The Inuvialuit Final Agreement (DIAND, 1984) affirmed Inuvialuit ownership of the land around the Lakes and northeast to include Liverpool Bay and the Bathurst Peninsula. The Inuvialuit Regional Corporation holds the land in trust for the Inuvialuit people, and these private lands are administered by the Inuvialuit Land Administration (ILA). The Inuvialuit hold surface rights to all the land around Husky Lakes, and subsurface rights to a significant portion on the west shore nearest Tuktoyaktuk. The Inuvialuit own the land under Husky Lakes, although the federal government retains ownership of the water itself (IFA, 1984; ILA, 2000). The water and land around Husky Lakes are used throughout the year, as residents engage in subsistence and recreational activities such as fishing, hunting, trapping, snowmobiling and boating.

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<sup>1</sup> Husky Lakes is the usual appellation for this lake system, however the name “Eskimo Lakes” is shown on most topographical maps and in much past research.

Many cabins, homes, tent frames, and tenting areas are situated along the shores of Husky Lakes, in which residents of Tuktoyaktuk and, to a lesser extent, Inuvik live for weekends or sometimes months at a time.

This research examined opportunities for DFO and ILA to work together towards integrated management planning for the Husky Lakes area. The thesis reports the results of interviews held, discussions shared, and meetings attended in Tuktoyaktuk and Inuvik in 2000 and 2001, regarding land use and development issues in the Husky Lakes area from the perspective of local residents. Maps are included that depict current subsistence land use patterns and development interests. This chapter introduces the land and people of Husky Lakes and describes the methods used in the research.

### ***The Husky Lakes Environment***

The most prominent features of Husky Lakes, as seen from the air or on a map, are the “fingers” – strips of land that extend across the Lakes, leaving only narrow channels for water to flow north to the Arctic Ocean (see Figure 1). These fingers, at the mouth of Husky Lakes where the Lakes empty into Liverpool Bay, are called *Singiit* in Inuvialuktun, the language spoken by the original peoples of the area. The fingers were formed during the deglaciation about 65,000 years ago, when water flowing beneath the ice eroded the sediments and carved out the fingers (Rampton, 1988). The water channels between the fingers are called tunnel valleys in the geological literature, and are described as elongated shallow basins, in a fairly regular pattern (Pelletier, pers. com.; Solomon, pers. com.). The area east of the Tuk<sup>2</sup> peninsula is susceptible to such erosion, as it is characterised by soft unconsolidated sediments (Pelletier, 1987).

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<sup>2</sup> The terms Tuktoyaktuk and Tuk are used interchangeably in this document.



Map 1: Husky Lakes Area: showing area covered by interview maps.

Most of the area is north of the treeline, and vegetation on the shores of the Lakes is typical tundra: lichens, mosses, willow, alder, dwarf birch, labrador tea, cranberries, aqpiqs (cloudberries), mossberries, fireweed, cottongrass, horsetails. The Tuktoyaktuk Community Conservation Plan (2000) identifies over 150 of the approximate 523 species of vascular plants occurring in the Tuk planning area, and notes that there are at least 100 mosses, 121 lichens, six species of liverwort and 11 species of fern in the region.

Some of the wildlife species in the area include the Bluenose caribou, grizzly and black bears, wolves, wolverines, lynx, snowshoe hares, moose, and many other species harvested for food and fur. Ducks, tundra swans, and geese stage and nest in Husky Lakes, particularly in Liverpool Bay, at the mouths of rivers, including the Anderson, Mason, and Kugaluk. Both freshwater and marine fish species are found in Husky Lakes. Lake trout, whitefish, coney (inconnu), loche (burbot), arctic grayling, flounder, sculpin, cisco, pike, cod, and pacific herring are all found in the Lakes and are harvested for subsistence as well as for commercial and sport fisheries. Beluga whales often enter Husky Lakes in the summer or fall, and occasionally are trapped by early forming ice or are unable to navigate the channels to return to the Arctic Ocean.

The three communities that use Husky Lakes are Tuktoyaktuk, Inuvik, and Aklavik. Tuktoyaktuk has a population of about 950, approximately 90% of whom are Inuvialuit. There are about 850 people in Aklavik, with a mixed population of Inuvialuit, Gwich'in, and non-aboriginal people. Inuvik's population of 2800 people is made up of about 30% Gwich'in, 30% Inuvialuit, and 40% non-Aboriginal people (Statistics Canada, 1996). Tuktoyaktuk residents are the primary users of Husky Lakes, as they are the descendants of the Kittegaryumiut and the Nuvorugmiut people, who originally inhabited the Tuktoyaktuk peninsula (Morrison, 1995). People from Aklavik occasionally make use of Husky Lakes, either for the journey or to visit friends and relatives. Tuk is the closest community to Husky Lakes, and most Tuk residents consider Husky Lakes as one of their primary resource areas, however, many Inuvik residents also participate in subsistence and recreational activities at Husky Lakes.

The Inuvialuit people have a strong sense of and connection to the land. The Inuvialuit or their ancestors have occupied the Western Arctic without interruption for 5,000 years. They have traditionally obtained food, clothing, medicine, and shelter from the land and its resources. The Inuvialuit's connection to the land persists even though their dependence on the land has outwardly declined. The Inuvialuit are a strong and persistent people, and have adapted to changing times repeatedly without losing their identity. They have reached a new era of control over their land, through the land claims settlement, which granted fee simple ownership of certain lands to the Inuvialuit and created management structures that require input from Inuvialuit for activity that occurs on all lands. A more detailed discussion of the Inuvialuit people and their traditions follows in chapter two.

### ***The Husky Lakes Study***

Early efforts to develop a management plan for Husky Lakes include the Mackenzie Delta-Beaufort Sea Regional Land Use Plan (The Commission, 1991), which was the result of five years of planning, but was never implemented. Community conservation plans evolved from the Regional Land Use Plan, and were completed by committees in each community. The Tuktoyaktuk Community Conservation Plan (TCCP), was a community-based planning document, spearheaded by the Tuk Hunters and Trappers Committee (HTC), completed in 1993, and revised in 2000 (TCCP, 2000). The conservation plan puts Husky Lakes in the "D" level land management category, which means that Husky Lakes is of "particular significance and sensitivity through the year, to be managed to ensure conservation" (TCCP, 2000). The Inuvialuit Regional Corporation had concerns that the Conservation Plan did not promote development. Although the TCCP described subsistence use in the Husky Lakes area, it did not allow for zones of industrial use. The Tuk Community Conservation Plan did, however, recommend that the ILA develop a management plan for Husky Lakes (TCCP, 2000).

The Inuvialuit Land Administration is responsible for managing the Inuvialuit private lands for the benefit of current and future generations of Inuvialuit people. The Department of Fisheries and Oceans has a mandate to apply the principle of integrated management to all oceans and coastal management initiatives. The *Oceans Act* (1997) commits the federal government to the principles of sustainable development, the precautionary approach, and collaborative management approaches.

Integrated management is growing in popularity, as single sector or even single species management plans are shown to be inadequate for dealing with contemporary large scale global and regional environmental issues. Moreover, as governments downsize, the need for collaborative efforts within and between levels of government and non-governmental agencies increases (Kay and Alder, 1999). The Husky Lakes integrated management study was an opportunity for the Inuvialuit and federal management structures to work together in supporting this research as background for integrated management planning.

### **Purpose of the Study**

The purpose of this research was to evaluate the opportunities for integrated management in the Western Arctic, through a preliminary survey of human land use and development in the Husky Lakes area, in the Northwest Territories. The research reported in this thesis provides the foundation for an integrated management plan in the Husky Lakes area, based upon my understanding of the values and attitudes of the Inuvialuit people who are the primary users of Husky Lakes.

### **Objectives**

The objectives of this project were:

- To assess the extent of current land use in the Husky Lakes area;
- To explore local residents' views of subsistence and recreational land use;
- To identify community concerns with and opportunities for economic development;

- To identify locally defined priorities for management;
- To investigate past and contemporary research methods to determine current best practices in community-based research for the Inuvialuit Settlement Region;
- To document the basis for an integrated management plan in the Husky Lakes area; and
- To make recommendations to the Inuvialuit Land Administration on the development of a management plan for Husky Lakes.

### **Scope of the Study**

The geographical scope of the study is Husky Lakes and Liverpool Bay and the surrounding land, including parts of the Tuktoyaktuk Peninsula, lands east of the Mackenzie River Delta, and land east of Husky Lakes up to and including the Anderson River valley. This area is shown on Map 1: Husky Lakes Area on page 3. Interviews were held only with residents of Tuktoyaktuk and Inuvik, with 90% of interviewees being from Tuk. I visited Husky Lakes in the spring of 2000 and again in 2001, and travelled by snowmobile on both the Inuvik and Tuk Husky Lakes trails. In May, June, July, August, and October of 2000, and in June of 2001, I spent time in Tuktoyaktuk and Inuvik. The socio-cultural and political scope of the study focused on the communities of Tuktoyaktuk and Inuvik but considered the context of larger Inuvialuit Settlement Region and Canadian interests.

### ***Methods***

This research project was a case study, examining land use, development, and management issues for the Husky Lakes area, through interviews and interactions with residents of Tuktoyaktuk and Inuvik. Methodologically, this was a mixed-method approach, grounded in a qualitative framework. The methodology is based on that developed for the Inuit Land Use and Occupancy Study (Freeman, 1976), and similar to the Inuit Observations of Climate Change project (Riedlinger, 2001), using semi-directed

interviews, mapping, visiting, and community verification. The information presented in this thesis was gathered during four visits to the Inuvialuit Settlement Region in 2000 and 2001. Besides the land use and development foci of the interviews, I used the anthropological technique of participant observation. The methodology which I used is very similar to Riedlinger's approach of "relationship-based methodology" which she developed working in Sachs Harbour around the same time as I was working in Tuk (Riedlinger, 2001).

There were four broad phases to the research: preparation, fieldwork, data analysis and writing, and verification. The preparation component involved researching past work on the history of the Husky Lakes area, land use, development, and management, as well as reviewing the principles of sustainable development and integrated management. Also during this phase, I wrote proposals and applied for research permits, ethics approval, and funding. This phase occurred from September 1999 to May 2000. The fieldwork stage occurred from May to October 2000, and consisted of participation in community activities, participant observation, interviewing and mapping, and attending meetings of community decision-making and advisory bodies. The third phase of the research project (October, 2000 to December, 2001) was analysing the data and writing up the results. Finally, the verification phase occurred in June 2001, when I returned to Tuktoyaktuk and Inuvik to report back to the communities on the results of the project. Verification included return visits to interviewees and presentations to committees, boards, and councils.

### **Researcher Context**

Doing community-based research, one tends to become acquainted with one's weaknesses, biases, and constraints. I had considered myself, before arriving in the field, as being a northerner and relatively comfortable with and conversant in aboriginal ways of being and communicating. I was born and raised north of 60° north latitude, and have spent many hours with friends and non-kin relatives who were First Nations. I found,

however, that despite the perhaps greater understanding granted me by my upbringing and fortuitous northern birth, I brought biases and distortions to the research.

I am a female, non-aboriginal person, raised in a small city (Whitehorse, Yukon), and educated in the formal post-secondary system in southern Canada. I was trained as a biologist, and through my undergraduate research learned to think myopically, trying to understand wholes through close examination of small parts. Interdisciplinary research works quite differently, asking researchers to think big, think openly, and resist the temptation to rely on narrow paradigms to simplify complex issues. I brought to this project therefore, a muddle of scientific thinking, wholistic ideals, and personal values which centre on respect, moderation, and individual responsibility for society, environment, and self.

Morrow and Hensel (1992), Chambers (1997), and Nadasdy (1999)<sup>3</sup>, in their discussions of traditional ecological knowledge and scientific research, discuss power. This is something that I did not really consider when designing this research project. In the field, I felt very much that I was in a position of non-power, because I was young, female, and a student. However, this is not necessarily true, nor, perhaps, is it what I conveyed, which leaves me with the question: how did this affect the research results?

Since I was an outsider in the communities of Tuktoyaktuk and Inuvik, I had the additional complications of learning the norms of behaviour and communication within this society. I had not pondered deeply on the implications of my gender in the work before delving into this research project. Previously, I had not felt that my being a woman had impacted my choices or activities. This is not to say that my gender did not influence my reality, but that I did not perceive it to have done so. Working in a small

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<sup>3</sup> See chapter two for more discussion of power relationships in traditional ecological knowledge research.

community, particularly one in which I was an outsider, I was faced with the acknowledgement that my gender did affect the roles I assumed and experiences I had.

### **Phase 1: Preparation**

In preparation for the fieldwork, I reviewed ethnographic, anthropological, native studies, integrated management, and resource management literature. Through this exploration, I developed an understanding for some of the work that had been done in the past, and some of the approaches that have been tried in similar research projects. All research done in the Northwest Territories must be licensed, and I acquired a research licence from the Aurora Research Institute in Inuvik, after community consultation, in the form of letters and phone calls to the various community groups (community corporations, elders and youth committees, hamlet councils, and hunters' and trappers' committees). I discussed the project methods over the telephone and via e-mail with the Inuvialuit Land Administration and Department of Fisheries and Oceans. The Natural Resources Institute Ethics Review Committee reviewed and approved my proposed interview questions and consent form.

In May 2000, I visited Inuvik and Tuktoyaktuk to meet with key groups and individuals, in preparation for my summer field season. Three of my committee members were also present for part of the visit and we met with the Inuvialuit Land Administration staff, the Inuvialuit Regional Corporation Chair and Executive Officer, and the Department of Fisheries and Oceans staff in Inuvik. During this visit, we set the terms of reference for the study and discussed some of the logistical considerations. While in Inuvik, I also reviewed some of the literature available in the Dick Hill Northern Collection at the Centennial Library.

The purpose of this first stage of research was to plan, organise, and prepare for the fieldwork and later stages. By reviewing the literature on research methods and methodology, land use and management, historical, ethnographic, and other relevant literature, I attempted to minimise mistakes and accelerate my understanding.

## **Phase 2: Fieldwork**

The data that provides the core of this research was gathered in the fieldwork phase. Three field visits are included: one week at Husky Lakes in May 2000, six weeks in Tuktoyaktuk and Inuvik in July and August 2000, and four weeks in Tuktoyaktuk in October 2000. The methods used to gather data during these visits include participation in community activities and subsistence harvesting, participant observation, visiting, interviews (including mapping), and attendance at meetings. Working in the field allows the researcher opportunity to gain the deeper understanding of the community and local perspective only possible through personal interaction.

### **1. Participation and Participant Observation**

In May 2000 I was at Husky Lakes for a week, travelling with Inuvialuit families. I experienced the spring ice fishing at Husky Lakes, which is an important cultural event in the annual harvesting calendar. I returned in June and July, and stayed with an Inuvialuit family in Tuktoyaktuk and participated in such daily activities as checking fish nets, making dryfish, picking berries, going for picnics, and collecting driftwood for fuel. In October, I stayed with a friend who had several years' experience in the region, doing anthropological research. I went hunting, fishing, and skidooing with friends. During the verification visit in May-June 2001, I stayed with two different families, and baby-sat, checked the fishnet, made dryfish, and collected fuel wood.

The benefits of the experience of living with families in the community cannot be overemphasised. The activities I participated in (particularly harvesting activities) gave me grounding for the information shared in interviews. When participants told me how many fish they caught spring jigging as a family, I was able to appreciate the time and effort expended. My hosts and friends also taught me some Inuvialuktun words, and showed me how to do such things as cutting fish for drying and skinning and dressing caribou. To document my learning from participation in activities and participation

observation, I kept a log of 'notes to self' on my computer, as well as making notes in my field notebook when the computer was not available.

The daily advice, reality- checking, and interpretation offered by my various hosts was invaluable. For example, I had been in Tuktoyaktuk for a few weeks when my host mom asked me if I knew about the body language "yes" and "no". I had not figured it out myself, so she showed me how wrinkling the nose denotes negative, while raising the eyebrows indicates an affirmative. Knowing this one communication tool made a big difference in subsequent interviews. While I was trying to figure out family relationships and some of the subtleties of life in small northern towns (who is related to whom and why do the same people show up at all public meetings), my hosts and other friends were very patient in explaining and clarifying. Through these interactions, my participation, and observation of participants, I was able to better appreciate the context of my more formal methods: interviewing and mapping.

## 2. Visiting

Visiting was an important part of my field method. Riedlinger (2001), Stevenson (2001), and Cruikshank (1996, 1981) discuss the importance of building relationships with the participants, particularly in research involving Aboriginal people and especially with elders. Since I was a stranger in the community of Tuktoyaktuk, I felt it was essential for residents to get to know me before I asked them to share their knowledge and experience in the interviews. Usually when visiting for the first time, I asked a friend or acquaintance to introduce me; sometimes someone from the ILA accompanied me, sometimes one of my hosts called ahead to make an appointment. The strength of relationships built through visiting was directly related to the depth of information shared with me by participants.

## 3. Interviews, Mapping, and Attending Meetings

I identified interviewees by the snowball sampling method (as described in Russell, 1994). This is a method whereby key community organisations and/or

individuals identify appropriate participants for the study. Over the course of the interviews other possible participants were identified, as interviewees suggested other people who I should contact. To further publicise the study, I ran an ad on the community channel, introducing the project and myself. Having set a target of fifty interviews in the terms of reference meeting, I tried to talk to a cross-section of the population, male and female, old and young. However, because the names suggested to me tended to be the "hunter" population (young and middle-aged males), the sample did not reflect the composition of the entire community. Nevertheless, the variation in responses from interviewees seemed to come into convergence (no new views or suggestions were being brought forward) by the time fifty interviews had been completed. Interviews were generally held in the homes of the interviewees although some people preferred to meet with me at my office at the ILA or elsewhere. Most interviews took between forty-five minutes and an hour, although one took only twenty minutes, and others lasted over two hours.

I conducted semi-directed interviews with a selection of individuals in Tuktoyaktuk (46) and Inuvik (5). There were two components of the interviews: land use and development (see Appendix 1 for list of interview questions). Land use inquiries concentrated on mapping and each interviewee drew on a paper map the extent of his or her family's land use. Land use questions were closely related to Freeman's map biography (Freeman et al., 1976), except that in this research, I asked only about current land use, rather than describing an individual's history of land use. The second section of the interview looked at development and management. Questions about development focused on the opportunities that interviewees saw for development, and what interviewees' concerns about development might be, while management questions examined the current land and resource management system and looked for interviewees' perceptions of how the Husky Lakes area could better be managed.

Of the fifty-one people interviewed, five were from Inuvik, and forty-six were from Tuktoyaktuk. All Inuvik interviewees were male, with four being in the 36-50 years

old range, and one being between 51 and 65 years of age. Eighteen of the Tuk interviewees were female, one between 26 and 35, seven between 36 and 50, six between 51 and 65, and four over sixty-five. Of the Tuk male interviewees, there was one each in the 19-25 and 26-35 years old brackets; twelve were between 36 and 50, nine Tuk men were between 51 and 65, and five of the male Tuk interviewees were 66 or over. Undoubtedly with a different mix of individuals, gender balanced, and with a more evenly distributed age range, I would have had slightly different results. However, I feel that this sample gave an indication of some of the points of view prevalent in Tuk and (to a lesser degree) in Inuvik at this time, as regards to land use and development.

The interviews consisted of questions about subsistence land use (hunting, trapping, fishing, wood, berry, and plant-gathering, and cabins or camping spots), development (oil and gas, tourism, reindeer herding, and road), and land and resource management. The land use section of the interviews was primarily accomplished through drawing on maps the colour-coded uses of the land and water of the Husky Lakes area. The maps used were developed with the help of DFO's geomatics co-ordinator, and were based on the National Topographic System maps 107A (Crossely Lakes), 107B (Aklavik), 107C (Mackenzie Delta), and 107D (Stanton). The colour-coding for land uses marked on maps was based on the Manitoba Keewatinowi Okimakanak protocol (MKO, unpubl.). The mapping part of the interviews was more straightforward and easily communicated to interviewees than the more amorphous questions of development and management. Because land use and occupancy studies have been done in the Western Arctic before, most interviewees were familiar and comfortable with the process.

Besides participating in interviews, I attended meetings of decision-making and advisory boards early in my summer field season to familiarise these important bodies with the substance of my research and to ask for feedback on the research design and for suggestions on who should be interviewed. The research project was introduced at meetings of the Tuktoyaktuk Hunters and Trappers Committee, Tuktoyaktuk Elders

Committee, and Tuktoyaktuk Hamlet Council. I also attended the Tuk Community Corporation annual general meeting and youth committee meeting and introduced myself to the boards. Later, on the return verification visit, I revisited the various committees, and obtained very helpful feedback on the research process as well as the research results. Attending meetings in the Inuvialuit Settlement Region is a good way to familiarise communities with one's work and is a starting point to building relationships. Throughout this research project, I have found that the better the relationships were, the more effectively information was communicated. Attendance at meetings, especially over a period of time, was valuable in that it indicated to local residents a commitment to the project and the community, and built confidence in the usefulness and value of the project.

### **Phase 3: Data Analysis and Writing**

Upon my return from the field, I had notebooks with my observations, notes from interviews, and schedules of my daily activities; I also had interview maps with masses of data, to be transferred to a more efficient format for analysis. To make sense of my notes from interviews with participants, I used content analysis and key theme analysis (Russell, 1994; Denzin and Lincoln, 1994). Databases were created, and comments coded by topic (e.g. "caribou hunting" or "oil and gas positive impacts"). I then considered the variety of comments under each topic and picked out themes and representative or typical comments. These illustrative comments are included in chapters four (land use) and five (development and management).

Composite theme-based Mylar overlays (tracing the interview maps by hand with colour-coded pens) were compiled to show the extent of land use, as a first step in analysing the map data. These overlays were used for the verification visit and also to clarify the potential presentation of the digital data. I felt that the map data also had to be put in a more easily analysable format, and had decided early on to digitise the data so that this information could be saved and possibly used in future management decisions.

Transferring the data from paper maps to digital format (GIS) was more challenging than I had anticipated, and so I ultimately decided that it was beyond my capabilities, and contracted GIS professionals to complete the digitising. The data from all interviewees was then compiled to obtain thematic maps of land use (e.g. fishing areas, traplines and areas, caribou hunting, etc.). These maps are presented in chapter four and a compilation map of all land use themes is provided in the map pocket at the end of this volume. I felt that, although land use and occupancy studies in the past had looked at the extent and variety of subsistence land use, it would nonetheless be useful to have a more up-to-date record of contemporary land use, both for comparison (today's use against that of thirty years ago, or thirty years in the future), and to inform decision-making. It is a first step in land and resource management to find out what resources are available and how they are being used.

An overlooked and neglected stage of the methods is writing. Besides writing this paper, I wrote an interim summary report, which was distributed during the verification visit and an executive summary that was distributed to the community at the completion of the research project. The former is included as an appendix at the end of this volume (Appendix 3), while the latter is available at libraries in Inuvik. Through writing these reports, and preparing presentations, my thinking on the project crystallised. Even in the course of revisions, there was continual learning and clarification of the concepts.

#### **Phase 4: Verification**

Verification is an important step in community-based research, particularly in the Western Arctic. Although much research has been done in the past on the people and environment of the area, little has been reported back to community members. This has created a degree of distrust of researchers amongst community members. Verification provides an opportunity for the researcher to build quality into his or her research project, through obtaining feedback from the community. And this step also helps members of the community to affect the work that indirectly impacts their lives. So, for example, in

this project, I spoke to many more people in the verification phase than I had in the previous field visits. This meant that a larger proportion of the community was aware of the research and had an opportunity to contribute to the final reports that will likely be used in management decision-making.

After reviewing and analysing the data gathered in the three field visits, I wrote a short summary report (four pages) and compiled composite theme-based Mylar overlays for the maps. I returned to the Inuvialuit Settlement Region in May-June of 2001, to report back to the communities (boards, committees, councils, and interviewees) on the tentative results of the study and to solicit feedback to be incorporated into the final product. I met with most of the key community organisations, giving presentations to the Tuk Elders' Committee, Tuk Hamlet Council, Tuk Community Corporation, Tuk Hunters and Trappers Committee, the Mackenzie Beaufort Integrated Management Working Group, and the Inuvik Hunters and Trappers Committee. I revisited most of the participants in the study, meeting with about forty of the fifty-one interviewees. An open house was held in Tuktoyaktuk, which was attended by some individuals who had not participated in nor previously been aware of the study. On the verification visit, I met with approximately two hundred people.

Finally, to complete the process of reporting back to the community, I produced an executive summary of the results of the study, which has been widely distributed to participants, community organisations, boards and councils, and interested individuals. The final maps showing land use have also been distributed in the community. This thesis is available at the Aurora Research Institute, Inuvik Centennial Library, Joint Secretariat, Department of Fisheries and Oceans, and the Inuvialuit Land Administration as well as through the University of Manitoba.

### ***Organisation of the Document***

This chapter introduced the study area and the research project. Chapter two introduces the concept of sustainable development, describes the integrated management

approach, and examines the area of traditional ecological knowledge and indigenous values. Chapter three provides background on the Inuvialuit people, as I review some of the ethnographic and historical literature. In the fourth chapter, I report the results of the study relating to subsistence and recreational land use in and around Husky Lakes, primarily through maps and a selection of quotes from interviewees. Chapter five presents a summary of the results and analysis of the development and management issues addressed in the interviewing process. A discussion of the results and the research project in general follows in chapter six. Chapter seven contains the summary, conclusions, and recommendations of the thesis. The appendices include the survey instrument, list of interviewees, and short summary of the study (which was distributed to the public). The base map, development map, and a summary land use map are included in a pocket at the end of the thesis.



a) Husky Lakes shorelines as seen from the air, fall, 2000



b) Husky Lakes coast, summer 2000



c) Snowdrift at Husky Lakes, spring 2000



d) Ikinilik, from the air, summer 2000



e) Driftwood, summer 2000

Figure 1: Some scenes from Husky Lakes

## CHAPTER 2: SUSTAINABLE DEVELOPMENT, INTEGRATED MANAGEMENT, AND TRADITIONAL ECOLOGICAL KNOWLEDGE

In this chapter, I look at sustainable development as the dominant paradigm within which land and natural resource management decisions are made today. Integrated management is placed within the context of sustainable development, and traditional ecological knowledge examined as a tool for implementing sustainable development and integrated management planning. I review the land and resource management history in the Husky Lakes area since Euro-Canadian contact. Finally, I review some of the parallels between indigenous ways of knowing (as accessed through traditional ecological knowledge) and the western scientific concept of sustainable development. The Husky Lakes study draws on traditional ecological knowledge, and looks at integrated management within the context of sustainable development. Through reviewing literature on these subjects, I attempt to avoid replicating mistakes, and try to enhance the quality of the research. This chapter presents the ideological framework and policy context for land and resource management in Husky Lakes, sets the stage for participants' comments reported in chapters four and five, and provides the background for the discussion in chapter six.

### *Sustainable Development*

Sustainable development is a central principle in natural resource management today. The term became widespread after the publication of *Our Common Future*, the report of the World Commission on Environment and Development (WCED, 1987), but the idea of sustainable development has been around for much longer (Ehrenfeld, 1986). *Our Common Future* offered the definition: "sustainable development means meeting the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987: 43). Slocombe (1992) suggested that sustainable development quickly gained widespread approval because *Our Common Future* was

written by highly respected environmental scientists and administrators, who, despite having varied ideological view, had come to unanimous agreement on the extent of and potential solutions to socio-environmental problems. The authors of the WCED report asserted that the world's environmental and development problems were so extensive that only a fundamental rethinking of human-environment interaction could address these issues (Slocombe, 1992). The Canadian Round Table on Environment and Economy further explained that sustainable development and sustainability essentially acknowledge the complexity of environmental, economic, and social needs, and recognise that integrated decision-making is the best way to deal with these complexities (NRTEE, 1993).

The three facets of sustainable development are social, economic, and environmental. Social sustainability indicators are participation, social mobility, empowerment, social cohesion, cultural identity, and institutional development. Environmental sustainability criteria include biodiversity conservation, healthy hydrology, and the maintenance of ecosystems' abilities to provide services (Greenland, from Berkes, pers. com.). Economic sustainability is indicated by the maintenance of a strong, resilient and adaptable economy. There are efforts internationally to integrate these concepts of sustainability into natural resources management. The increase in public consultation, use of traditional ecological knowledge, and local control of resources can all be elements of sustainable development. Sustainability is complex, with the goal of ensuring long-term ecological, social and cultural capacity to support economic activity and structural change (Barbier et al, 1994). Sustainable development does not entail disregard of the economy, but rather that sectors requiring ecosystem exploitation be held within the carrying capacity of the environment, and the needs of all people be met. Sustainable development's primary task is to ensure that all people have access to sustainable and secure livelihoods (Butz et al., 1991).

The notion of sustainability has not been a major element in development decisions in the north since the early twentieth century, when external governments

started directing development. Wolfe and Walker (1987) examined the role of subsistence harvesting in Alaska's economy, and the impact of industrial (oil and gas) development on this sector. The authors observed that, generally, the farther one moves from urban population centres, the more subsistence productivity increases, and that the presence of roads generally correlates to lower subsistence harvesting (Wolfe and Walker, 1987). Wolfe and Walker examined the value of subsistence harvesting in the economy and concluded that fish, wildlife, and berry harvesting contribute substantially to the economy and the social welfare of Alaska. The authors observed that development can be planned in ways which enhance the subsistence economic base if planners make an effort to understand and appreciate the role of subsistence in Alaska's regional economies (Wolfe and Walker, 1987). Wolfe and Walker (1987) further observed that being aware of the significance of subsistence harvesting, which is predominantly small-scale and sustainable, was particularly important in the face of the rapid and extensive economic development that was occurring during the oil boom in the 1970's and 1980's. This is similar to the hydrocarbon development boom that is starting in the Mackenzie Delta-Beaufort Sea region now in 2001.

Duerden (1992) discusses the notion of sustainable development in the context of its applicability in the Canadian North. The relevance of his analysis arises from the growing human population within limited and sensitive ecosystems in the north, and pressure from increasing assimilation into the global economy. Duerden (1992) broaches the question of local versus global sustainability, observing that northern energy extraction is futile as long as southern urban areas continue to over-consume. Duerden (1992) does not examine options for the application of sustainable development strategies, but concludes that although the symbolic importance of the concept is important in informing management approaches, the practical implementation and measuring of sustainable development presents the greater challenge.

Based on the Northern Development/Remote Regions sessions of the Western Regional Science Association between 1984 and 1990, Huskey and Morehouse (1992)

look at economic development and socio-political change in northern and other remote regions. The paper looks at theoretical perspectives of researching resource development, native claims, and village economies. The authors briefly review the literature for each topic and suggest areas for future research. In defining remote regions, the authors observe that these areas are not poor and underdeveloped over all, but part of large, wealthy, complex nation-states, with elaborate constitutional systems and overarching dominant cultures. The boundaries of these northern remote areas are permeable, and the regions are open economically, politically, and culturally (Huskey and Morehouse, 1992). While looking at the sociological definitions of development, Huskey and Morehouse (1992) observe that researchers tend to see remote regions as problem areas, suffering from physical, economic, and political limits on their security, welfare, and autonomy. In this view, then, the authors suggest that development is perceived as a process of overcoming obstacles to achieve desired forms of change (Huskey and Morehouse, 1992). Discussing resource development, Huskey and Morehouse note that modern economies have expanded into remote regions primarily for the pursuit of resources, and authors observe that resource production only takes place when profitable and when market price covers costs of production and transportation (Huskey and Morehouse, 1992). The authors conclude that this type of resource-based economy faces two long-term problems: first the cyclical (rather than stable) nature of resource prices and second the (by definition) finite life of non-renewable resources (Huskey and Morehouse, 1992).

“The modern economy affects village economies in three ways. First, it provides jobs in the transfer sector or in resource production. Second, it results in decreased local control over local resources. Finally, opportunities provided by the modern economy affect population movement in and out of the villages” (Huskey and Morehouse, 1992: 134).

Huskey and Morehouse (1992) describe some information gaps, some of which are relevant to this study. They suggest that there is need for more research looking at the implementation of land claims, for focusing on the interactions between the internal and external factors in regional development, and the role of resource ownership in

development. The authors note that there should be more interdisciplinary research, with improved theoretical frameworks and more rigorously tested hypotheses (Huskey and Morehouse, 1992).

Flanders et al. (1998) consider decision-making techniques for federal governance in oil and gas development, through a comparison of Russian and American examples. Their paper looks at the clarification, justification, and improvement of decision-making in natural resource management, particularly as related to oil and gas development (Flanders et al., 1998). The authors look at two different decision analysis methods, explaining that decision analysis systematically evaluates alternatives, looking at all available information, to select the best option. The purpose of decision-analysis is to make better and more transparent decisions, based on decision-makers' perceptions of the options available, potential consequences of the options, and the relative importance of criteria against which the consequences are assessed (Flanders et al., 1998). The authors state that the purpose of looking at decision-analysis was to find an aid to enable regulators to make sounder, smoother, more defensible decisions that were less wasteful of resources (Flanders et al., 1998). After comparing the qualitative and quantitative methods, the authors observe that both methods reduce complexity in decision-making, therefore achieving a valuable public goal: allowing both decision-makers and members of the general public, without any firsthand knowledge of the Arctic, to understand the essential issues (Flanders et al., 1998). The authors conclude that decision analysis, although it does not remove subjectivity, does tend to make subjective decisions more understandable to others and make decisions more public.

### ***Integrated Management***

“Integrated coastal management [is a] management strategy for coastal areas based on well thought-out plans that are future-orientated and involve all sectors of society” (IISD, 2001).

Since the early days of land and resource management in the Western Arctic, there have been various efforts to create a land use planning process that would protect

the health and welfare of land and people while not constraining the opportunity for economic benefits, which come from large-scale industrial development. This past land and resource management work has tended to fall short of the aims of integrated management planning. Integrated management is comprehensive and enduring. McKee (1998) explains that integrated management planning is an 'integrated' approach because it considers all natural resources (wildlife, water, scenic, oil and gas, minerals, forests, etc.), all the values of these resources (environmental, social, cultural, economic), and the variety of connections between them. Thus, rather than planning for a single resource (caribou, petroleum) or value (protection, development), integrated management looks at the people, the ecosystem, and the various forces which interact.

Some of the benefits of integrated resource management plans include: providing strategic direction, ensuring vision and goals are met, acknowledgement and respect of community values, facilitating participation, providing a framework within which to evaluate proposed activities, and enabling communities to be proactive in decision-making (McKee, 1998). Even with many programs and projects already in place, integrated management fills the need for a longer-term and wider-ranging process. Integrated or coastal management puts the focus on integration across scales of time and space, active participation by the public and levels of decision-makers, and "an incremental iterative approach to problem-solving" (Olsen and Christie, 2000: 9).

Meltzer (1996) talks about the two routes by which integrated coastal zone management tends to develop. The first is from a single issue; this model focuses on one issue (such as shoreline erosion) and grows from there. The second is comprehensive, in which a cross-sectoral approach is adopted from the beginning, and a variety of issues are incorporated with a goal of sustainable development in the coastal zone (Meltzer, 1996). Meltzer (1996) describes the institutional or administrative approaches to coastal zone management. Canada's current integrated management program falls into the "within-the-system" category. In this administrative approach, the duties of the prevailing lead agency (DFO) are expanded (i.e. through the *Oceans Act*), and arrangements with other

departments, agencies, and groups are informal. Meltzer (1996) notes that a common criticism of this approach is its frequent inability to integrate sectoral activities and decision-making practices, and also talks about the rise of local and community-based management. She suggests that the key ingredients to successful community integrated coastal management are models where roles and responsibilities are clearly defined and government is committed to providing adequate funding, information, training and technical assistance to the effort (Meltzer, 1996).

McKee's (1998) paper discusses the process and object of integrated resource management planning. McKee differentiates between integrated resource management planning and land use planning, saying that land use planning deals with "what land uses should occur, where they should take place, and how they should go ahead", while resource management is concerned with how renewable and non-renewable resources are allocated and managed (McKee, 1998: 5). McKee (1998) notes that the ISR community conservation plans are not integrated resource management plans because they are focused on the conservation interests of the community, and do not integrate the values and interests of other stakeholders and interested parties. ILA became involved in the Husky Lakes integrated management project because ILA felt that there would be usefulness in research that went beyond the Tuktoyaktuk Community Conservation Plan, involving traditional land use and other activities and values in the coastal area of interaction between land and water.

The International Workshop on Integrated Coastal Management in Tropical Developing Countries produced a booklet of guidelines, reinforcing the importance of incremental approaches, recognising that coastal management principles must be adapted to the culture and priorities of specific regions (quoted in Olsen and Christie, 2000). The guidelines also suggest that the first step in implementing integrated management is to start with a demonstration project to establish how integrated management might be applied in a particular geographical and social setting (ibid.). The Husky Lakes management planning process, of which this research project is part, is an example of the

above. Husky Lakes was identified as a high priority area for management planning (by ILA and IRC) and is therefore being used to demonstrate the opportunity for co-operation between the federal government (DFO) and an Inuvialuit organisation (ILA) in the context of integrated management planning.

### ***Traditional ecological knowledge: Different Ways of Knowing***

*Our Common Future* (WCED, 1987) stated, "...communities are the repositories of vast accumulations of traditional knowledge and experience [...containing] skills in sustainably managing very complex ecological systems". The term, "traditional ecological knowledge" or TEK has become ubiquitous in both the natural and social sciences, and was the basis for much of the information gathered in the Husky Lakes integrated management study. TEK has been defined as "a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one and other and with their environment" (Berkes, 1999). Although gathered for the most part by non-traditional methods, the results of interviews, presented in the next two chapters, are examples of traditional ecological knowledge. The information gathered relates personal and ancestral knowledge of the land and environment and applies that knowledge to decision-making and planning.

Berkes (1999) suggests that TEK has great potential to play a role in injecting ethics into the science of ecology and resource management. Freeman (1992) explains, "[TEK] is directed towards gaining a useful understanding of how ecological systems generally work, to how many of the key components of the total ecosystem interrelate, and how predicative outcomes in respect to matters of practical concern can best be effected." Freeman then describes how some branches of science (notably ecology) are coming into alignment with the holistic approach of TEK. There is increasing interest in looking at relationships and systems, in lieu of the classical reductionist approach, which

tries to understand nature by studying the smallest or simplest manageable part of a system, essentially in isolation (Freeman, 1992).

Berkes (1999) pointed out that scientists often consider it their duty to remain sceptical, particularly when faced with an area like traditional ecological knowledge, which doesn't readily lend itself to verification by science. Gadgil et al. (1993) suggested that indigenous peoples' use of TEK gives them a long (temporal) view of biological processes and therefore makes them more fit to make conservation decisions. However they go on to say that, as TEK is so intricately linked to practice and belief, western science may not be willing or able to fit TEK into western science's framework.

In the Husky Lakes study, traditional ecological knowledge was pivotal in interviews. For the section of the interviews that dealt with land use, many responses and comments were informed by TEK, even if they could not be said to *be* TEK themselves. Questions on development and management also relied on traditional knowledge, in that the participants' knowledge about the land (the plants, animals, and other environmental elements), how the land was used formerly, and what type of management choices or alternatives may have been favoured in the past, informed interviewees' perception of today's opportunities and options. Although this was not a study of traditional ecological knowledge, TEK was source of much of the information recorded.

### **Methodologies and Application of TEK**

Grenier (1998) describes a method for undertaking traditional ecological knowledge research. She suggests that one must clearly recognise one's biases and subjectivity, in order to be open to the information that will be offered. She also describes several different ways of conducting TEK research, including the methods used in the Inuit Land Use and Occupancy Project. Grenier points out that researchers have traditionally neglected to recognise their own prejudices. This has led to a tendency for researchers to unconsciously impose their own way of knowing on participants, in the type of questions and in the way in which questions were asked, as well as the way notes

were taken and papers written. Grenier suggests that openly acknowledging one's biases makes one more able to receive and interpret traditional ecological knowledge.

Berkes (1999), Freeman (1992) and Gadgil et al. (1993) each look at the ways traditional ecological knowledge can be used in resource management. All agree that TEK has valid and valuable contributions to make. However, they also recognise that there may be some problems with its recognition within the western science paradigm. None of the authors address the question of whether TEK *should* be justified by western science.

Drawing from many years of anthropological work within a small community of First Nations elders in the Yukon, Cruikshank (1998) discusses how stories, and the oral tradition, have been fitted into western scientific paradigms, often losing their meaning in this translation. She talks about the increasing interest in traditional ecological knowledge over the last few decades, but asked whether, if some voices were now being heard, which ones were still being left out, and if this information was being incorporated, how? This paper questions whether it is reasonable to expect indigenous traditions to "provide answers to problems created by modern states in terms convenient for modern states" (Cruikshank, 1998). She observes that TEK tends to be treated as subservient to science, rather than a valuable source of knowledge in its own right, which could be used to inform science. Cruikshank (1998) concludes, "accepting the language of TEK may bring immediate benefits for those who use it successfully, but this is a globalising exercise. Fragmentation, objectification, and standardisation of knowledge by encroaching bureaucracy carries unanticipated costs".

Some of the limitations of using traditional ecological knowledge in scientific research are raised by Morrow and Hensel (1992) in their paper titled, "Hidden dissension: minority-majority relationships and the use of contested terminology". Morrow and Hensel (1992) discuss the casual imposition of western reality on aboriginal people when interacting with government representatives and researchers. The authors examine policy negotiations between Alaska first nations people and non-aboriginal

government representatives. The authors observe that by not challenging or allowing to be challenged the definitions for such inherently negotiable concepts like subsistence, conservation, traditional use, etc., the non-aboriginals were imposing their reality on the parties with whom they were supposedly negotiating. The authors do not suggest that this power structure or inherent unfairness was consciously imposed. However, they argue that refusing to openly discuss and examine the underlying belief systems and terminology signifies a failure to address the inherent conflicts between western science and traditional ecological knowledge. The authors observe that by using imprecise vocabularies not clarified by both parties, a “false sense of agreement” is created, even though cross-cultural meanings may not be comparable. The authors conclude,

“In sum, a variety of factors contribute to the concealment of ethnocentrism. Resource managers ethnocentrically assume that Yupi'it will have certain “non-rational” beliefs about game animals, while being comparatively unaware of their own cultural biases. The regulators canonise the biological model of population dynamics even when, as is often true in the Arctic, population figures are sketchy, variables are numerous, and the dynamics are not well understood, all leaving sufficient room for the influence of Western beliefs in making actual management decisions.” (Morrow and Hensel, 1992: 45)

In a discussion of the various ways of “transferring reality”, including education and training, Chambers (1997) focuses on international development. His discussion of power is applicable to the way TEK research is done, especially with the objective of “involving local people” in the research. Chambers (1997) asserts that “top-down centre-periphery transfers are found world-wide [... and can] override local priorities, inhibit participation, and obliterate diversity”. Chambers (1997) suggests that, in order to serve the needs of those in the periphery, we must be attentive to the power differential and seek to minimise it by recognising each of our own biases and acknowledging the value in what the people in communities have to say.

Duerden and Kuhn (1998) also discuss the application of traditional ecological knowledge, in their case applying TEK in geographical research. They point out that in the early years of “contact”, indigenous knowledge of geography was used extensively by

government representatives, traders and explorers, to get to know the land. However, the authors also observe that the depiction of the north which evolved “was in the terms and spatial artefacts of Euro-American culture” (Duerden and Kuhn, 1998). Although indigenous ways of knowing did not fit into the dominant culture’s quantification model, Aboriginal groups were “obliged to depict their world in a geographic format that the rest of the population could understand and accept” (Duerden and Kuhn, 1998, p. 32). Duerden and Kuhn suggest a range of ways that traditional ecological knowledge can enter into application. One extreme is having TEK as the starting point, providing raw data and indigenous approaches. The other extreme is to be merely used to support the position of an external interest (for example environmentalism). The authors assert that scale and context are fundamental to traditional knowledge, and conclude that the roles and legitimacy of traditional ecological knowledge would be enhanced by the education of the broader population to understand the existence of “valid knowledge frameworks outside scientific Euro-American traditions” (Duerden and Kuhn, 1998).

Nadasdy (1999) argues that the integration of TEK and western science is doomed to fail, because the compartmentalisation and distillation by scientists is contrary to the “meaning” of TEK. Nadasdy (1999) further states that it is inappropriate that this distillation would be carried out by scientists who do not understand the context of TEK. He says, “the very idea of such integration implicitly assumes that knowledge is an intellectual product which can be isolated from its social context” (Nadasdy, 1999). Nadasdy (1999) notes that the power relationship of science to local knowledge is such that external parties have control over local people by imposing this “universal scientific truth” on communities. Like Cruikshank (1998), Nadasdy (1999) questioned why TEK is only used within the western scientific paradigm, and suggested that traditional knowledge might better challenge this paradigm and offer a different way of looking at knowledge.

“Many TEK studies focus on single species or at most a handful of related or ‘important’ species – almost always large game animals or medicinal plants. This focus on individual species conforms not to the views of native elders and

hunters, but to the needs and specifications of the scientists and government officials who are managing these populations in an established institutionalised setting. [...] The integrated and holistic view of the world that hunters value and, indeed, depend upon for their very survival cannot be accommodated by the institutional structure of the state management system into which they are being 'incorporated'." (Nadasdy, 1999: 6)

Nadasdy based his observations and conclusions on intensive work with one community in the Yukon, where he lived and participated in community life, including scientific and government research activity. He reported that elders are particularly concerned with the way researchers insist on "getting TEK" only in isolation: TEK on bears or sheep, for example, and therefore inevitably missing the context in which that information has meaning. TEK is particular to place, and individual stories, observations, and life experiences add up to a general knowledge and understanding of the area in which a person lives. When researchers take portions of this knowledge, compartmentalise and distil it into a format which fits the external administrative need, rather than the needs of communities, communities and individuals are disempowered, because the process actually concentrates power in government offices and big cities, and the expense of local people (Nadasdy, 1999). Nadasdy (1999) noted that people in communities have become disillusioned with the scientific process, because even when individual scientists have good intentions, the system inevitably fragments information, and the desired changes (the reason that community members participate) never materialise; resource management practices don't change and communication doesn't improve.

### **Current Status of Current Commercial Land Uses at Husky Lakes**

After a decade-long hiatus, oil and gas exploration activity resumed in the Inuvialuit Settlement Region; the Ikhil natural gas pipeline between Parson's Lake and Inuvik was completed in 1999 and Chevron, PetroCanada, and Anderson Resources resumed exploration in the Settlement Region in the winter of 2000. Currently, there are three exploration licences in the Husky Lakes area (west of first and middle Husky

Lakes) and one significant discovery licence (also west of first and middle Husky Lakes). Producing natural gas wells are located at Parson's Lake, north of Inuvik, and a natural gas pipeline currently carries gas to supply Inuvik. Reports from the Inuvialuit Settlement Region indicate that oil and gas exploration and extraction activity will intensify over the next several years.

There is limited tourism activity at Husky Lakes at present. The Inuvialuit Land Administration has issued one commercial tourism licence, to Saunatuk Fishing Lodge which is located at Saunaktuk, between middle and third Husky Lakes. Another cultural tourism licence is dormant; this operation is based at Stanley Cabin, in first Husky Lakes. All residential leaseholders also have the right to 30 person days of commercial activity on each residential lease he or she holds. This informal commercial activity could have substantial impacts, as it is not monitored or closely regulated.

Reindeer herding occurred at and around Husky Lakes in the past. However, for more than a decade, the reindeer have been on the north end of Tuktoyaktuk Peninsula, and therefore have not impacted Husky Lakes or harvesting in the area. In 2000, the reindeer herd was sold to Kuññek Development Corporation. Kuññek's proposal to move the herd south was reviewed by the Environmental Impact Review Board and approved in December 2000. The herd was moved to Richards Island in the spring of 2001, and will be located in the area around Richards Island and the south end of Husky Lakes.

An all-weather road between Inuvik and Tuktoyaktuk has been proposed and discussed since the mid-1970's. When the Dempster Highway was completed in 1979, an extension to Tuktoyaktuk was planned, but the residents of Tuktoyaktuk were concerned about negative impacts on the land and wildlife, and requested a deferment to the development until research into impacts could be completed. In 1998, the territorial government renewed interest in a proposed all-weather road with a Highway Strategy. GNWT set up a local advisory committee which met in 1998 and 1999 to look at some of the social, economic, and environmental aspects of the proposed highway development.

The territorial government has not committed funding to the construction of an all-weather road between Inuvik and Tuktoyaktuk.

### ***Summary and Conclusions of Chapter***

This chapter has introduced some of the principles of management decision-making often employed in the Western Arctic. Sustainable development and integrated management are “core values” in the *Oceans Act* and often cited as objectives or means for allocation and management of land and resources. Traditional ecological knowledge has become at least an element of much of the research done in the Western Arctic. This chapter has introduced the concepts of sustainable development, integrated management, and traditional ecological knowledge, and briefly described the type and extent of commercial/industrial use of the Husky Lakes area at the current time (fall, 2001).

In the Husky Lakes study, I have attempted to address the concerns raised by some of the researchers mentioned in this chapter regarding traditional ecological knowledge research. To differentiate my opinions and interpretations from those of the participants and interviewees, I noted specifically when an interviewee was speaking, and for the most part, kept my own interpretations out of the results chapters, in which participants spoke in their own voices. However, my own biases emerge through choices to include some comments and exclude others. The information I heard from participants was certainly affected by my background, knowledge, and worldview. I have tried in this research to be open to other ways of looking at issues, of knowing topics, and of approaching management and planning. This report and this research project represent my efforts towards “best practices” in integration, sustainability, and traditional ecological knowledge research.

## CHAPTER 3: THE INUVIALUIT AND HUSKY LAKES

In this chapter, I describe the Inuvialuit people and their history of land use in the Husky Lakes area, through the examination of ethnographic and historical literature, land use and occupancy studies, and contemporary land use patterns. This chapter introduces the people of the Western Arctic, and focuses the discussion of chapter two (sustainable development, integrated management, and traditional ecological knowledge) into the Husky Lakes area. This background provides the context for participants' comments presented in chapters four and five.

### *The Inuvialuit: A Tradition of land Use*

*The Kittigaruit people used to live on caribou. You could see the trails, there were so many. Then there were none. People used to walk from Kitti to Husky Lakes (especially Saunaktuk) for the hides. You can tell from the trails the caribou left behind long ago. (Comment from Interviewee)*

### **The origins of the Inuvialuit**

The Inuvialuit are generally thought to be the descendants of the Dorset culture Mackenzie Delta Inuit and immigrant Inuit from Alaska (McGhee, 1974, Taylor, 1976). The Mackenzie Delta Inuit were decimated by disease in the late nineteenth and early twentieth centuries. McGhee (1974) said that, "by 1910, the Mackenzie Eskimos were reduced to a few score survivors scattered among the more numerous Alaskan Eskimo immigrants who flooded into the Delta in the company of European whalers and traders." Early contact was made with traders (1799-1860's) and whalers (after 1860's), and the economy gradually shifted to a commodity-based lifestyle, with Inuvialuit trapping fur for trade and hunting whales and caribou to sell to Europeans (McGhee, 1974).

The two groups of the Mackenzie Delta Inuit that used the Husky Lakes area were the Kittegaryumiut, who lived on the east side of the Delta, including the southern end of

Husky Lakes and the Tuk peninsula, and the Nuvorugmiut, who lived on the north end of the Tuk peninsulas and Husky Lakes (McGhee, 1974). Each group had a central village, inhabited for part of the year by as many as 1,500 people (Kittigaruit). The Mackenzie Delta Inuit were distinctive among the Inuit for their beluga-hunting adaptation, in which they used the estuary of East Channel as a trap for whales (McGhee, 1974).

### **Move to the communities**

A seasonally nomadic people, the Inuvialuit suffered a major societal shift in the middle of the twentieth century, when families moved into permanent communities. Peter Usher (1976), in his overview of land use in the Western Arctic, divided recent history of the Inuvialuit into three periods. The first was the whaling and early fur trade period, which ended in the late 1920's. Then came the peak fur trade period, when fur prices were high and the Inuit moved to a primarily cash economy, with fur trapping being the main industry. By the mid-1950's, fur prices had dropped dramatically, and economic hardship was prevalent in the Western Arctic. The third period started in the mid-1950's, and was characterised by a general move into permanent communities: Aklavik, Tuktoyaktuk, and Inuvik. It was in the 1950's that the opportunity for wage employment became widespread, as Inuvik was built between 1956 and 1963, and construction on the DEW-line<sup>4</sup> was started in 1955.

### **The traditional way of life**

The Inuvialuit traditionally were active in many types of harvesting activities, in extensive travel, and in various entertainments which mirrored skills and knowledge needed for life on the land. Many of the traditions of the past continue in some form in

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<sup>4</sup> Distant Early Warning (DEW-line) system was a series of radar receivers that were built during the Cold War to provide advance warning of air attacks on the North American continent.

the present, although changing technologies and ways of life have altered their expression. Oral traditions show that the Inuvialuit and their ancestors travelled great distances to hunt, trap, and fish in season. Extensive educational journeys were also undertaken: there are stories of Inuit travellers who traversed the northern extremes of the North American continent, as well as accounts of travel to Greenland, Alaska, and other distant places (Brody, 1976). Seasonal land use voyages were less extensive, but still covered large expanses of land and sea. During the first half of the twentieth century, many Inuvialuit from the Tuktoyaktuk and Husky Lakes area travelled annually to Banks Island to trap foxes. In the summer these families would return to the Mackenzie Delta to hunt whales. The many skills that enabled Inuvialuit to survive in the Arctic environment were taught through hands-on demonstration, through experiential teaching and learning, stories, dances, and games, (Nuligak, 1971).

*I, Nuligak* is an autobiography of an Inuvialuk born in 1895. He described his experience of the arrival of Europeans, the decimation of his people by disease, and the changes in the Inuvialuit lifestyle and culture that he observed over the course of the first half of the twentieth century (Nuligak, 1971). This excellent first hand report gives a feel for Nuligak's life, and the context of this time of rapid change. Nuligak (1971) gave a detailed picture of his life in the early years of the twentieth century. Nuligak observes:

“We suffer from cold when we go hunting! We look for food in such blizzards that our own feet become invisible to use when we are travelling! Storms of snowflakes swirl about us in the darkness of our winter season. It is impossible for us to save money. We spend our whole life in search of something to eat and we work for a very miserable salary.” (Nuligak, 1971: 178)

Yet Nuligak loved the way of the Inuvialuit, and regretted that,

“The young Inuit are learning the white man's way of life while our own is fading away. I do not tell you everything in these stories that I relate. Every day we went somewhere and many adventures are alike in some ways. There would be material for more than one book were I to say everything. So I have skipped many events and I have cut across months to give a cross-section of the year.” (Nuligak, 1971)

The traditional way of life made it possible for the Inuvialuit to survive and thrive in a challenging environment. The Inuvialuit knew the land and water, plants and animals, of their traditional territories intimately. This detailed knowledge, which was held by Inuvialuit in the past, persists in the subsistence harvesting and cultural activities of today. Although some knowledge has been lost in the passage of time, and new activities and opportunities have become part of the modern Inuvialuit life style, these traditions are still very important to the Inuvialuit.

### *Inuvialuit use of Husky Lakes*

The Husky Lakes and surrounding land have been used as a harvesting area for many generations of Inuvialuit. The waters hold many species of fish: lake trout, broad whitefish, crooked back whitefish, herring, grayling, loche, coney, and jackfish. Seals also live in Husky Lakes, being particularly abundant in Liverpool Bay, the Fingers, and third Husky Lakes. Beluga whales occasionally enter Husky Lakes and have been found as far south as Whale Point, above first Husky Lakes. Whales have been slaughtered, when they were trapped in the upper reaches of Husky Lakes by ice. Although many resources are found at Husky Lakes, one of the primary species harvested is lake trout, which are found in abundance in first and middle Husky Lakes<sup>5</sup>. The Tuk Land Freeze study (ISL, 1977) states that “the boundaries of Area ‘A’ were clearly selected in an attempt to protect the watershed of Eskimo Lakes and the lands of Cape Bathurst” (ISL, 1977: 9).

In the dry lakes (or marshes) around Husky Lakes, river estuaries, Liverpool Bay, and in the Lakes themselves, waterfowl stage and nest. Ducks, snow geese, white-fronted geese, and tundra swans are harvested on and around Husky Lakes in the spring

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<sup>5</sup> See map 1 (p. 3) showing first, middle, third Husky Lakes, and surrounding area.

and fall. The bluenose caribou herd migrates across Husky Lakes in the fall (heading west) and in the winter and spring (heading east).

Berries are plentiful and widespread on the land around Husky Lakes. Aqpiqs, blueberries, cranberries, and blackberries are common. Masu, or liquorice root, and Eskimo rhubarb also can be found around Husky Lakes. The treeline dips up around the upper Husky Lakes, so there is some fuel wood available. Other firewood is gathered as driftwood from beaches, especially at where rivers enter the Lakes.

One other type of land use, which has occurred at different times of the year and in various areas over the last several decades, is reindeer herding. A herd of reindeer was bought by the federal government in the 1920's and brought from Alaska to the Western Arctic in the early 1930's. For many years, the land between Inuvik and Tuktoyaktuk on the east side of the Mackenzie River was a reindeer grazing preserve, and hunting of caribou was prohibited in that area. The reindeer were sold to private individuals and corporations, and when the land claims were settled, the grazing preserve was extinguished. The reindeer herd is currently located on Richard's Island and on the land south of Tuktoyaktuk between the East Channel and Husky Lakes.

There are ample sources of food and fuel at Husky Lakes throughout the year, but in the springtime the area is bustling with activity. Families travel to Husky Lakes to participate in traditional harvesting activities, as well as to visit with friends, eat country foods, and camp on the land.

### **Contemporary seasonal land use patterns**

#### Summer

The Husky Lakes area is rich in resources and used throughout the year. In the summer (June-September), fish are harvested by casting or trolling, and caribou are hunted along the shores of Husky Lakes. Because travel on the lakes is easy by boat,

large areas are covered, and people pitch tents on the gravel shores or stay in cabins. The primary fish species harvested in the summer is trout, although grayling are also caught and occasionally whitefish or herring are harvested for dryfish. Grayling, trout, and loche are caught by angling (casting or trolling with a rod), while whitefish and herring are usually netted. Caribou are hunted towards the end of the summer, as their hides are prime for clothing, and the meat is fat. Berries are found all around Husky Lakes, and harvested along the shores where they are easily accessible. Aqpiks (cloudberries or salmonberries), blueberries, mossberries, and cranberries are targeted, and raspberries and currants are picked when found. Few people (2-5 families) travel to Husky Lakes for the summer, as it is expensive to fly in and out. However, some hunters go out for short trips in late summer to hunt for caribou, and occasionally women charter a plane to go berry-picking for the day. Some geese are harvested also in late summer, as the waterfowl start their fall migration south (TCCP, 2000).

## Fall

Fall is the time of freeze-up and the first snow cover, from September to November. As soon as snowmobiles can travel on the land, hunters head towards Husky Lakes looking for caribou. This is the main season for harvesting a family's supply of caribou for the year, and a hunter may harvest as many as twenty-five caribou to feed a family of four or five. In early fall some people may still pick cranberries, even dusting off early snowfalls to extend the berry-picking season. Net fishing at Husky Lakes starts as soon as the ice can support a person and skidoo. This fish is often used for dogfood, though when trout are caught they are retained for human consumption. Seals are also hunted during fall in Liverpool Bay, the fingers (*Singiit* in Inuvialuktun), and third Husky Lakes. Seals are primarily harvested for dogfood, although some pelts are retained for clothing and crafts, and some meat is reserved for human consumption (TCCP, 2000).



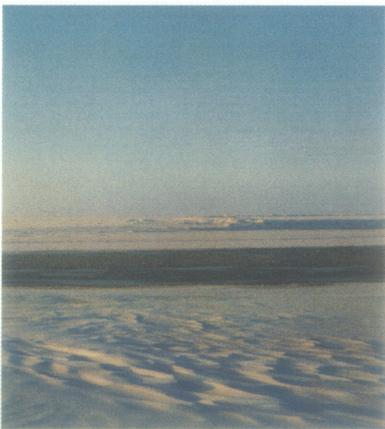
a) Caribou near Husky Lakes, fall 2000. Photo by Simon Adam



b) Lake trout at Dennis Creek, spring 2001



c) Hooking hole, Tuk, fall 2000



d) Open water, fall 2000



e) Aqipiks (cloudberries) summer 2000

Figure 2: Species and scenes from the Husky Lakes area Northwest Territories.

## Winter

Winter extends from November to March. This is the time of least activity at Husky Lakes. Caribou continue to be hunted throughout the winter, although few are harvested during the darkest period. Trapping season is from November to March, and all furbearer species are harvested around Husky Lakes. Wolves and wolverines are also harvested when encountered, as hunters travel on the land, monitoring traplines and hunting other species. Polar bears and seals are hunted in the winter primarily offshore, although some hunters travel through Husky Lakes en route to Baillie Islands and Cape Bathurst (TCCP, 2000). The sport hunting season peaks in the winter, and sport hunters from the south hunt for polar bears, caribou, muskox, and grizzly bears with local guides. Caribou and grizzly bear hunts are sometimes based at Husky Lakes.

## Spring

As soon as the light returns, hunters and fishermen start heading out to Husky Lakes. There is a mass relocation of Inuvialuit from Tuktoyaktuk to Husky Lakes to camp, fish for lake trout, and visit with friends and family on the land. Many people from Inuvik also travel to Husky Lakes in the springtime; some have cabins, while others travel to visit friends or to camp. This migration to Husky Lakes for spring “jiggling” has been taking place since before the community of Tuktoyaktuk was established, although increasing populations and concentrations probably have changed the “shape” of the land use. Besides fishing for lake trout, the major activity and reason to go to Husky Lakes in the springtime, is to hunt for tundra swans, geese (yellow legs and wavies), and various species of ducks. These birds are harvested in their spring migration from southern Canada and the United States to nesting areas in the Arctic. Swan, goose, and seagull eggs are gathered as well. In the springtime, seals are harvested in third Husky Lakes and in and around the fingers. Caribou are hunted when encountered, as are ptarmigan. Muskrats are trapped and hunted around Husky Lakes and Five Hundred Lake.

Snowmobiles have made travel much easier and faster, and are used from first snowfall until break-up. The advent of the snowmachine has changed some aspects of land use at Husky Lakes. Before the movement to settle in communities, the Inuvialuit covered vast areas of the land on foot and with dogteams. During the 1940's and 1950's, concentration of populations in communities resulted in reduction of the land base utilised, to the accessible land near settlements. The widespread use of snowmobiles restored the large land and resource base to hunters, trappers, and fishermen. Freeman et al. (1976) found that the area used by harvesters in the mid-1970's was similar to that of the early part of the century.

### ***Past Research on Land Use and Land Use Planning***

The Inuit Land Use and Occupancy Study (Freeman, 1976) was the first and largest scale survey of the land use patterns of the Inuit across the Canadian north. The project was completed to inform the land claims process and negotiations between Inuit claimant groups and the Federal and Territorial governments. This comprehensive study included the Western Arctic, and documented Inuvialuit use of the land and water from the Alaska border, across the Yukon North Slope, through the Mackenzie Delta region, across Husky Lakes, and east through the Horton River plain to Paulatuuq, continuing north to Victoria Island, and including the land up to the traditional territory of the Coppermine Inuit (Freeman et al., 1976). The Inuit Land Use and Occupancy Study showed uninterrupted use of this entire region by the Inuvialuit and their ancestors.

Brody (1976) discussed Inuit land occupancy in the Eastern Arctic. Drawing from hundreds of interviews with elders and other Inuit northerners, Brody (1976) recorded the Inuit's descriptions of their travels on and experiences with the land. Like Rasmussen, he observed that it is practically impossible to translate the meanings from Inuit languages, because English cannot encompass the range of expressions and minute detail that is part of the Inuit worldview.

The Eskimo language does not readily translate into English – there are grammatical constructions, sets of notions, and a vast specialised vocabulary. [...] Inuktitut has many levels and, according to older persons, it is a language of a richness and subtlety that are acquired only over many years of life on the land. (Brody, 1976)

In this short passage on language Brody (1976) underlined the centrality of the land or environment to Inuit culture. Brody (1976), whose essay encompasses the whole of the Canadian Arctic, writes that “despite differences in history, members of communities in regions as far apart as the Mackenzie Delta, the High Arctic, and the Keewatin focused on the same things: the importance of ancestral land use, intergenerational difficulties, links between Inuit identity and land occupancy, and the kinds of dangers they consider to be inherent in their present situation.” Brody’s essay gave a general feel for the extent and importance of land occupancy to Canada’s Inuit people.

In 1972, Elf Oil applied for a permit to conduct a seismic program in the Cape Bathurst area. COPE (Committee for Original Peoples’ Entitlement), ITC (Inuit Tapirisat Canada), the Tuk Hamlet Council, and residents of Tuktoyaktuk raised concerns about possible irreparable environmental damage to this area, in light of its importance for subsistence harvesting. The Minister of the Department of Indian Affairs and Northern Development agreed to delay approval of the application to develop until a study be carried out to “examine the environmental concerns expressed by the Tuktoyaktuk residents and native organisations, apprise him of the state of knowledge on area wildlife resources, and recommend specific controls and guidelines which might be applied to regulate exploration and development activity in the Cape Bathurst area” (ISL, 1977:5). The moratorium on development was renewed for 3 years, while the study was being completed. At the same time, aboriginal organisations continued to press for a land claims settlement, and in 1974, the Indian Affairs Minister suggested to Inuit Tapirisat Canada that DIAND might be willing to consider a freeze on development for certain parcels of land, pending settlement of land claims. One of the three areas proposed by COPE) was “Area ‘A’ – Proposed Tuk Land Freeze”, which included Husky Lakes, east

to Horton River, and north to Baillie Islands (ISL, 1977). Industry was vehemently opposed to the removal of a large block of land from development. DIAND did not accept the land freeze proposal, but extended the moratorium on Cape Bathurst until May 1976, at which time the Minister proposed management for multiple land use, with preference given to traditional pursuits over industrial development (ISL, 1977).

When the comprehensive land claim (Inuvialuit Final Agreement) was settled in 1984, some conditions for development in the Husky Lakes area were laid out in Section 8 (IFA, 1984). The IFA specifies that no dredging, platform building, or fuel storage facilities may occur in the waters of Husky Lakes, and says that approval for any development activity is subject to “acceptable environmental standards” set by the Environmental Impact Review Board (EIRB) (IFA, 1984, section 8). The EIRB is currently (fall, 2001) in the process of developing environmental standards for oil and gas development in the Husky Lakes area (Hornal, pers. com.).

In the 1991 *Community-based Regional Land Use Plan for the Mackenzie Delta-Beaufort Sea Region*, Husky Lakes was afforded category B level protection. This means that it includes “land where there are cultural or renewable resources of some significance and sensitivity, but where terms and conditions associated with permits and leases shall assure the conservation of these resources” (Planning Commission, 1991: iii). The rationale for this classification was that Inuvialuit used the area for subsistence fishing, hunting, trapping and berry-picking, and that there were “about 25 recreational and trapping cabins located throughout the area” (Planning Commission, 1991: 208). In the Tuktoyaktuk Community Conservation Plan (TCCP), produced in 1993, the classification of Husky Lakes was upgraded to D level: “land where cultural or renewable resources are of particular significance and sensitivity through the year. [...] These lands shall be managed so as to guarantee the conservation of the resources” (TCCP, 2000: 19).

## *Summary and Conclusions of Chapter*

This chapter has provided some background on the Inuvialuit people, the area of Husky Lakes, and Inuvialuit use of Husky Lakes. Although much work has been done on the Inuvialuit, on land use and occupancy, and on traditional ecological knowledge, the Husky Lakes integrated management study contributes in the way that it brings together all these elements in a contemporary context. In this chapter, I have briefly described the history of the Inuvialuit, their use of the land, especially the Husky Lakes area, and seasonal variations in land use patterns. The next two chapters present participants' comments from the Husky Lakes integrated management study. Familiarity with the history and environment of the Inuvialuit contributes perspective to participants' remarks.

## CHAPTER 4: PARTICIPANTS' COMMENTS: LAND USE IN THE HUSKY LAKES AREA

In this chapter, I present the results of the study pertaining to local subsistence and recreational use of the Husky Lakes area. For the most part, I have tried to let the participants speak in their own voices, through quotes describing the different points of view. Because most answers were not a simple yes or no, I have grouped the responses into illustrative categories. The interviewees were assured of confidentiality and these quotes are not attributed to individuals. Some of the quotes may have been slightly altered to protect the identity of the speaker. The complexity of issues were portrayed effectively by many of the people with whom I spoke, as they explained to me how they felt the need for the benefits of development (jobs, economic growth) could be balanced against the costs (environmental degradation, social deterioration).

This chapter looks at contemporary land use and occupancy, and includes maps of cabins and tenting spots, as well as hunting, trapping, fishing, berry-picking, and wood-gathering areas. This chapter also looks at cabin and residential leases at Husky Lakes and other concerns such as garbage disposal and meat wastage. The next chapter (chapter five) deals with development and management. Specifically, oil and gas, tourism, Kuññiek Reindeer Herd development, and the proposed all-weather road between Inuvik and Tuktoyaktuk are considered. In chapter six (discussion), I will look at the implications and significance of participants' responses to integrated management planning in the Inuvialuit Settlement Region.

### *Land Use*

In the interviews, when I asked people about how they used the land, I asked specifically about camping and cabin locations, trapping, hunting, fishing, berry-picking, wood harvesting, other plant gathering, and community or recreational areas. I asked about burial sites and spiritual or special historical cultural sites, but most interviewees

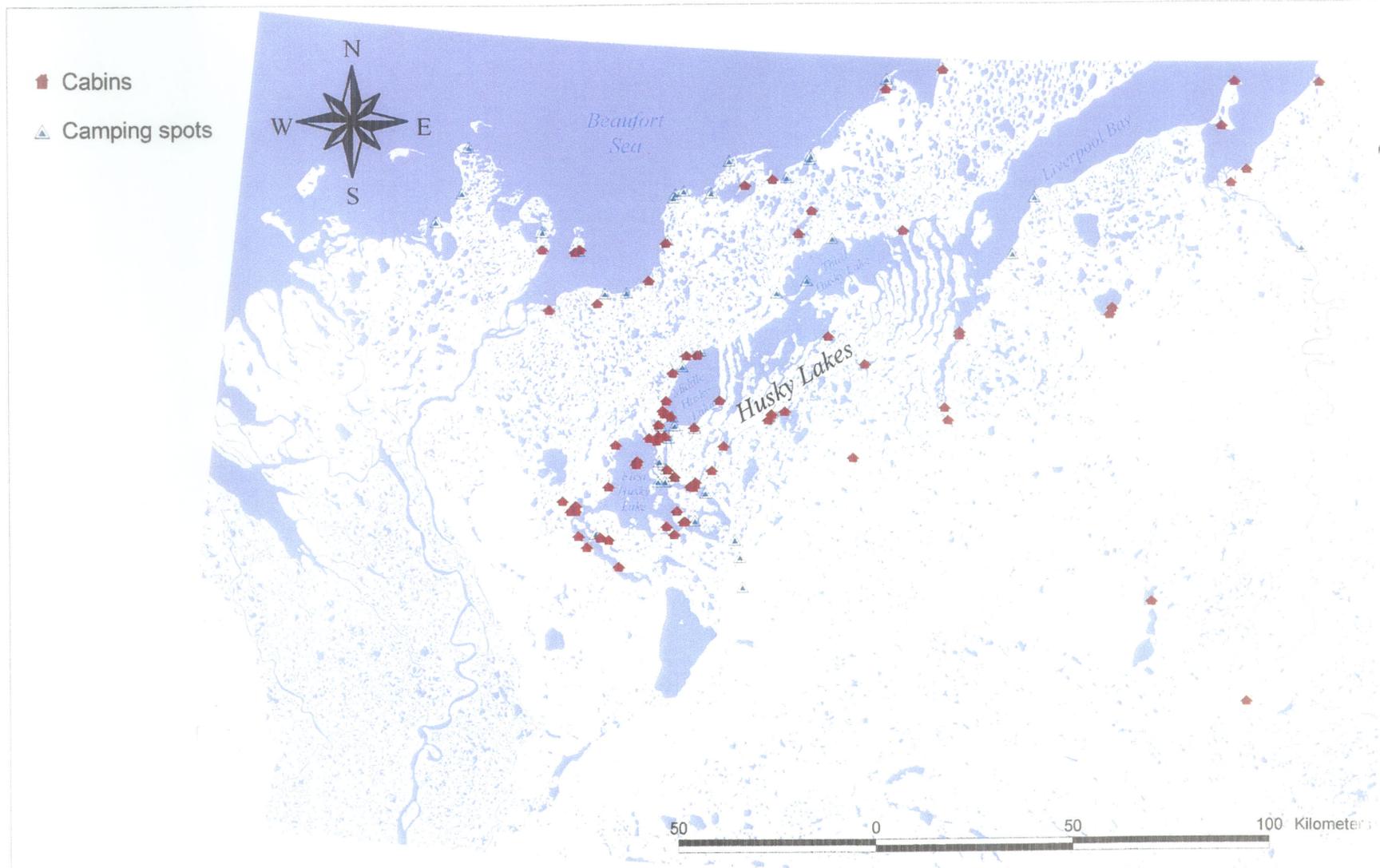
were not comfortable marking these on a map. These categories were derived from the Manitoba Chiefs protocol (MKO, 2000). I also asked interviewees if there were other types of use that I had not thought of. All spatial data were marked on a base map, one map sheet for each interview. The scale of the map was quite coarse, and colour-coded felt markers were used to identify land uses.

### **Cabins and Tenting Spots**

The first question I asked people was whether they had any cabins at Husky Lakes or particular spots where they habitually put up a tent. Most people did have one or the other, but a few people said that they preferred to move around, camping at various spots, as this was a more traditional way to travel. The cabins are shown on the map below, as well as tenting spots as identified in interviews. The Tuktoyaktuk Community Conservation Plan stated that there were about twenty-five residential, recreational, trapping, and educational cabins out at Husky Lakes (TCCP, 2000). In the course of my interviews, I mapped fifty-one cabins and thirty tenting spots at Husky Lakes and Liverpool Bay, and an additional fifteen cabins in the general mapped area. Locations were not exact, due to the scale of the hard-copy map used in interviews. The ILA has been working on identifying cabin locations, both by having cabin-owners register the locations of their cabins, and by an on-the-ground survey done in the spring of 2001 using GPS (global positioning system), which identifies fairly accurate locations. The ILA's data is not yet compiled, so I have not included it in this report or on the maps. At the end of this chapter is a longer discussion on some of the issues around cabins, tenting, and residential leases at Husky Lakes. Cabins and tenting spots are shown on map 2, page 50.

### **Trapping**

Of fifty-one people interviewed, only fifteen trap currently. Thirteen showed their trap lines as routes, while two showed me areas within which they set traps.



Map 2: Cabins and camping spots in the Husky Lakes Area.

Trapping areas and traplines are shown on map 3, page 52. Yellow shaded areas are general trapping areas; solid yellow lines are current traplines. One trapper explained that very few people trap now because the fur prices declined and trappers couldn't make enough money selling fur to cover their costs of being out on the land. Another trapper told me that he has only been out on his trapline a few times in the last decade; he keeps his trapline so he can show his children how to trap.

Some comments from interviewees:

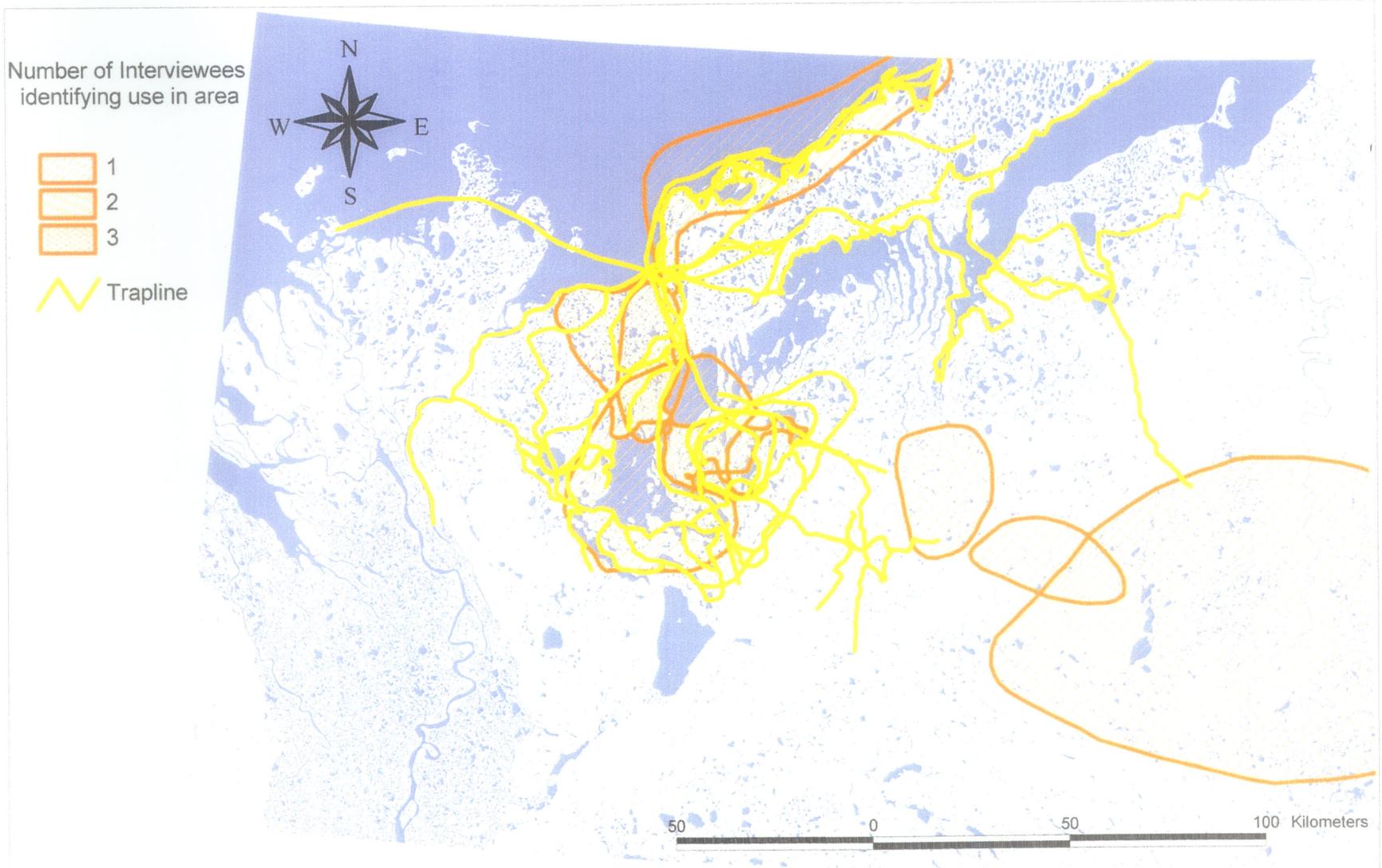
*"I don't trap anymore, except for rats, in the spring. Last spring, there's nothing: no rats. We tried to look for rats, but nothing. Usually we trap rats all around Five Hundred Lake. We travel around and look for them, all around the little lakes around there."*

*"Trapping is good in September to March. Get white foxes December to May, then towards springtime, the coloured foxes get faded in colour."*

*"I used to trap around Five Hundred Lake, Old Man Lake, along the coast south of Tuk, but I haven't trapped in years. Trapping declined because fur priced didn't keep up with the costs of going trapping."*

## **Hunting**

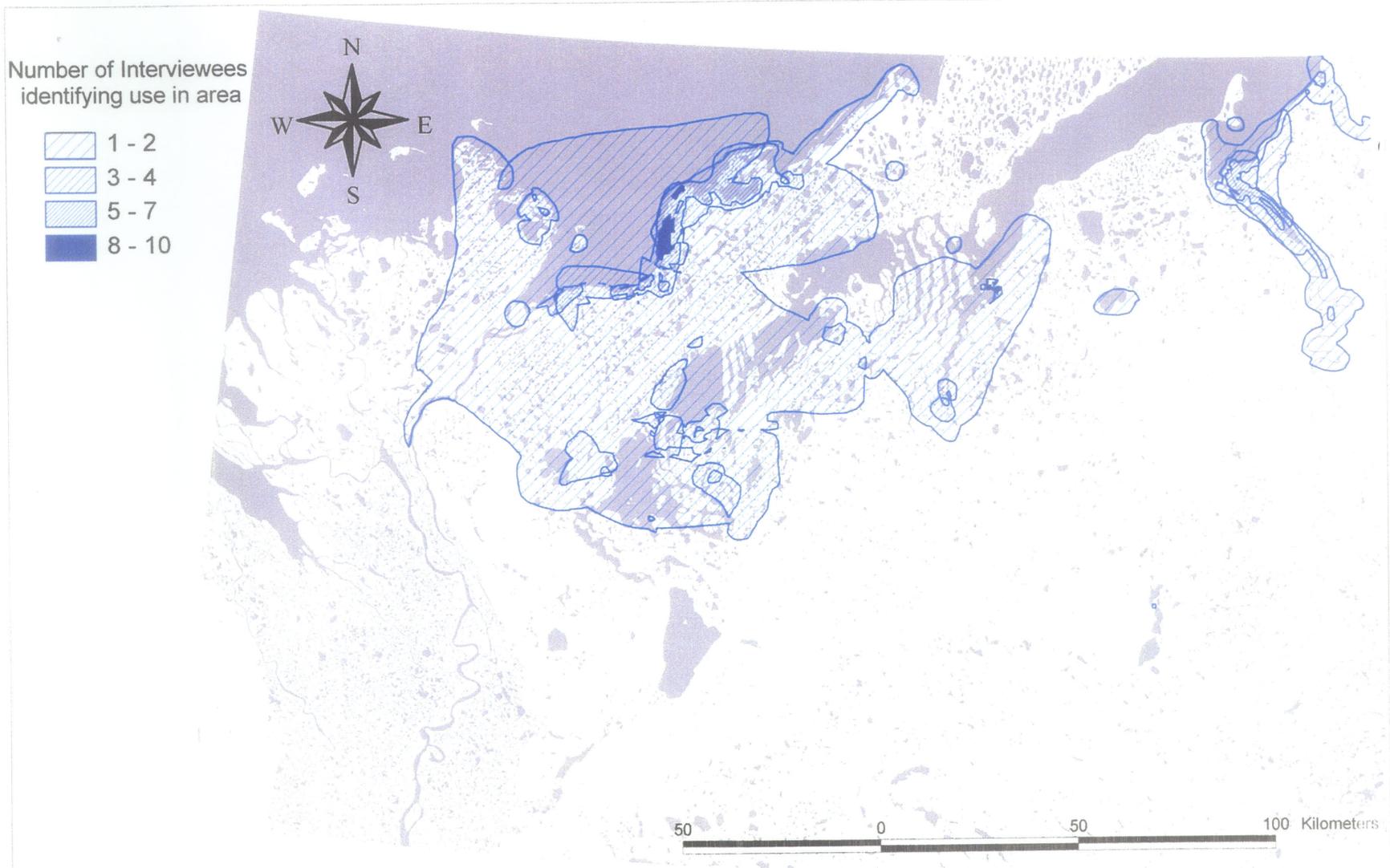
Almost every person I interviewed indicated on a map where he, she, or the family hunts for caribou (*Rangifer tarandus*) and geese (*Chen caerulescens* and *Anser albifrons frontalis*). Some interviewees also indicated polar bear (*Ursus maritimus*) or grizzly (*Ursus arctos*) hunting areas, seal (*Pusa hispida*) or beluga (*Delphinapterus leucas*) hunting areas. Others showed wolf (*Canis lupus*) and wolverine (*Gulo gulo*) hunting areas. Although not all hunters cover huge distances when hunting for a certain species, when all the families' hunting areas are collated, for all species, almost the entire land base in the Husky Lakes and Anderson River watersheds is included, as well as the Beaufort watershed of the Tuk peninsula. Most hunters have preferred hunting spots or areas, but will travel further if the game is elsewhere. Likewise, all hunters are somewhat opportunistic. Although a hunter may be looking for caribou, if he sees a wolf with a



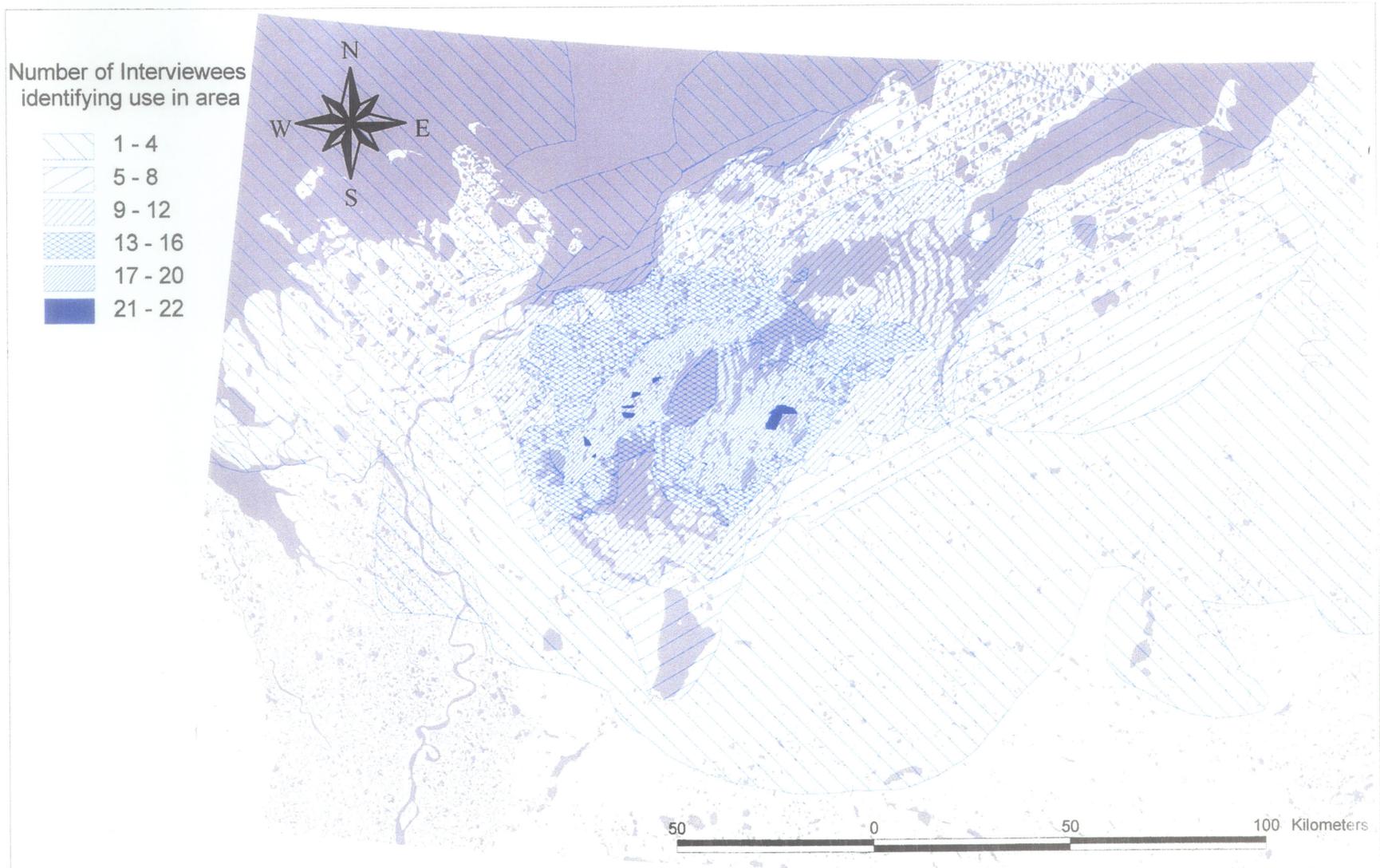
Map 3: Trapping areas and trap lines in the Husky Lakes Area.

good pelt, he will hunt it. The maps following show waterfowl and caribou, wolf, and wolverine hunting areas. Caribou hunting is along the coast in the late summer and early fall by boat, and inland during the late fall and throughout the winter, by skidoo. Geese are hunted along the coast, at river mouths, and in the Husky Lakes area in the springtime and falltime, with a high concentration of hunters at Husky Lakes, the Kugaluk, Anderson, and Mason River mouths in the springtime. In the fall, most goose hunting is along the coast out of Tuktoyaktuk. Polar bear hunting extends beyond the base map used in interviews, either at the north end of the Tuk peninsula around Cape Dalhousie, or northeast of Liverpool Bay, around Cape Bathurst, Baillie Islands, and points east. Because there is a lot of overlap between geese and caribou hunting, these have been separated into two maps to enhance clarity.

One interviewee said, "When I go out hunting in November, December, hunting caribou, I keep my eyes open for wolves, wolverine." Another noted, "Before, there was lots of ptarmigan around. Used to make drymeat, soup, fry it, cook it. You can eat it any way, like caribou. It tastes good." Another interviewee said he "goes out to Husky Lakes every spring, and sometimes in the winter and fall. In spring, I go out for about a month, fishing and hunting geese. In fall, I fly in with a float plane for long weekends, hunt caribou and pick berries." Harvest numbers vary (contact the Inuvialuit Harvest Study at the Joint Secretariat, Inuvik for more details), but interviewees noted they kill from five to twenty-five caribou to feed a family for the year. Individual families may harvest between a dozen to over two hundred geese in a spring hunt. Bear hunting is on a quota system, with numbers set by RWED, and administration of the quota by the Hunters and Trappers Committees. There are no externally imposed limits on fur hunting or trapping, or beluga or seal harvesting. Geese hunting is shown on map 4, page 54, while caribou hunting is shown on map 5, page 55.



Map 4: Hunting in the Husky Lakes Area - geese, ducks and waterfowl.



Map 5: Hunting in the Husky Lakes Area - caribou, wolves and wolverines.

## Fishing

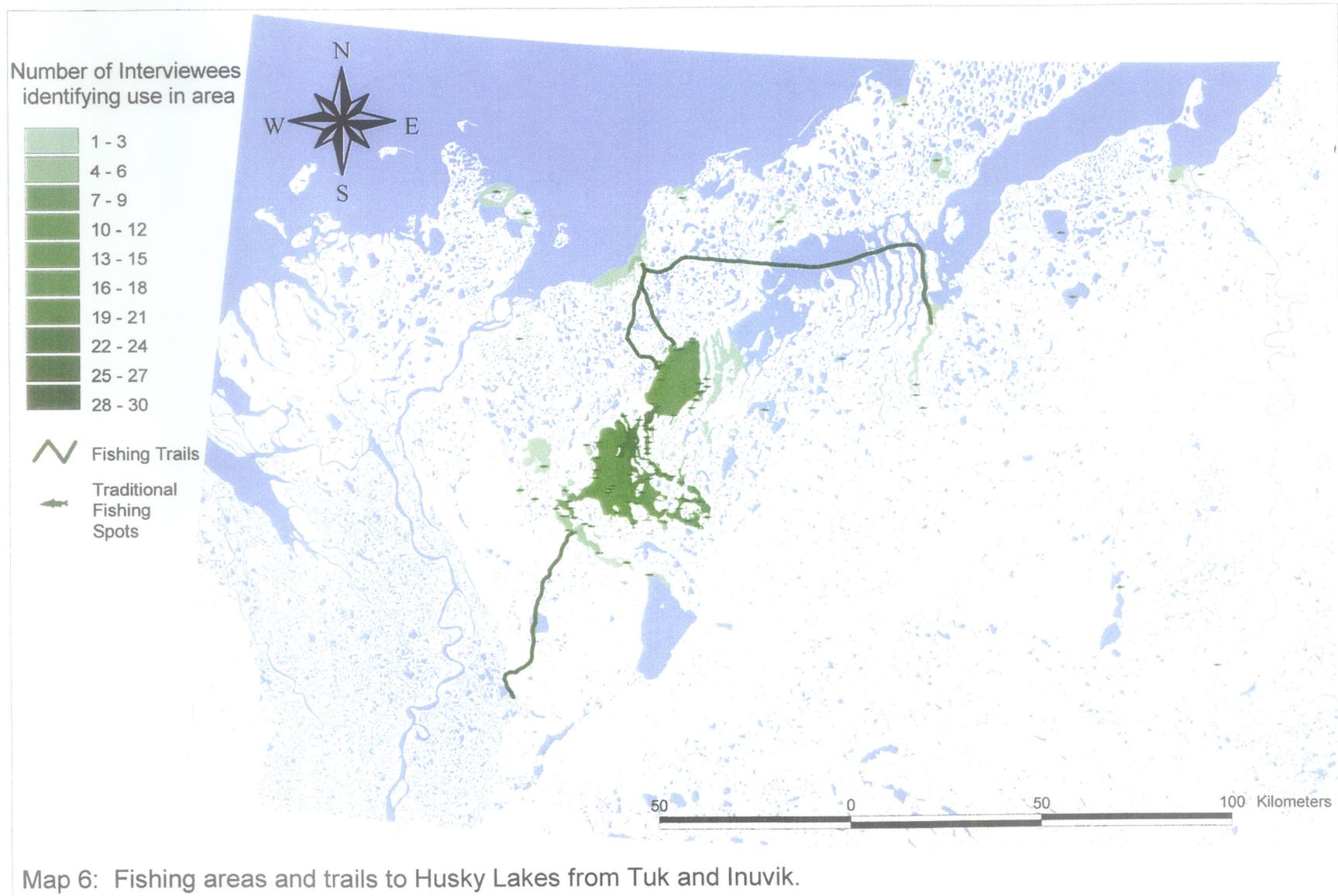
Although there traditionally have been specific places in Husky Lakes where people fished, interviewees told me that in recent times, people fish throughout first and middle Husky Lakes. This may be because ice augers have made it much easier to put holes in the ice, and skidoos have made it much easier to travel long distances fast. Therefore people often fish in one spot for only a short period of time, and if they have no luck, they move to another area. The main species harvested at Husky Lakes are lake trout (*Salvelinus namaycush*), whitefish (*Coregonus clupeaformis* and *Coregonus nasus*), herring (*Clupea pallasii*), and loche (*Lota lota*). Trout is the target species for spring “jigging”, while broad and crooked back whitefish and herring are harvested in the summer, fall, and winter with nets, often for dogfood. Other species, such as coney (*Stenodus leucichthys*), cod (*Boreogadus saida*), grayling (*Thymallus arcticus*), cisco (*Coregonus sardinella*), and jackfish (*Esox lucius*) are opportunistically harvested. There are some places that are traditionally known as good places to set a net when you really need lots of fish. Some of these are shown on the map below. The entire area of first and middle Husky Lakes from Sitidgi Lake to Saunaktuk is coloured green on the figures in this document, indicating that people fish throughout this area. Certain spots are areas of concentrated use, and these are indicated by fish symbols. Fishing areas and spots are shown on map 6, page 57.

Interviewees describe their fishing habits:

*“I fish in Husky Lakes for trout, crooked back, jackfish, and grayling. The grayling are there more in the summer, around July, than in the spring.”*

*“Long ago, they used to get long white trout at Saunaktuk. My mom used to tell me that they used to catch lots of fish right in the middle of Husky Lakes, at Qikuqyuaq.”*

*“Elders were fishing out there long ago. Today, the same places are being used because of knowledge from the elders.”*



*"I go out to Husky Lakes for fishing lake trout. In summer, I go boating, fishing, have fry-outs at Saunaktuk, at Five Hundred Lake. In April and May, and June, July, August, and September, I fish for lake trout."*

*"You don't have to get fish to go fishing – you can just go to be outside, for recreation."*

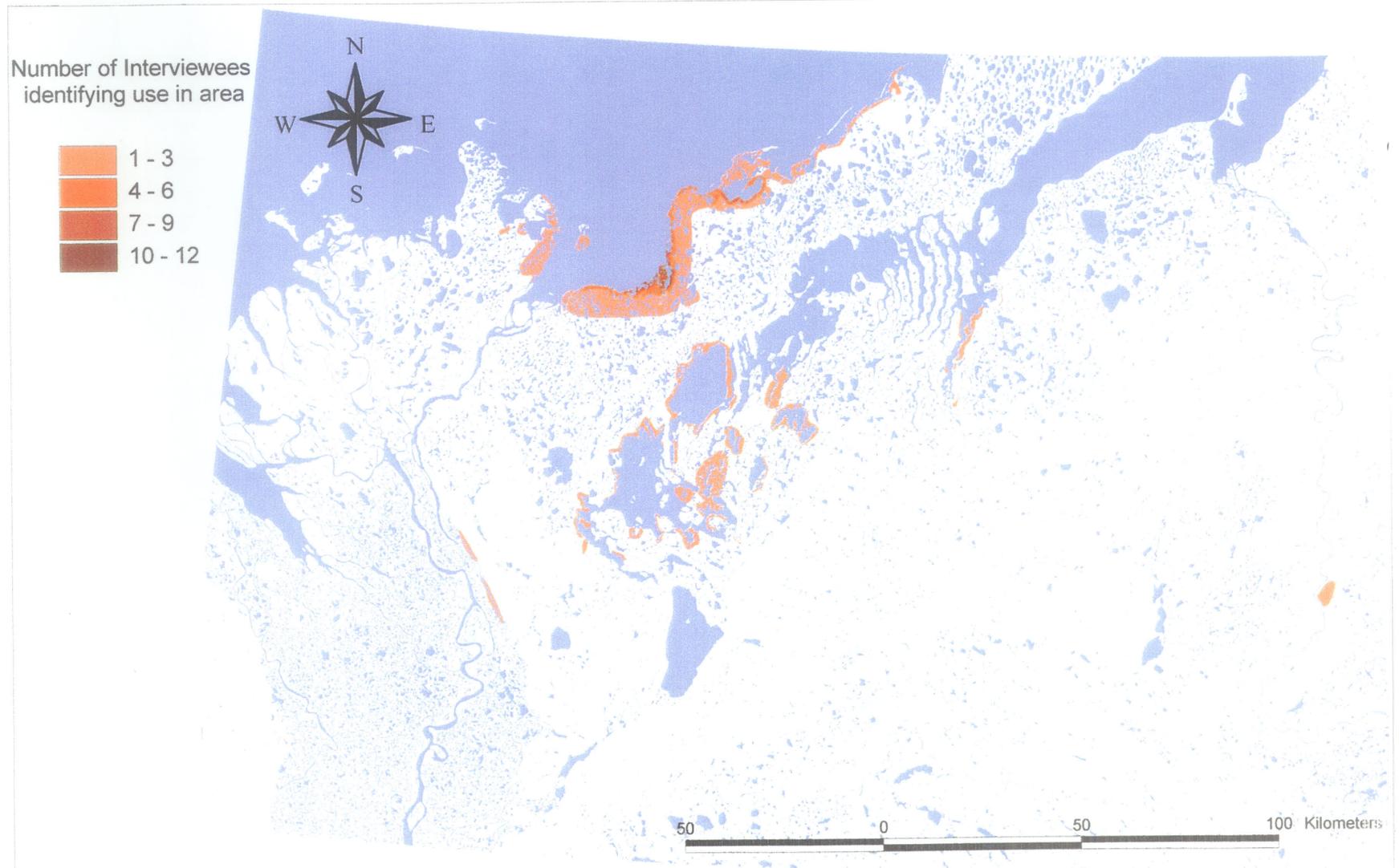
*"There are areas that need more research. Last spring, two local guys were doing sampling fish; that was pretty good. The fish were nice and fat this spring, around March. They were kind of skinny around Dennis Creek area. When we checked stomachs, there was all kinds of junk in there – bullheads even. Those trout can swallow anything when they're hungry."*

### **Berry Picking**

Aqpiks (*Rubus chamaemorus* or cloudberry), lowbush cranberries (*Vaccinium vitis-idaea*), blueberries (*Vaccinium uliginosum*), and blackberries (*Empetrum nigrum* or mossberries) are harvested in the late summer and fall. Blueberries and blackberries are often found when harvesters are picking aqpiks, and picked opportunistically. Cranberries ripen later, and are harvested both in the falltime (sometimes even after snow has fallen) and in the springtime, as the snow melts. Although berries grow throughout the tundra, harvesters tend to pick berries accessible by water, as this is the main mode of transportation on the land during the summer and early fall. Sometimes harvesters charter a plane to go out to a favoured berry-picking spot, but this is expensive and therefore not very common. On map 7, harvesting areas are shown. The highest concentration of berry-harvesting is along the coast west and north of Tuktoyaktuk, along Gungy Creek, south of Tuk, and at Husky Lakes from Dennis Creek in the east and Sitidgi Creek in the south to the west side of middle Husky Lakes. Berry-picking areas are shown on map 7, page 59.

Interviewees said,

*"Anywhere you land, there's cranberries and blueberries. There's lots everywhere in Husky Lakes."*



Map 7: Berry-picking in the Husky Lakes Area.

*“I pick aqpiks at Five Hundred Lake and on the coast, cranberries and blueberries around Five Hundred Lake.”*

*“It’s hard to get berries now, hard to get rain. There is not so many berries now as there used to be in the past.”*

*“Now, with the weather all changed around, you don’t know if there will be berries.”*

*“For berries, I pick aqpiks along the coast and down the creek. People just go where they have access, where you can go by boat.”*

### **Other Plant Gathering**

Most interviewees indicated that they did not regularly gather other plants for food or medicine. A few interviewees noted that they gather Eskimo rhubarb (qaugaq or *Polygonum alaskanum*) or other plant species. Normally plants are harvested opportunistically, usually when picking berries. Few people identified specific plant-gathering areas on maps, so this use was not mapped for the final report.

Interviewees said,

*“We pick alingut – long green leaves – we pick them in the same areas as aqpiks. Eat them fresh and also store them in uksuq.”*

*“At Lucas Point, there’s masaktuak, they call them, there. But you don’t see anybody picking plants on the land around here, Tuk, plants to eat. Other than berries.”*

*“All around Reindeer Station, and Lucas Point too, we used to pick those rhubarbs, boil them, and when you make soup, too, you put them in. And you could eat them like that.”*

*“When I was a young girl, I used to see people pick [...] masu or aypit we call them. They pick lots and they make the whale intestine, you know, they blow it up and dry it. And then they put oil in there and put the stems in there for the winter. But I never saw any around here, even if I walk around Husky Lakes, I never see that kind.”*

## Timber or Wood Harvesting

Wood is harvested both from driftwood that comes down the Mackenzie and washes up along the coast near Tuk, and from standing dead wood around Husky Lakes. Since most cabins have wood-burning stoves for heat and/or cooking, interviewees either harvest wood around Husky Lakes or near Tuk or Inuvik and transport it to their camps. There was some concern raised about the sustainability of the harvest of standing wood at and below the treeline near Husky Lakes. This wood is easily accessible, but it grows very slowly in the arctic climate, so the sustainable yield is very low. Wood gathered along the coast, which is driftwood from the upper Mackenzie, is plentiful, but can be arduous to gather. It is more work to transport driftwood from the coast to Husky Lakes than to cut standing dead wood below the treeline near Husky Lakes. Participants told me that collecting driftwood is more sustainable than cutting local trees, because of short growing seasons and subsequent slow growth in the Arctic. Wood-harvesting areas are shown on map 8, page 62.

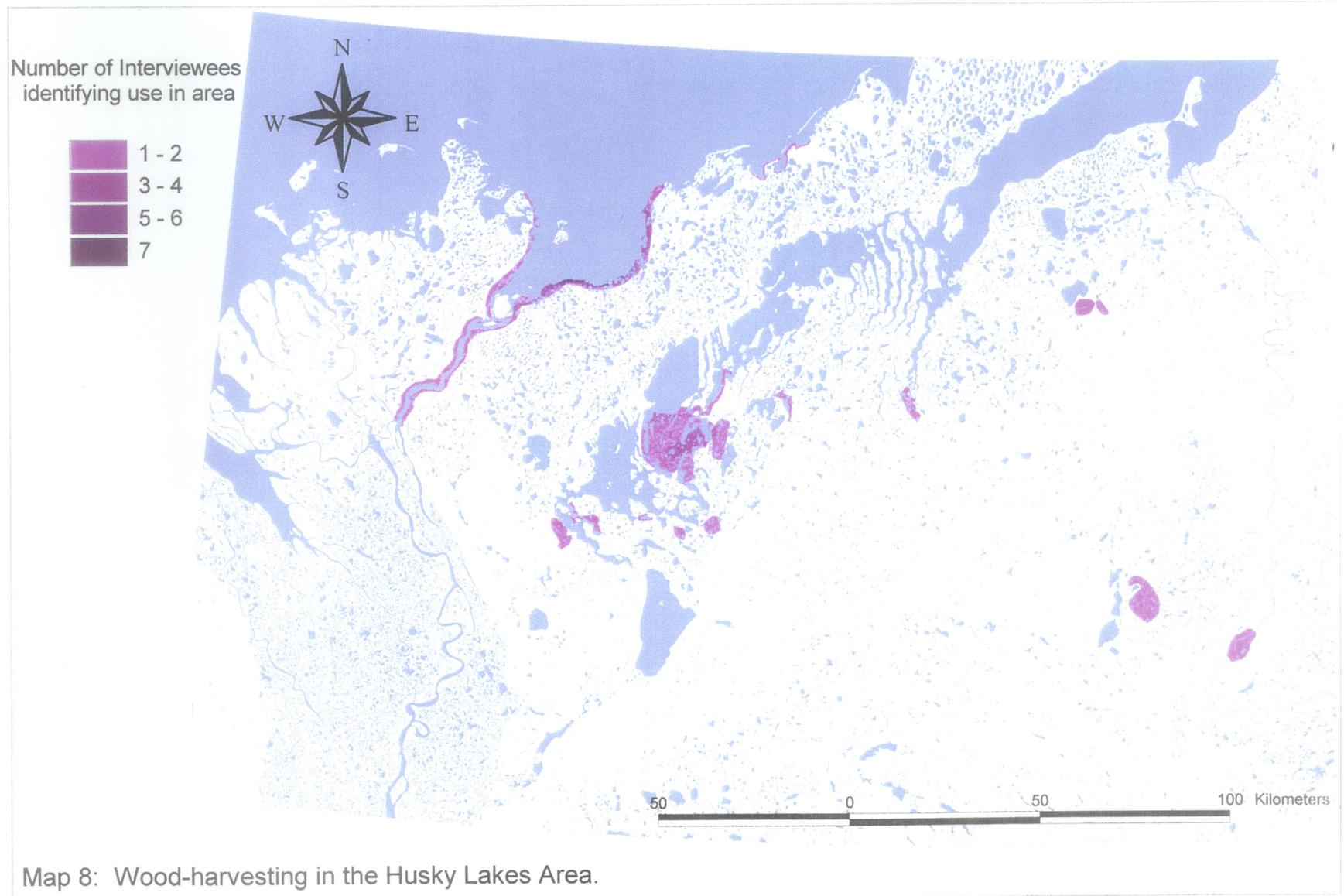
Interviewees said,

*"It's important. When a lot of people use the same area, they use a lot of wood for fire, etc. I'm concerned about that. I get wood from the coast. But you can also get wood around Husky Lakes in fallen deadwood."*

*"All cabin owners have wood stoves. Unless you cut deadwood, you shouldn't be allowed to cut wood. People shouldn't be allowed to cut live wood. If we don't put a stop to people cutting down the trees, there'll be nothing left. In the plan, that should be acted on really fast too, before next spring. They should put a control on that cutting down trees in there."*

*"I get wood from the coast, and brings it in to camp. Also bring wood from Inuvik in winter."*

*"For firewood: cut it up there or bring it from Tuk. Mostly I get it out there. The wood is getting cleaned out now; there's not much around. Also good wood up at Zemen too, up at the Lakes."*



*"I get wood from the powerline: it was cut years ago and they left big piles of wood. It's quite a ways to go to get wood, but it's all piled up. That's where most people get their wood - it's from the powerline. There is lots of dry wood behind our camp, but we usually bring wood from town (driftwood from Tuk)."*

## **Cabins**

Although I did not specifically ask about the issue of cabins and residential leases at Husky Lakes, the topic came up often enough to warrant special treatment in this chapter. Many interviewees had major concerns about residential leases and the construction of cabins at Husky Lakes. Since the Inuvialuit Final Agreement was signed in 1984, ILA has been asking Inuvialuit beneficiaries to voluntarily register their cabins, to facilitate ILA's management of the Inuvialuit private lands. In the last ten years, there has been an increase in numbers of cabins at Husky Lakes, from about twenty-five cabins in 1991, to an estimated fifty today. I have grouped the concerns about residential leases into five categories: ownership, control, stewardship or respect, tradition, and crowding or privacy. Below are some of the comments from interviewees.

### Ownership

There were three types of comments that I categorised as relating to ownership. Several interviewees expressed the concern that if people have leases for cabins, then other people who use the area don't feel comfortable "trespassing" even though the lease may be for only a small area of land, and traditionally all Inuvialuit used the whole area. Other interviewees were concerned about ownership from the point of view that Husky Lakes is Tuk's land, and therefore only Tuk residents should be allowed to build cabins there. Finally, a couple interviewees expressed concern over the concept of ownership, whether any of the land should be owned at all, and whether anyone (even beneficiaries) should have leases. Some examples of comments received are shown below.

*"Some people have camps; there are shacks all over. People that usually tent maybe don't want to set up a tent if there's a cabin right next to it."*

*“People with tents are losing lots of places where they used to camp and hunt because people don’t feel right putting up a tent if there is a cabin right there.”*

*“I wondered, are they shoving some people out of their area? Like the old people, maybe, when someone builds where they always used to camp? For example, there was one family that always camped at a certain area, every spring, and people started putting up cabins and they got shoved aside. They never said anything.”*

*“I don’t like the thought of a place like that, that belongs to everybody, giving out leases. If someone has a camp out there, then I feel like I’m intruding, just putting up a tent frame there beside a cabin. Even houses, permanent structures, shouldn’t have leases.”*

*“If we start owning things, then people start not getting along. People should have equal rights.”*

### Control

Another theme that arose in discussions about cabin at Husky Lakes was the issue of control. Some interviewees were concerned about Inuvik residents’ building cabins at Husky Lakes because this might be the thin edge of the wedge, which will lead to Inuvik control of Husky Lakes management, while most Tuk residents consider Husky Lakes to be their land. Some interviewees suggested that people who had lived out at Husky Lakes for a long period of time should have more control, or be treated differently, than people who had only more recently started staying out at Husky Lakes.

*“When you speak of Husky Lakes, the area of concern would be the camps that have been established for three or more decades: Old Man Lake, Urquhart Lake, Five Hundred Lake, Nallok, Kugaluk, Stanley Point area, Hans Bay area, and down even to Sitidgi Lake. These areas because these are camps that have been established well over thirty years. They should be treated differently than newer ones.”*

*“There are already too many cabins. Especially with people from Inuvik, we don’t want any more. Soon they [people from other communities] will be hunting and this is wrong. Each community has hunting and trapping areas. By applying, people from Inuvik can get residential leases in these areas.”*

*“I wondered when they’d start managing cabins, like who and where. Up to about 10-15 years ago, the other communities came in and started using Husky*

*Lakes and there's cabins all over. So I wondered how they were going to come up with some sort of management plan."*

### Stewardship or Respect

The third theme that arose in discussions about cabins was the issue of stewardship or respect. Comments that fell under this theme mostly dealt with people lacking respect for cabins out there – either people vandalising cabins, or people with cabins not taking care of the cabins and the land around them.

*"As far as cabins, I'm concerned with people putting up junk for buildings, then just leaving it. People should be responsible for cleaning up old camps if they are leaving them."*

*"For the last few years, the cabins or houses out there are being vandalised by people from the other settlements, especially the houses of the elders."*

*"Husky Lakes is always not spoiled. Now it's just a little bit. With more people, there's more houses, more garbage. It used to be just tenting: you take it down, it's like you were never there."*

*"What kind of worries me is this: when I'm not there, people see my camp, say, well, the owner's not there..."*

### Tradition

Tradition versus modernity is a theme that ran through all the questions in all the interviews: how does one balance the need and desire to maintain the old ways against ubiquitous media and the momentum of modern life: the skidoos, the televisions, the nine-to-five jobs? This question came up in interviews with elders and with young people, and was a part of many responses, some of which may have fallen under different themes or headings.

*"The best development is something not permanent. If you can put up a tent frame, you can move it after a few years. Tents are good. You take it down and go."*

*"There's lots of cabins out at Husky Lakes. Before that, we used to have tents, and move here and there."*

*"It's funny when you think that people use to live all over the Tuktoyaktuk peninsula mainland, and then as transportation became easier, people travelled less. People are now more community-centred. I guess it is human nature, laziness."*

*"Today, the Inuvialuit have so much access to so many places. In the past, people really went out to some place, and then they survived, just lived off what was there. They just stayed out the whole year 'til the next year; they made do. If they lost their knife or gun, they had to make do. They really had to know their area, know what they were doing."*

*"There's enough cabins there already. Myself, I never build a cabin up there. I respect the livelihood."*

### Crowding or Privacy

Another concern that was raised when talking about cabins was crowding, or lack of privacy. Definitions of "crowded" varied from person to person: some felt Husky Lakes is already too crowded; others felt that it is not too crowded now, but may become so in the future.

*"Too many houses are being built at Husky Lakes by local people."*

*"Some people have camps out at Husky Lakes – there are shacks all over."*

*"The hardest part is that you are going to deny some people [residential leases] because anyone within five miles has the right to say whether the new residential lease can be nearby. It's a bad rule to make people not allowed to camp within five miles. It's a bit much to expect."*

*"I spend spring hunting geese all around Five Hundred Lake, Stanley area, Ikinilik. This area is really good camping area, but there are lots of cabins now; it's really crowded."*

*"I'm concerned about the amount of camps out there. I'd like to keep it as uncrowded as possible. Maybe a reasonable number would be less than twice as many as there are out there now. In the last ten years, there have been a lot of people from Tuk coming out and putting up camps."*

*"Would really hate to see Husky Lakes be like Airport Lake near Inuvik, with a cabin every hundred metres. You could have more activity at Husky Lakes though."*

## No Comment or Everything's Fine

Because there were no specific questions about cabins in the interview “schedule”, not everybody commented on this issue. However, of the people who did talk about cabins (because either I brought it up or the interviewee did), several people said they had no comment or felt that everything is fine as it is.

*“As long as there's not too many cabins... and it's always nice to stop and warm up in their cabins.”*

*“When I am an old woman, I would like to settle out there, have a cottage or something.”*

*“No one's going to be building cabins right now because of ILA.”*

*“I used to put a tent up by Husky Lakes. I'm not going to say anything about cabins.”*

### **Summary of Comments Regarding Cabins and Residential Leases**

Many interviewees felt strongly about the issue of cabins at Husky Lakes. The themes that were most prevalent in interviewee comments were ownership and crowding or privacy. The one comment that I heard repeatedly was that when there is a cabin in an area at which a person might traditionally have tented, the tenter might feel reluctant to put up a tent because of the cabin-owner's proprietary rights to the area (by virtue of having a permanent structure and lease). A few interviewees specifically did not want to talk about the cabin issue, because it is so politically charged. The issue of control came up several times, although not as much specifically regarding cabins as with some other questions.

Some interviewees in Tuktoyaktuk felt that Inuvik should have no say in managing Husky Lakes, regarding cabins or any other issue; some felt that Inuvik residents should not be allowed to build cabins in Husky Lakes at all, because this is Tuktoyaktuk private lands (7(1) a and 7(1) b) as defined in the Inuvialuit Final Agreement. Interviewees in Inuvik, when they raised the issue, felt that if people from

Inuvik are using the area, they should have a say in the management. Inuvik interviewees also unanimously felt that all Inuvialuit beneficiaries have equal rights to use (camp, hunt, fish, etc.) all land in the Inuvialuit Settlement Region.

That stewardship and tradition are closely tied is reflected in the past, when conservation of a traditional use area was ensured because a family group would use the area over a long period of time and their careful management of the land and resources ensured their personal well being. Now, as people live mostly in settlements, this primary connection with the land has decreased. Furthermore, because most of the materials for subsistence harvesting – skidoos, gas cans, disposable food containers, outboard motors – are not biodegradable, any refuse left on the landscape will remain, and this is a concern also with abandoned buildings and cabins at Husky Lakes. Several interviewees talked about crowding or lack of privacy being a concern at Husky Lakes, although there was not consensus on how crowded is crowded (i.e. how many cabins at Husky Lakes is appropriate and acceptable). Finally, some interviewees felt that they were not in a position to make any comment and others had no concerns with the current situation.

### ***Other Concerns***

Three other issues relating to local use of Husky Lakes that repeatedly arose in interviews were garbage, vandalism, and meat wastage. Garbage was a major concern with many people in Tuktoyaktuk. Interviewees talked about litter around hooking holes, garbage around cabins and camps, and honeybags not brought back to town. Some suggestions to deal with this issue were increased enforcement by RWED and DFO officers, the ILA, and the Hunters and Trappers Committee, hiring local people to clean up after the springtime, and public awareness and education. Interviewees said,

*“If people that use the land, our own people, don’t take their garbage home, instead leaving it by their camps... You just have to tell people to take it home. You see lots of litter along the coast of Husky Lakes. The HTC should be telling people, giving out flyers. It’s frustrating when you know it’s this way but it*

*should be the other way. You wish you could fix it but you can't. The land is good, but you have to take care of it. In a place like Tuk where everybody is outdoorsy, if they could just take care of a little bit of it, it can really sustain us."*

*"The younger people leave garbage. It is a problem now, because people don't realise that one little garbage will turn into a big heap. The ILA should be doing regular inspections there, just to remind the people, on a regular basis."*

When I returned for the verification visit in June 2001, I was told that this spring there was much less garbage than in other recent years. Some people suggested that it is just a matter of raising awareness, and even just this study has contributed to people being more conscious of the issue of littering and therefore individuals are more likely to clean up after themselves.

The subject of meat wastage was raised frequently on my October 2000 interviewing trip. Many people were concerned that the caribou meat was not being fully utilised by hunters; sometimes hunters were taking only the hindquarters and leaving the good meat of the ribs and forequarters. The HTC and RWED have regulations and laws that deal with meat wastage, but interviewees suggested that there is insufficient enforcement. From interviews, I was told that the solution for the problem of meat wastage is increased enforcement, education, and public awareness. Some interviewees also suggested that local hunters could be hired during the fall caribou hunting season to monitor harvesting activity and report any meat wastage.

Interviewees reported an increase in vandalism at Husky Lakes over the last several years. This was a concern for many people. Suggestions on how to deal with vandalism are the same as for garbage and meat wastage: enforcement, awareness-raising, and education. There was a general feeling that the HTC should take a lead role in addressing vandalism at Husky Lakes, but this may or may not be within the HTC's jurisdiction. Interviewees said,

*"People need to have more respect for other peoples places, camps. It's getting worse. The HTC should look into it. It's the young hunters. Most people call head and tell us if they're going to use our place and they clean up after, but others just leave a mess."*

*“People come and take everything from a cabin. Now you can't leave anything; you have to take it all out because people steal it all.”*

*“We never used to lock up anything. Now we lock our cabin. It's not safe, because if someone is in an emergency and needs to use it, they can't unless they break the door down or a window.”*

### ***Summary and Synthesis of Chapter***

The water of Husky Lakes and the surrounding land are used extensively by Inuvialuit for subsistence and recreational activity. Recreational activity is defined by local residents as activity on the land when harvesting is not the objective. Many residents have cabins or habitual camping spots in the Husky Lakes area. All families participate in hunting and fishing activities, with fishing concentrated in first and middle Husky Lakes, goose hunting in certain areas of Husky Lakes and nearby dry lakes, and caribou hunting in the entire study area, but with concentrated use of the land between Tuktoyaktuk and Husky Lakes, and immediately around first and middle Husky Lakes. Berries are numerous on the tundra all over the study area, but berry-picking is generally limited to berry patches accessible by water. Therefore, berries are harvested all along the coast north and south of Tuktoyaktuk, in bays and up creeks, and along the shores of Husky Lakes, mainly in first and middle Husky Lakes, and at Nallok south of Thumb Island at the head of Liverpool Bay. Fuel wood to be burned at Husky Lakes is often carried from the communities (where it is collected from driftwood along the coast and delta shores); wood is also cut from the forests below the treeline in the Husky Lakes area – generally on the east side of first and middle Husky Lakes.

*“We people in Tuk, we want to keep our culture. Husky Lakes is like our garden, our farm. It's where we live off the land. We use it [Husky Lakes] just about year around. We're just about the only people who live on it year around. Sometimes our whole family goes up there.” (Interviewee, summer 2000)*

The seasonal distribution of activities today is similar to that of past harvests. Caribou are hunted in the falltime, when they are fat from summer grazing. Furbearers are trapped in the winter when their pelts are prime. Residents ice fish for trout when the

days get longer in the springtime, and hunt geese during the spring migration. Whale-hunting occurs in the summertime. Berries are harvested in the late summer and early fall. Although a lesser proportion of the diet and a small fraction of the income is derived from subsistence harvesting than in the past, these activities are still very important for the Inuvialuit. Harvesting is seen as a cultural activity, and necessary for the preservation of traditions.

*“The reason why we use Husky Lakes is traditional - we go fishing, hunting. We know both sides, the traditional and the modern. We taught our children both sides of the life. Some children are more in town and others are more like they want to be out on the land all the time. We use Husky Lakes to teach our children and grandchildren of this life. They love it, they really do. They learn this life and now the great grandchildren too are learning this life.” (Interviewee, fall 2000)*

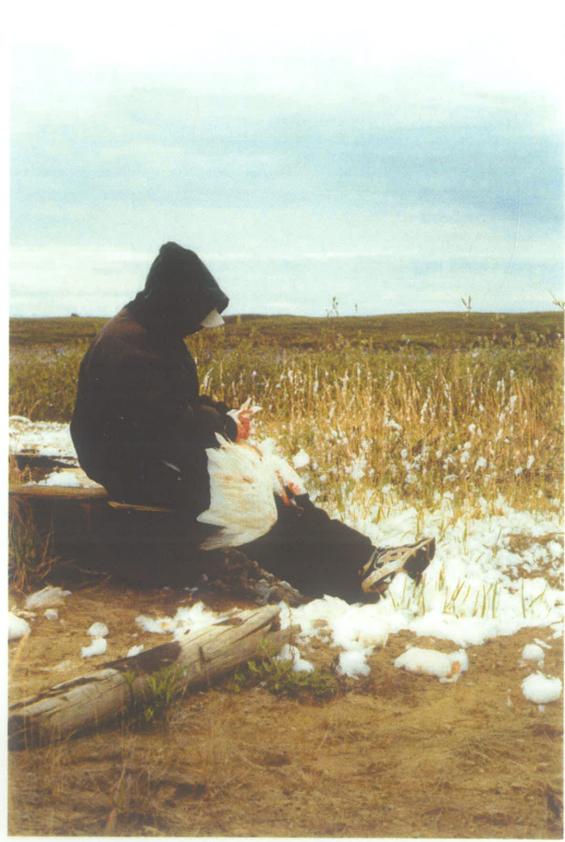
Some of the issues and concerns regarding land use in the Husky Lakes area which were raised by interviewees include vandalism, garbage and littering, meat wastage, maintenance of traditions, and resource conservation. Interviewees were nearly unanimous in expressing their love of the Husky Lakes area, and impressed upon me the necessity for preserving this land and water for the use of future generations. In many interviews participants discussed cabins at Husky Lakes; predominantly, they raised concerns about over crowding, prevalence of cabins over traditional tenting and camping, lack of stewardship, distribution of control, and ideologies of ownership. The underlying themes in all discussions of land use were the dynamic tension between traditional and modern lives and practices, the evolution of new social values, and the maintenance of cultural identity. The land and water of the Husky Lakes area are well-used. Fishing, hunting, trapping, berry-picking, and wood harvesting are activities which are widespread over the area; a large proportion of the community (and all interviewees of this study) participate in subsistence and recreational activities at Husky Lakes.



a) Field dressing caribou, near Husky Lakes in fall 2000.



b) Showing off nice lake trout, Dennis Creek, spring 2001.



c) Plucking geese near Tuk, summer 2000.

Figure 3: Subsistence harvesting activities in the Inuvialuit Settlement Region.

## CHAPTER 5: PARTICIPANTS' COMMENTS: DEVELOPMENT AND MANAGEMENT

### *Introduction to the Chapter*

The second section of the interview addressed questions of economic development and management of resources and land. Interviewees were asked specifically about oil and gas exploration and extraction, tourism, the Kuññek Development Corporation reindeer herd revitalisation project, and the proposed all-weather road between Inuvik and Tuktoyaktuk. Participants discussed the costs and benefits, or positive and negative impacts, of each type of development. Because the interviews were semi-directed, the questions were asked in slightly different terms in individual cases. The gist remained the same however; interviewees were asked, for example, "are you in favour of oil and gas exploration and development?" Or, "do you think it's a good idea, that it will be positive for the region, you, your family, this community?" Under each subject heading representing the four major types of economic development, interviewees' comments are quoted. The selection of responses is intended to give a feel for the spectrum of reactions encountered in interviews.

### *Oil and Gas*

Oil and gas exploration and extraction development was economically significant in the Western Arctic in the 1970's and 1980's. The interviews on which this report is based were done in 2000, just as oil and gas activity was starting to return to the region. The primary questions asked were: are you in favour of oil and gas exploration and development; do you think it's a good idea, that it will be positive for the region, you, your family, this community; what are the benefits you see and what concerns do you have about oil and gas exploration and extraction? Most people understood the questions to be pertaining to the Husky Lakes area. However, a few interviewees answered in a

more general sense for the Western Arctic region. Responses were predominantly in favour of oil and gas development, with about one third of the responses being yes (there should be oil and gas exploration), one third being a qualified yes (yes, but I have some concerns), and the other third being divided between no, qualified no, or no opinion. Below are some participant comments representing the essence of the five responses.

The most common response was “yes, there should be oil and gas development.” A representative comment from the “yes” response is:

*“I’m in favour of oil and gas exploration and development. I think it could return to the 1970’s level of activity – we could handle it. It’s all exploration right now, and that can be really restricted at this point. Once it goes to the production stage, it will be a different story. The way they do exploration is different now. It will bring business and employment for local people; if a person wants to work when oil and gas is here, they can get a job.”*

A qualified yes was the second-most common response. These interviewees had concerns about oil and gas exploration and extraction development, but concluded that the development would still be beneficial. Some qualifications to wholehearted endorsement of oil and gas development include:

*“We don’t worry too much about Husky Lakes because it’s a no-development area, including Liverpool Bay to the Baillie Islands. The oil companies aren’t allowed to have development.”*

*“The cumulative effects of all the developments is going to impact the animals out there. But we need development.”*

*“It’s okay as long as we can control what happens.”*

*“I don’t mind development, but they can’t go near Husky Lakes or on the east side of Husky Lakes.”*

*“Before they start the pipeline, they should do the highway. They shouldn’t extract any oil and gas resources until the highway is in place. We need better schools, better nursing stations, everything... transportation links, before extraction. The oil companies and federal government can pay for it.”*

Few interviewees said no to oil and gas exploration and extraction. However, for those not supportive of oil and gas development, the following is a representative response:

*“There should be no oil and gas development at Husky Lakes. There should be no seismic. Husky Lakes has to be a protected area. Even with the new high-tech equipment, we don’t know how it will affect us. You can still see the seismic from before. If industry goes up there, they will pollute our water. At the DEW-lines there’s so much pollution. If they start on Husky Lakes, what’s going to happen? The same thing!”*

Several interviewees responded with a qualified no; this perspective is characterised by the following responses:

*“Oil and gas development is going to cause problems, but we need the jobs.”*

*“It’s not a very good idea, but as long as we get to control it, and if we get compensation when they cause damage.”*

*“There should be no development in Husky Lakes, but it is okay if they stay away from Husky Lakes.”*

Finally, some interviewees preferred to neither endorse nor denounce oil and gas exploration and extraction activity. The “no opinion” response may have been more indicative of disempowerment than anything else:

*“I can’t stop it. IRC really wants it, so it will happen.”*

*“I don’t like this oil and gas development but it will come anyways; there’s nothing I can do to stop it.”*

## **Benefits**

After introducing the general theme of oil and gas development, interviewees were asked what they saw as the positive impacts of oil and gas development or what benefits they expected to see from exploration and extraction in the local area. There were some prevalent responses; job creation was most frequently mentioned, followed by “more money in the community”, royalties to the Inuvialuit governing bodies (IRC),

development of infrastructure locally, training for local people, and increased self-sufficiency (less dependence on government subsidies and handouts). Other benefits enumerated by interviewees included cheaper oil and gas and cheaper consumer goods locally, construction of highway and subsidiary roads, stimulation of other business, population growth, and compensation for wildlife loss (income to harvesters).

### **Costs**

Interviewees were also asked to identify any negative impacts of oil and gas development and what concerns they might have about oil and gas exploration and extraction in the Husky Lakes area. The primary concern was that industrial development would scare or disturb wildlife and affect hunting. Many interviewees also raised concerns that fish and wildlife would be killed during development activities. The third most common negative impact of oil and gas development identified by interviewees was that "oil companies come and then leave suddenly." Many people spoke of past activity (in the 1970's-1980's) in which development happened really fast, and then, when the community members were fully dependent upon the wage economy, the companies left and local economies collapsed. Major concerns raised by participants included: oil spills (chronic or catastrophic), too much money (people's misuse of money), aesthetics, and disrespect for wildlife. Other concerns were mentioned only once: the cumulative effects of all developments on wildlife, over-dependence on the wage economy, neglect of children because of both parents working, garbage or debris from camps polluting the environment, companies behaving badly towards the community, and companies not contributing to the local economy. These concerns were often supported by stories or anecdotes about past activity in the area (in the 1970-1980's, for example) or similar activity in other parts of the world.

## **Summary of Oil and Gas Responses**

The majority of interviewees felt that there should be oil and gas development in the Western Arctic. However there were significant concerns with possible negative impacts that might come from such development, especially from development in the Husky Lakes area. Interviewees brought up concerns with possible oil spills, habitat destruction, disturbance and destruction of wildlife, and development practices that show disrespect for wildlife and the environment. Many interviewees suggested that a negative impact of development is that industrial development arrives hard (or has in the past) and then leaves suddenly, just when the population is completely dependent upon the wage economy. There were concerns with social problems which might come with oil and gas development: increased alcoholism and drug use (as there will be more money in the community), neglect of children (when both parents are working), and loss of traditional lifestyle (as all adults are engaged in the wage economy).

Interviewees supported the return of oil and gas exploration and extraction because they felt that the positive impacts would outweigh the negative. Examples of the positive impacts expected include: there will be jobs and Tuk residents will no longer be dependent upon welfare; there will be more money around for necessities; industry will invest in infrastructure for the community; oil and gas revenues from royalties and access fees will pay money into the Community Corporations; the wealth created will be a benefit to community members. Despite the many concerns raised by members of the communities interviewed, the assessment was that the benefits would outweigh the negative impacts.

### ***Tourism***

Currently there is limited tourism at Husky Lakes. Only one commercial fishing lodge exists (Saunaktuk Lodge), and it is primarily operational in the summer for sports angling. Other tourism activity occurs when local residents take non-beneficiaries to

Husky Lakes to harvest fish. The level of this latter activity is not known exactly, but all residential lease-holders have the right to 30-person-days of commercial tourism as a stipulation in their leases.

Most interviewees felt that the current level of tourism activity is acceptable, although some did have concerns about the way the industry operates, and the distribution of benefits from tourism. A few people did feel that there should be less tourism than there is currently, and some interviewees did not support any tourism at all at Husky Lakes. Several participants were in favour of increased tourism and felt that tourism activity should be promoted at Husky Lakes. Below are the benefits and costs that participants identified as related to tourism at Husky Lakes. Some comments on acceptable levels of tourism activity include:

*“Right now, tourism is really controlled. It is well managed now. For commercial activity, there is only room for two tour operators up there at Husky Lakes.”*

*“There is enough tourism now.”*

*“I would really hate to see Husky Lakes be like at Airport Lake near Inuvik, with a cabin every 100 metres. You could have more activity though, at Husky Lakes. Could have maybe a half dozen tour operators. Operators would respect subsistence users and not impact them at all. Tourism wouldn't have an impact at all. I doubt if it would even equate to subsistence use.”*

### **Positive impacts**

Various positive impacts of tourism activity were identified. Interviewees talked about the jobs created by tourism, the income generated through arts and craft sales, and educational aspects of tourism. Comments from participants include:

*“More tourism is a good thing. Tuk is too lonely most of the time anyway. It will create employment. Tourism brings money to the north”.*

*“Tourism: as long as it's controlled, it's okay. It's not as bad as the oil companies.”*

*“Ecotourism really supports land and cultural activities. It provides people with the money to continue to do the things they want to do.”*

## **Negative impacts**

Interviewees also distinguished negative impacts of and concerns about tourism. Concerns included potential for over-harvesting, lack of respect for the land and people, interruption of and interference with traditional activities, and little distribution of wealth generated. Some remarks from interviewees are:

*“Local non-beneficiaries take out non-residents, and no one knows about it, no one checks it. They take over their limit on fish. There’s more and more people fishing, tourists galore; even if we manage well, there’s going to be problems.”*

*“In Husky Lakes, there should be no more tourism, sports fishing, or sport hunting. People go there in summer to sport fish, and local people have seen fish dragging a line, like angling line, from when it broke off the rod.”*

*“For tourism, I think we shouldn’t have any more. The last thing we need is tourists taking pictures of us at our cabins. A negative impact of tourism is that they interfere with us”.*

*“It would be great if they had no tourism up there. I don’t like [tour operation] but I can’t do anything about it. The tour operators make lots of money but it doesn’t help the community.”*

## **Comments Regarding Tourism**

Some other comments and concerns from interviewees are listed below. These observations and remarks were not directly condemning or promoting tourism, but are relevant in considering tourism development and assist in setting the context for participants’ views of tourism in the Husky Lakes area.

*“Other developers do everything according to environmental laws, and do everything to ensure that the environment is protected; whereas tourists are not out there to take care of what they do.”*

*"In BC, they put a road in a certain area and within ten years, all the wildlife was used up. All people should stay away from Husky Lakes. If you give people an inch, they'll take a mile. Tourism is good, but not the road. The road would promote "low-end" tourism".*

*"In terms of tourism, the bureaucracy is slow, cumbersome, and therefore expensive, so entrepreneurial efforts are stifled because of the slow process. This has turned off lots of small entrepreneurs. On a small scale, it's hard to get around the system. For example, there was a meeting of the Hamlet Council and they passed a motion to support tourism, and then a month later, the HTC turned it over, reversed the decision."*

*"Oil and gas development is better than tourism, because tourists are too nosy. They're pests. Every move you make, they question you. You, you're just doing your traditional lifestyle."*

### **Summary of Responses Regarding Tourism Development**

Most interviewees felt that the current level of tourism activity is acceptable, although some did have concerns about the way the industry operates, or the distribution of benefits. A few people interviewed thought that there should be less (even no) tourism in and around Husky Lakes. They felt that the tourists didn't respect the land or the Inuvialuit subsistence hunters and fishers, and that there are insufficient controls on access to Husky Lakes for the general (non-Inuvialuit) public as well as insufficient monitoring of tourism operators. Some specific concerns were: anglers who either did not have licences or did not respect the bag limits; damage to fish when anglers' lines break; and beneficiaries' traditional activities becoming "spectator sports" to tourists who fail to recognise their need for privacy.

Most interviewees felt that tourism does benefit the community. Some of the positive impacts of tourism include economic development and therefore more money in the community, jobs for local residents, and an enhanced reputation for the region. Some interviewees felt that tourists are more sensitive to the land than some of the local people, and at the very least that at least one can control the tourists. A few interviewees

observed that it is nice to meet the tourists, nice to have new people visit the community, and that the tourists seemed to like it in Tuk and this was seen as a benefit.

Tourism was less of a concern with most interviewees than some other issues such as oil and gas development and the all-weather road. A common feeling was that right now tourism in Husky Lakes is at an acceptable level; there are only two tour operators licensed<sup>6</sup> and one is inactive at the present time. Many people felt that the type of tourism that is presently occurring does not have major environmental impacts. However, many people expressed concern about an influx of tourists after an all-weather road would be built. The feeling seemed to be that a large increase in the volume of tourism activity could negatively impact both the land and the Inuvialuit people.

### ***Reindeer***

Most people did not seem particularly excited (either way) about the reindeer herd development. About equal numbers were for, against, or had no opinion about the development. Many of the interviewees did not answer the question. A few people felt strongly that the reindeer should not be moved west to Richard's Island, and a few felt strongly that they should be. It seemed that individuals who had had a connection with the reindeer herd (worked with the herd themselves, or had father or uncles who had) were in favour of the reindeer being moved south. The sense was that the reindeer had been in that area historically (thirty to seventy years ago), and therefore they couldn't really do any harm. Those who were against the reindeer herd development tended to think that the reindeer would degrade the habitat south of Tuk, and therefore the caribou would be forced to change their migration pattern. This would negatively impact subsistence hunters in Tuktoyaktuk, since they would have to go farther to get meat for

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<sup>6</sup> Several interviewees noted that there were two operators licensed for tourism at Husky Lakes. In fact, according to the Tuk Hunters and Trappers Committee, there is only one current licence, held by the Grubens, for Saunaktuk Lodge.

their families. A substantial portion of the interviewees had no opinion on the topic; they either felt that they did not know enough to be able to predict possible impacts, or they did not think there would be either positive or negative impacts.

Some comments regarding the reindeer herd development and revitalisation are:

*"I'm against the reindeer herd development because of impacts on other animals that rely on the range, especially caribou. The reindeer herd is getting fewer and fewer now, and it is not well-managed."*

*"I'm in favour of the reindeer herd development. They will not have an effect on anything. They will intermingle with caribou, but caribou go wherever they want anyways, whether there are reindeer there or not. If the numbers of reindeer get up to a certain point, it may create a problem, so they might need to control the numbers of reindeer."*

*"For the reindeer, the people in Tuktoyaktuk have never benefited from it. As I see it, the caribou don't go in that area where the reindeer are now, because there's nothing to eat there anymore, nowhere to graze. The herd is already interfering with the hunting of caribou."*

*"If the reindeer were forced to migrate, it would be okay. There wouldn't be too much pressure on the feed if they moved the reindeer around."*

*"I'm against the reindeer herd development. The herd and caribou are competing for land right now. They could co-exist, but the herd has to be managed a lot better, with better herding. There are times and seasons for caribou and reindeer. You don't want the reindeer coming when the caribou are using the land. The reindeer don't know the land. Just look at the area where they have been for the last few years and see the damage they have done. So they really have to look closely at this issue, because the reindeer are competing with the caribou for the same resources."*

*"We went through a lot, socially and economically, just to fight for the right to hunt caribou wherever we see them. I don't want the reindeer herd development to compromise that."*

### **Summary of Reindeer Herd Development Comments**

The reindeer herd development (Kuñnek Resource Development Corporation proposal) did not raise great concerns for most interviewees. Those participants who had

concerns were generally very vehement against moving the herd south. An equal number to the opponents of the development were for the reindeer herd redevelopment. A substantial proportion of the interviewees had no opinion. The supporters of the reindeer herd development generally felt that the reindeer herd, having been in the area in earlier times, would not negatively impact the land or people. The opponents felt that the reindeer have been mismanaged in the past and they are currently negatively impacting the land on the Tuk peninsula, therefore the herd should not be moved south into the main caribou hunting area for Tuktoyaktuk people. When I returned for my verification visit, the Kuñnek proposal had been approved by the Environmental Impact Review Board, and therefore the comments I received will not impact any decision-making on the subject. However, these observations may inform future decision-making and management choices.

### ***All-Weather Road Between Inuvik and Tuktoyaktuk***

There has been a proposal for over twenty-five years to build an all-weather road between Inuvik and Tuktoyaktuk. In the past, this proposal has met with a great deal of resistance from residents of Tuktoyaktuk. I asked interviewees whether they felt there should be an all-weather road and what they saw as the benefits and possible drawbacks to the road. The responses were generally emphatic – either in favour of or against the road. Almost a half of the interviewees were supportive of an all-weather road between Inuvik and Tuktoyaktuk; twenty percent approved of the road, but had concerns (therefore a “qualified yes” response). Another fifth of the participants opposed the construction of an all-weather road, either categorically dissenting, or qualifying their opposition with positive expectations. Examples of the responses are listed below.

Almost half of the participants were in favour of the construction of an all-weather road between Inuvik and Tuk. Typical responses described the benefits of and expressed the need for a year-around highway.

*"I'm in favour of building the road. Like any other road, it could have an effect on the Lake, with traffic having easier access to the area throughout the year. It will bring business and work; training would be involved for local people. As far as building the road, it's easy – the methods are there – and it's so controlled by DFO that it's going to be good. It might have some positive impacts for the economy."*

*"The road overall will be a good thing. It will create a lot of tourism. Probably it will create a lot of work. The oil companies will really use that road, now that they are coming back. I always wanted to see a road, and wondered if I'd see it in my time. We'll be picking berries on that road anyways, for sure! I expected they would be by the East Channel, for the tourists."*

*"The road will have no negative impacts. The positive impacts are lots of work. For example, park wardens, patrol officers, roadwork. It will create more work. There is no problem with where the road goes, as long as it's monitored, for example, a no-hunting corridor. As long as they have the right workers out (i.e. local workers) – maybe the TCC should hire the monitors."*

*"They should have made the road long ago. Prices will go down. There's no need to fly that close, only twenty minutes to Inuvik. They should have a road. You'll see lots of cabins, lots of hunting along that route. The animals will start travelling. I don't mind the road."*

*"With the road it will be cheaper – you can go shopping in other communities. When the winter road is closed, you spend more money than when it is open. In Inuvik, you get double or triple what you get here in Tuk for your money."*

Other interviewees expressed concerns with the construction of an all-weather road, although they were supportive of the development in principle. Some characteristic responses are listed below.

*"It's okay as long as they don't plug up the creeks, as long as the creeks stay open. That's where the fish travel by."*

*"It would be good to have a meeting with the people at least, when they are deciding about the road. As long as they let the communities know, let them know what is happening on their land."*

*"You can't say that you can't use the road for tourists to get to Husky Lakes. They are already up there. You can regulate it, and say that the road can only be used for transportation, but it won't keep the tourists away. I wouldn't mind if they put that road farther away from Husky Lakes."*

*“The road should come, but it has to be at least ten to fifteen kilometres from Husky Lakes, so they won’t have access with trucks and trailer. My kids, grandkids, are growing up and I’d like them to know how it was.”*

Some interviewees did not want to see an all-weather road constructed. Concerns centred around negative impacts to Husky Lakes (especially pertaining to access), although other issues were raised as well. Although three different routes have been considered, the preferred route (most economically feasible and least complicated from an engineering point of view) approaches the west coast of Husky Lakes at three points.

*“I don’t know how they’ll do the road. Because it’s our home, you know, in the spring. We deserve to go out on the land without disturbance from the road. One or two miles is too close! They’ll be trolling from their trucks! The caribou migrate along the west side of Husky Lakes, in winter, springtime. Lots of elders say it’s good land for harvesting. There will be big change if they build that road. The caribou will cross the road. There will be more hunting, more illegal hunting, by non-aboriginals. It will be better if they build it by the East Channel.”*

*“This route by Husky Lakes will bother the geese hunters and it will scare off the geese. Pollution is going to be a bad thing. Smog will be here that we never had before; air will be more dirty. There will be more accidents. Mostly people will go to Inuvik for booze and then they will come back and have an accident.”*

*“With the road, the land will be contaminated more because of the fumes from the trucks. There’ll be no more birds. I don’t want the road because it goes too close to Husky Lakes. We’ll have no more caribou because of the road. There’ll be no more Rough Hills – they’ll be Flat Hills, because they’ll take away all the gravel to build that road. If they build the road to Inuvik, you really will see the impacts forever – it won’t disappear after a while. I don’t mind the part that goes across the land, but I don’t like the stretch near Husky Lakes. There will be more poaching and illegal hunting and fishing if that road goes through.”*

*“Even if the road goes the other way, I don’t support it. There are no positive benefits. It’s hard to say what it would lead to. When you’re looking at building a road... the [operations and maintenance] of an all-weather road compared to ice road and barging... if it were economically viable, it would be okay to start looking at the desirability of it. But even if economically viable, it may not be desirable. It’s a fragile ecosystem – you notice impacts quickly and then impacts do last for a long time.”*

Several interviewees expressed opposition to the road, but qualified their opposition by concentrating on the benefits or positive impacts of an all-weather road. Two responses are below.

*"I have always been opposed to the road, since a long time ago. For tourists, it's special to come to Tuk – they go up to Inuvik by road or whatever, then fly to Tuk. It's so beautiful. It won't be much cheaper with a road than it has been flying, because with package tours, the flight is already in the cost. With or without a road, it won't make a difference for freight. People bring groceries now from Inuvik on the ice road; they get stuff in on the barge. By the time you drive to Inuvik and get stuff and drive back, it will just about cost the same amount, because of gas and everything. The road will take away Tuk's remoteness, the thing that makes it special. But for the younger people, the road would be better, because there's always some jobs available. A road just makes opportunities."*

*"It's already marked out. It will happen sooner or later anyways. Money talks. They won't listen to us. In the beginning, it might be good; they might listen. But after, they don't even care. I don't know why, but they've always managed to talk about the positive rather than the negative with this road."*

Finally, a few interviewees did not want to express support or opposition to the road. These participants felt that the road would have positive and negative impacts, and did not feel a need choose one option or the other.

*"I'm not for or against the road. I don't think the road will happen anyways, because they would have to compensate the Inuvialuit for lands lost; also, because of priorities, the road won't be build until after the Mackenzie Highway. I'm concerned about the road, though, because animals are hesitant to cross "lines", and there will be more pressure on animals from harvesters. Salt attracts animals to the road, and harvesting will put pressure on the animals."*

*"It will be a big change to the lifestyle around. We won't have the old traditional lifestyle anymore; already, it's changing. The economy will rise; population and employment will increase. There are advantages to travel. Services will become more available to the community. The negative impacts are the advantages people will take to travel to Husky Lakes cabins. There'll be more caribou meat wastage. It could happen: it's so easy to travel. People could get to the animals that cross by the road."*

## **Positive Impacts of an All-weather Road between Inuvik and Tuktoyaktuk**

Overwhelmingly, people felt that the major benefits of an all-weather road between Inuvik and Tuktoyaktuk would be cheaper goods, access, business opportunities, and job creation. Regarding lower prices for goods, interviewees were primarily concerned with groceries, but also mentioned cheaper freight and travel once the road is in place. Access was the second dominant benefit anticipated by interviewees. People talked about the advantages of easier travel to the land between Inuvik and Tuktoyaktuk, especially Husky Lakes, access to Inuvik and points south, decrease in isolation, the benefits to education of easier access, better shopping, and increased immigration to Tuktoyaktuk. One person also brought up the point that when one is travelling up to Tuktoyaktuk and you drive up, then you're stuck there waiting for an airplane, but if there were a road, you could just keep driving.

People felt that the road would generate business opportunities; interviewees mentioned the tourism and oil and gas industries and felt that a road would make more services available to the people of Tuktoyaktuk. Job creation was seen as a major benefit of an all-weather road. One person also mentioned that these jobs would also mean training for Tuk residents. Recreation benefits of a road included more cabins and sightseeing. Health and safety came up as well; people felt that an all-weather road would be an important positive step for the health of Tuk residents, as weather can prevent medivac planes from travelling to Tuktoyaktuk for days, whereas a road would allow individuals to be transferred to Inuvik more easily. There were some nebulous benefits raised by interviewees: an all-weather road will open up the area and make peoples lives easier. Two interviewees observed that some people in Tuk are scared to fly because of an accident a few years previously, and a road would make it possible for those people to travel. One person observed that there is no need to fly when Inuvik is so close. Only two people felt that there would be no benefits to an all-weather road. One person said he didn't know whether there would be any benefits.

## Negative Impacts of an All-weather Road

Concerns about the all-weather road fall into three main categories: harm to the people or community, over-harvesting and illegal hunting or fishing, and damage to the land and wildlife. Many people raised concerns about the social impacts of the road. Interviewees saw possible consequences of an all-weather road between Inuvik and Tuk to include increased imports of drugs and alcohol to the community (thus more alcohol-related social ills), more common and more serious vehicular accidents (thus more deaths), and the accelerating change to the way of life. One interviewee said,

*“It will be so easy to travel, it will be a big change to the lifestyle around here. We won't have the old traditional lifestyle anymore. Already, it's changing.”*

Overharvesting and an increase in poaching were also major concerns for many interviewees. People felt that a road would make access to the large land base between Inuvik and Tuktoyaktuk, and especially Husky Lakes, and this would mean that more people would chose this area for hunting and fishing. Of particular concern are aboriginal hunters, since they do not have to obtain licenses and there is no required monitoring or control of hunting or fishing harvest. Officially, anyone who hunts or fishes on Inuvialuit land must obtain approval from one of the Hunters and Trappers Committees before harvesting. However, many interviewees felt that this if often not done, and there are already large numbers of harvesters making use of Husky Lakes and the surrounding area. Many people suggested that this impact could be mitigated my seriously increasing the monitoring and enforcement of existing regulations.

A third category of negative impacts anticipated by the construction of an all-weather road between Inuvik and Tuk was damage to the environment. Specific concerns included the destruction of fish habitat by “plugging up creeks”; contamination of the air because of fumes from internal combustion engines, road kill, and increased meat wastage as hunting becomes easier because accessibility is greater. Some people were concerned that a road might impact the migration routes of caribou and geese. Finally,

some interviewees talked about Tuk's "specialness" and suggested that a road, by decreasing remoteness, would take away the character and make the town "just like other northern towns at the end of the road".

### **Summary of Comments Relating to the Proposed All-Weather Road**

While most interviewees are in favour of an all-weather road between Inuvik and Tuktoyaktuk, there were major concerns with possible negative impacts that might come from such development. The benefits of the road were seen to be cheaper goods (groceries, freight, and travel), increased access and decreased isolation (including access to education and shopping, Husky Lakes, Inuvik and points south), business opportunities, job creation, and health and safety (medivacing, search and rescue). Interviewees saw the road as an opportunity to improve life in their community, raising the standard of living, and creating opportunities. The costs or negative impacts of the road were a major concern to many people, however. Interviewees talked about social degradation (escalation in alcohol and drug imports and use, accidents), poaching and overharvesting, and environmental degradation (during construction of the highway and in operation of the road). Despite the numerous and vehement concerns raised by many interviewees, a majority of the people I interviewed in Tuktoyaktuk and Inuvik are in favour of the construction of an all-weather road between Inuvik and Tuk.

### ***Management***

Management was not a major concern for most interviewees, perhaps because the question I asked was too vague, perhaps because they perceived no shortcomings in the status quo. Of those who expressed opinions on management, general comments suggested that the current management regime was fine, that there should be more co-operation and communication, or that there should be increased public participation. One specific concern raised by several people was the ongoing disagreement between the communities of Tuktoyaktuk and Inuvik regarding participation in the management of

Husky Lakes. Everyone I spoke to felt that the land is important to the Inuvialuit. Repeatedly I heard about how special Husky Lakes is, what a beautiful place, how important the area is to the survival of the Inuvialuit. One interviewee said,

*“People have to make that choice – what is important to you? Resources? Money? There are people here who have their interest in the land, right here. But today, you are seeing people in Tuktoyaktuk who grew up with store foods. The elders are the people who know. The infrastructure is there, but are the people ready to meet that demand, fill those duties? What would satisfy me is seeing someone sitting in those positions who has proven themselves. When the going gets really tough, then the real leaders will come out.”*

### **Inuvik-Tuktoyaktuk Sharing of Decision-Making**

A position taken by a number of interviewees from Tuktoyaktuk was that Inuvik should not be involved in the management of Husky Lakes, since Husky Lakes is on Tuk private lands and it is primarily Tuk residents who use Husky Lakes. Some interviewees felt very strongly on this subject. During the verification visit, in a meeting with the Inuvialuit Game Council, one member pointed out that, “you should never underestimate the importance of Husky Lakes to Inuvik people” while another explained that the Inuvialuit private lands in the Inuvialuit Final Agreement were meant for all Inuvialuit, not just for the residents of the community to which the lands are designated. An interviewee explained:

*“One beneficiary’s use of land for recreation and subsistence is equal to or the same as another beneficiary. I always end up stressing in meetings that the land does not just belong to each community, but to everyone together. They should have just made all private lands the same colour on the maps. I don’t have any more rights than any other Inuvialuit.”*

The feeling that Inuvik should not be involved in Husky Lakes management came primarily from Tuktoyaktuk side. Many Tuk residents were passionate on the topic, and explained their reasoning on two fronts. First, Tuk “gave up” the right to trap and hunt in the Delta many years ago, and this was seen as fair exchange for exclusive use of Husky Lakes. Second, Husky Lakes is seen almost as a reward for living in Tuktoyaktuk –

Inuvik has many advantages, including shopping, road to the south, government and medical services, recreational facilities. Tuk is isolated and can be a challenging place to live. Husky Lakes is the compensation: it is beautiful and has bountiful resources; Husky Lakes is a place where families and friends can spend time in positive and healthful activity. Interviewees said,

*“We see this as Tuk’s hunting and trapping area. Tuk should have most of the say in managing that land. The reason we feel like that is because the boundaries were set (quotas, trapping areas) to manage the wildlife and Tuk gave up access to the Delta. You can only belong to one HTC. So Tuktoyaktuk HTC members should have exclusive hunting and trapping rights. We do not mind managing our own areas for our benefit.”*

*“Inuvik won’t let Tuk people even cut wood in their area or anything. If anyone does, they [Inuvik] start writing letters and complaining and everything. Tuk’s area will shrink if they start letting people in there and Tuk won’t have any say. I’m not concerned with residential permits, but just commercial ones.”*

*“You see, there used to be no one from Inuvik at Husky Lakes until recently. Now [people from Inuvik] are even asking for bear tags. It’s so crowded, it’s hard to get around there without bumping into anybody. Some people are against even having the Inuvik HTC involved in the management. That’s how it is now and there’s not much you can do.”*

*“The Husky Lakes Management Board and the communities – both Inuvik and Tuktoyaktuk, because they both go there – should be involved.”*

### **Extent of a Husky Lakes Management Plan**

The Department of Fisheries and Oceans and Inuvialuit Land Administration were both interested in finding out from community members which specific places in Husky Lakes were of high priority for a management plan and whether there were identifiable zones, which could be used to guide land use and resource allocation decisions. Most interviewees explained that they could not delineate particular areas of Husky Lakes for special management, because *all* of the area is important; it is *all* sensitive; and it should *all* be managed “specially.” Comment from interviewees include:

*“The whole Husky Lakes is sensitive, if there is activity that is going to take place. A Husky Lakes Plan should be for the whole area – don’t just concentrate on one small area at first. [...] Lots of things are well-regulated now (like oil and gas). They used to say there weren’t enough studies in the area to warrant decisions. Right now, there is no plan, no terms of reference, nothing. So it is better to have something to start with. This [Husky Lakes Study] will just get some ideas, something to look at.”*

*“For special management areas - maybe the Rough Hills and Tootsi Bay. Mainly people from Inuvik and Tuk should be able to get together and have a section of Husky Lakes that should be taken care of. Even around Five Hundred Lake there's lots of people that go hunting in there. For the advisory committee, the communities should be informed too, with what's happening. People should agree on what's going on. It's important to show people in the community what's going on.”*

*“It’s not just us that uses the area – it’s the other animals too. You should include the whole area. There’s foxes and caribou and wolves and all that. They move around here and there.”*

## **Participation in Husky Lakes Management**

To clarify involvement in managing Husky Lakes, I asked interviewees who they thought should manage Husky Lakes, who should be included, or whether a new planning body ought to be set up. Most interviewees felt that the current management structure was sufficiently comprehensive and perhaps too complicated, but suggested that the organisations already in place take on more responsibilities and that the various decision-making and advisory bodies could work together more effectively to clarify their roles and reduce duplication. Most interviewees said that the organisations which most represented their interests were the more local bodies, for example, the Hunters and Trappers Committee was more likely to be named than the Game Council; the Community Corporation was more likely to be named than the Inuvialuit Regional Corporation. Participants also noted that the general public must also be involved in decision-making and visioning, and suggested that public meetings meet that need. Interviewees said,

*"The community should be involved in management, for example the Husky Lakes Management Committee. There should be public meetings with the community if anything is going to happen. The Husky Lakes Management Committee should hold community meetings."*

*"The HTC, TCC, and Hamlet - these three main boards have a lot of say in management. We have our land claims, and within our land claims we have a say: who should hunt, who should come and work in our lands. We don't want Inuvik to have equal vote in managing Husky Lakes. We don't mind if they come up to fish or hunt sometimes. But we don't want them to run things on Husky Lakes."*

*"You never see all those people, the white and Inuvialuit people that make regulations. You never see them travelling around. How can they make these decisions? They don't know anything."*

*"The Tuk Community Conservation Plan, because it was made by the people, the ILA should really seriously consider what it says. Husky Lakes should be managed by the Inuvialuit themselves, i.e. the Inuvialuit groups that have a vested interest in the area: the ILA, THTC, TCC, Elders Committee. These groups should be involved in making policy, rules, enforcement, everything. Inuvik should not be involved except in an advisory role." (Tuktoyaktuk resident)*

*"I don't like to be judgmental, but it would be nice for people in the north to have a say anyhow. It would be nice if they control development from the region itself instead of from the Ottawa office, where they never did see [Husky Lakes] themselves in their lives."*

*"TCC does the business side; HTC takes care of the wildlife aspects. There's a hole somehow here though, in the current management structures. It goes right to the top of our leadership. You know you want everybody to work together, but in these small communities, people get sectioned off. They have to work together. TCC shouldn't work against the HTC. IRC should be working for the Game Council, not fighting against."*

*"I feel that the boards and everything represent my interests, but they could do a little more, you know. They should be coming to the community and getting input from the people. They do this now, but should do more. People should be more involved, too, more willing to be interviewed, for example."*

### ***Summary of Development and Management Results:***

Questions about development and management appeared to be more difficult for interviewees to answer than questions about land use. Perhaps it is that development and management are much more complex, and thus require more reflection. I found that a few people preferred not to discuss these issues in depth; others really examined some of the deeper context and history. These variations in responses may be representative of the range of opinions in the general population. When I returned to Tuktoyaktuk and Inuvik to verify the results, participants told me that the results were “correct”, that I had captured the issues and points of view regarding development and management in the Husky Lakes area.

While some interviewees were very specific about the opportunities for and concerns about development, others had more general observations of past experience and hypothesised detrimental and beneficial impacts based on that knowledge. Overall, there were certain themes that emerged from interviews. Participants saw a need for economic development. The principal benefits mentioned were job creation, infusion of capital into communities, training, infrastructure development, lowered cost of living, access (to the south), stimulation of the local economy, and health and safety advantages.

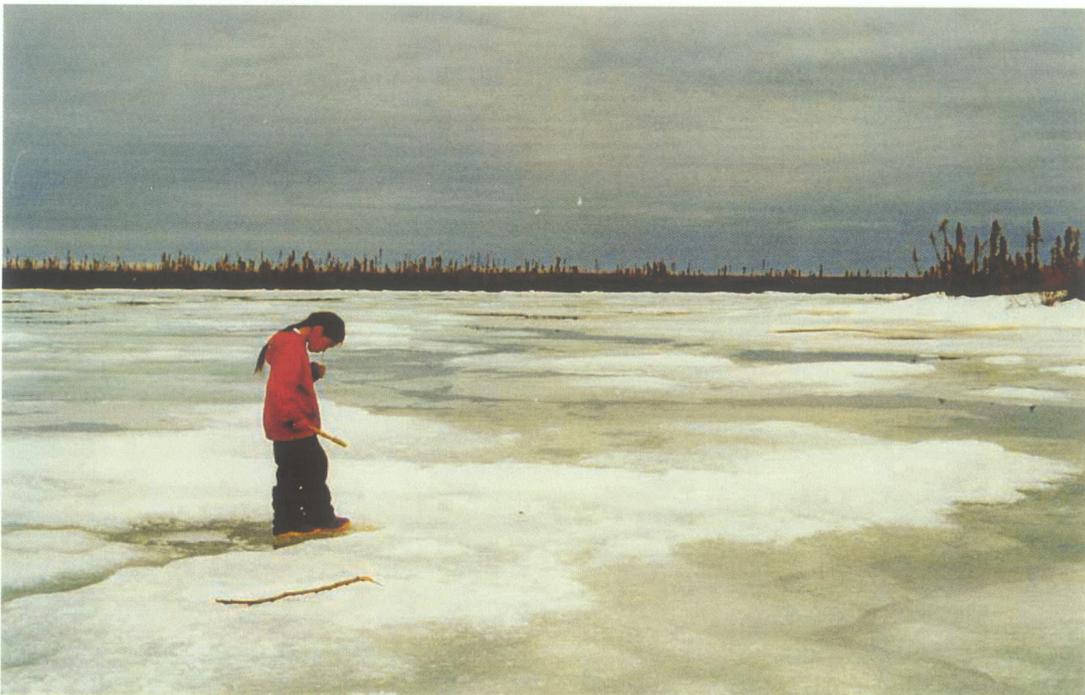
Questions about management also raised a range of issues. Major concerns included the distribution of power between the various decision-making and advisory bodies, the accountability of elected and appointed officials to their constituents, lack of communication and co-operation between the various bodies, and the ongoing disagreement between the communities of Tuktoyaktuk and Inuvik regarding participation in the management of Husky Lakes. These concerns are noteworthy and will not be solved quickly or independently. A discussion of ways to approach the solution of or addressing of issues and concerns raised will follow in chapter six.



a) Cabin at Husky Lakes



b) Mock interview in Tuktoyaktuk



c) Jigging for trout at Dennis Creek



d) Presentation to the Tuk HTC



e) Crossing Husky Lakes by Diamond Point

Figure 4: Scenes from the Husky Lakes integrated management research project

## CHAPTER 6: DISCUSSION OF THE RESULTS

### *Introduction and Context*

*"Husky Lakes is beautiful, falltime, summertime. Even in the springtime, everything is covered with snow. As long as you go to Husky Lake, you feel at home. You know, nice and quiet, peaceful. You can hear the loons. Beautiful. There's lots of mosquitoes now in summertime. But you know, it's really hard to go home to Tuk when you're out at Husky Lake. It's so beautiful." (Interviewee)*

This study was initiated within the context of growing political autonomy for the Inuvialuit, a growing population and a rapidly changing society. At the start of the research, there was a depressed economy in the Western Arctic. However in the winter of 2000, a resurgence of oil and gas exploration activity in the area resulted in an economic upturn. The last century and a half have been a time of massive change for the people of the Western Arctic. The economy shifted from a completely subsistence-based, hunting and gathering tradition to a mixed economy in the whaling (1870's-1910's) and trapping (1920's-1950's) periods, during which subsistence harvesting was primary but supplemented by commercial activity, to today's primarily commodity-based wage economy, in which subsistence harvesting is ancillary.

The movement for political independence had been gaining momentum since the mid-1970's. In 1984, the Inuvialuit signed a comprehensive land claims agreement with the federal government, which set up co-management and Inuvialuit decision-making, advisory, and management bodies and structures. While the implementation of the Inuvialuit Final Agreement has not been without obstacles, there has been significant development of political autonomy as well as experience and expertise in the Inuvialuit people.

Meanwhile, the economic and political turbulence has had an impact on the social and cultural health of the Western Arctic, and especially the community of Tuktoyaktuk. Gambling and alcohol addictions are common. The level of education attained in the

community is often insufficient to provide interesting and challenging employment opportunities, and undermines individuals' career aspirations. The young people tend to stay in jobs without potential or leave to find better opportunities elsewhere. Some interviewees expressed concern that high dependence on social assistance creates a feeling of disempowerment and depression. Participants pointed to specific causes of these problems, such as the oil boom in the 1960's or the concentration of people in settlements. One interviewee said,

*"Sometimes that development does a lot of good for some people. But other people they don't know what to do with all that money so fast. It's hard on the people when the development comes really fast and then the companies just leave suddenly." (Interviewee)*

However, I think that the Royal Commission on Aboriginal People (RCAP) more accurately concluded that the challenges confronting indigenous Canadians are the result of a range of policies and actions since European contact. RCAP describes some of the pressures: "[...] historical Aboriginal nations were undermined by disease, relocations and the full array of assimilationist government policies" (RCAP, 1996: Chapter 2). Further, "compulsory education, economic adjustment programs, social and political control by federal agents [...] combined with missionary efforts to civilise and convert Indigenous people, tore wide holes in Aboriginal cultures, autonomy and feelings of self-worth" (RCAP, 1996: Chapter 1).

The Inuvialuit are a people in transition, still maintaining aspects of the old way of life in the hunting, trapping, fishing, and berry-picking traditions. At the same time, the people of the Western Arctic participate in the wage economy and the western education system. While the Inuvialuit struggle to preserve their language, customs, practices, and beliefs, they must contend with the influences of satellite television, patterns of alcohol abuse and gambling, and the breakdown of the extended family unit. In the last two hundred years, the Inuvialuit have seen massive changes in their society.

## *Environment, Society, and Economy*

The three legs of sustainable development are the environment, social/cultural, and the economy. All three aspects arose in interviews, even though I did not specifically ask about them, at least not in so many words. This echoes the more holistic traditions of knowing and seeing of the Inuvialuit. The Inuvialuit traditionally did not separate themselves from the environment or their spiritual beliefs from harvesting practices. Participants in this study talked about wanting their grandchildren to have the opportunity to live like their ancestors, travelling on the land, hunting, fishing, and berry-picking. Interviewees said that they wanted their children to have choices:

*“We want opportunities for our young people, so they can work here and not have to move to Inuvik or outside. Development is good because it creates jobs. But we have to be careful about Husky Lakes too because we need to get food from the land: we really rely on the fish and caribou and berries we harvest. Otherwise, store food is really expensive to eat. Our elders showed us how to take care of the land and how to use it. When we go out to Husky Lakes, we spend time with our families; it is important for our community.” (Participant at verification visit)*

The interviewees talked a lot about “the land”. The Inuvialuit still depend on the environment to provide a significant proportion of their diet, and many people felt that the maintenance of a healthy environment should be of primary importance in decision-making. Some of the threats to the land and wildlife that were identified by interviewees include poor harvesting habits and loss of traditional skills, lack of enforcement of current conservation regulations, development practices (oil and gas exploration and extraction, road construction between Inuvik and Tuktoyaktuk), and pollution. The importance of the “land” to the Inuvialuit was reiterated in almost every interview. When the people of the Western Arctic talk of the land, they use the term much as Aldo Leopold did when describing his land ethic, including soils, waters, plants, and animals, in the “community.” Leopold said, “a land ethic, of course, cannot prevent the alternation, management, and use of these ‘resources,’ but it does affirm their right to continued existence, and, at least in spots, their continued existence in a natural state”

(Leopold, 1948: 204). The Inuvialuit recognise intrinsic value in the animals, plants, earth, and water and see themselves in the context of their relationships with these “beings”. However, this attitude is shifting over time. For the older people with whom I spoke, the connection between the people and the land is well known and understood, and central to their reality. The younger people, while maintaining the conviction that the environment is essential to the well-being of the Inuvialuit, tended not to feel as strongly the relatedness between the land and the people. Younger participants viewed the significance of the land in terms of procurement of country foods and passing on skills, i.e. from a functional or utilitarian standpoint. For many elders, it was felt that the conservation of the land was essential for healthy people, or for a healthy society.

*“Who should be involved in making a plan? They should have people who are there and aware of what's going on, to plan for the future - they don't have to be people in authority, all they have to be is knowledgeable and know where they are going (have vision). People have to make that choice - what is important to you? Resources? Money? There are people who have their interest right there, on the land. But right now, you are seeing people in Tuktoyaktuk who grew up with store foods. The elders are the people that the IRC and Game Council should go out and pull together. What would satisfy me is seeing in those positions someone who has proven himself. When the going gets really tough, then the real leaders will come out.” (Interviewee, summer 2000)*

There was a notable difference between the points of view expressed by male and female participants. Men seemed to distinguish issues and solutions in discrete components, while women focused more on connections and overviews. In many of the interviews, I observed that women tended to have a more holistic view of the issues and opportunities in development, management, and land use. Women tended to see the connections between the questions asked and conclude with solutions that were applicable to various aspects of different broad topics and issues. This gender-based difference came as a surprise to me, more so because I had not recognised it in myself until it was pointed out to me in a meeting with the Fisheries Joint Management Committee. The tendency of women to see more holistically has been extensively described (including Belenky et al., 1986; Gilligan, 1982; Gaard, 1993; Noddings, 1984). Noddings (1984) differentiates between male and female perspectives, characterising

males as having a linear view, while women look at problems and solutions holistically. Gaard (1993:2) describes women as having “a mode of thinking that is contextual and narrative rather than formal and abstract.” Interestingly, in this study, the gender “gap” was less evident in elders than in younger participants, meaning that the holistic point of view was more prevalent in both older men and older women.

The recognition of very different ways of perceiving issues and concerns between men and women raises two interesting questions relating to management and decision-making. How does the predominance of men’s participation on decision-making bodies affect the types of decisions being made? And might better or more comprehensive decisions be made through the increased involvement of women?

As seen in the discussion of the environment above, many participants saw a critical connection between the well-being of the land and the well-being of the people. Without using terms of sustainability or wholism, many interviewees seemed to feel strongly that the primary goal of managing Husky Lakes (as well as the goal of an individual’s life) is to work towards developing a healthy society. Perceptions of the means for accomplishing the objective were neither as clear nor as unanimous as the recognition of its importance. Some aspects of improving the health of the community identified by participants were: job creation, training for local people, decreasing alcohol consumption and gambling, increasing co-operation and communication between decision-making bodies, and involving a greater proportion of the population in the various boards and committees. The obstacles in the development of a healthy community were seen as the inertia of the current situation: gambling and drinking, fragmented families, loss of the language and culture, concentration of power in a few people, disintegration of traditions. The origins of these problems are many. The history of Euro-Canadian contact with the aboriginal people of the Western Arctic has been one of interference and obstruction. The introduction of consumptive society, imposition of religion and western-based educational systems, and establishment of diseases that decimated the population at the turn of the century, were all significant root causes of

contemporary social troubles. Furthermore, the rate of change has been so fast that the people have had to adapt very quickly to a totally different way of living.

*“People from the fifties to now, they had to grow in a changing society. From those years, we’ve come a long way, we’ve really adjusted. Now when development is coming on again, there are people [on boards, committees, and in jobs] with more confidence, people who deserve to be making decisions.”*  
(Interviewee, summer 2000)

The well-being of the community continues to be a major concern for most Inuvialuit, and many issues of management, development, and land use can be examined in the context of how the larger society or community would best benefit.

The economy is the third leg of sustainable development. Many interviewees talked about society and environment in relation to the economy. Most interviewees wanted to see a healthier economy in their community. Job creation, investment, and business opportunities were seen as the way to create a healthy economy. I didn’t examine deeply the goals of the healthy economy – some people described it as “more money in the community”, while others talked about being able to “buy more things, go more places” or have more opportunities available to them. Whether people truly wanted to duplicate the style of life seen on television or merely wanted some aspects of that level of comfort was unclear to me. However, many interviewees, particularly the younger ones (under 50 years old), did describe their economic goals in terms of having the same lifestyle as they have down south. One interviewee said,

*“We just want to be able to enjoy the kind of life they enjoy in other parts of Canada; we should have a chance to join the infrastructure.”* (Interviewee, fall 2000)

The connections between the perceived problems of and the identified solutions as regards economic development were not as clear to me as they seemed to be to some participants.

## ***Land Use in the Husky Lakes Area: A Discussion of Comments***

All of the people I interviewed in both Inuvik and Tuktoyaktuk use Husky Lakes. Some respondents spend significant portions of the year in and around Husky Lakes, while others go on the land only for short periods of time during the springtime. However, even those interviewees who do not use Husky Lakes intensively felt that it is important that the land not be damaged by development activity because of continuing use by Inuvialuit people in the future. Husky Lakes is most intensively used during the springtime, when a large portion of the Tuktoyaktuk population travels across the Tuk peninsula to fish for trout in first and middle Husky Lakes, Five Hundred Lake, and on Liverpool Bay at Nallok. Also in the springtime, many residents hunt for geese, swans, and ducks in the dry lakes (marshes) around Husky Lakes, Five Hundred Lake, and the Smoke, Miner, Kugaluk, Anderson, and Mason Rivers. The spring hunting and fishing season is approximately mid-April to early June, depending upon the weather. It starts when the weather warms and the days get long, and ends when the land is no longer passable (during break-up). All members of the community participate in the spring activities: elders, children, hunters, and women.

*“Everyone usually goes out there in the first part of May. Me, I go out in February, go get fish. I start jigging as soon as it starts to get light.”  
(Interviewee, summer 2000)*

### **Concerns About Subsistence Land Use and Harvesting**

There were few concerns raised in interviews about subsistence land use. Interviewees did not feel that the caribou, geese, berries, or various fur-bearers were threatened by over-harvesting. Several individuals noted that it would be helpful to have more studies on the fish stock populations in Husky Lakes, so that harvesting and impacts of commercial development could be more readily monitored. However, no one was concerned that the local subsistence harvest was above the carrying capacity of the population. Some interviewees mentioned indications that the certain fish populations

were less healthy, including their being “skinny”, “small”, or “it takes longer to catch them”. However, this was attributed to possible changes in the fishes’ diets, salinity of the water, or other environmental factors.

One type of subsistence use whose sustainability was questioned by interviewees was firewood harvesting below the treeline. Although everyone I spoke to harvested either standing dead wood, driftwood from the coast, or gathered already-cut wood from the powerline, several interviewees mentioned that other community members cut green trees, and that the very sparse forests around Husky Lakes are being depleted. Interviewees seemed to feel that the over-harvesting was occurring as a result of ignorance (of the results of over-harvesting) or laziness (not wanting to go farther to sustainably harvest). Although participants did not identify wood harvesting as a major concern, enough people raised the issue to indicate that there could be a problem. Because growth rates in the arctic are slow, vegetation, especially forests, take many decades to be re-established naturally. To guard against over-harvesting of this fragile resource, the interviewees suggested that the HTC’s should raise awareness through education and consider future deterrent action.

### Cabins and Cabin Leases at Husky Lakes

An issue that arose in interviews, which could fall into both development and subsistence land use categories, was the increasing number of residential leases and cabins at Husky Lakes. Originally, I had placed this topic in the development section, as I saw it as a development of the land: parcels of the land base were being allotted to community members, transferring possession from the group to the individual. However, because the individual owners at issue are local Inuvialuit, and the land is being used for recreation and subsistence harvesting, I decided that this issue should more appropriately fall under the land use section.

The subject of cabins and residential leases was sensitive and seemed to be a focus on which many themes converged. Some interviewees considered cabins to be

inconsistent with the practice of a traditional lifestyle, since traditionally, the Inuvialuit were a travelling people, leaving little trace when they left an area. Others saw the leasing of land to be quintessentially non-Inuvialuit, since traditionally property was common, and land was used by all but owned by no one. The concept of land ownership was foreign; land was travelled on, inhabited, and respected as intrinsically valuable, but use was transitory and not exclusive. Some interviewees took issue with the control aspects of cabin leases, characterised by the comment, “who is ILA to say I can or cannot build on land that my family has traditionally owned for hundreds of years?!” Yet others felt that the issue was essentially one of crowding, since the number of permanent structures has increased rapidly in the last fifteen years or so. In 1991, the Mackenzie Delta-Beaufort Sea Regional Land Use Planning Commission reported, “there are approximately 25 recreational and trapping cabins located through the [Husky Lakes] area” (Planning Commission, 1991). In 2000, sixty-five cabins were identified by participants, approximately fifty of which were in first and middle Husky Lakes area. Since not all users were interviewed, this number is conservative.

The Inuvialuit have faced many changes in the last two hundred years, and have adapted rapidly and radically. The issue of cabins and cabin leases will continue to be a volatile issue until it is resolved to the satisfaction of community members. I suspect that it will not be easy for all members to come to a solution, as cabins are at the crux of the change from a traditional nomadic subsistence lifestyle to a modern wage economy with recreational use of land. Although balance is shifting within the community, the issue is unlikely to resolve itself until the Inuvialuit themselves decide how they will act together to ensure the preservation of traditions while benefiting from of new opportunities. This ambitious objective will be accomplished only with inspired leadership and hard work.

#### Garbage and Meat Wastage at Husky Lakes

Other concerns raised by interviewees when talking about subsistence land use were the garbage or litter at Husky Lakes, and the prevalence of meat wastage on the land. Many participants described the problems of littering and meat wastage, but the

means of resolving the problems were less congruent. Some interviewees felt that increased enforcement would address the issues, while others favoured education. A small proportion of the interviewees suggested that community members must take responsibility for their own actions, and self-monitor. These participants also recognised the difficulty of self-regulation in the current atmosphere of critical and even sometimes antagonistic community interactions and social structures that are inadequate for the demands placed upon them. Interviewees pointed out how difficult it is for the community to police itself – this is your brother and your neighbour – but recognised that each person has to take responsibility for his or her actions. Relying on outside agencies to direct community members doesn't work in the long term, because it abdicates responsibility for community members to solve what are essentially internal problems.

### ***Development in the Husky Lakes Area: A Discussion of Comments***

The history of commercial development in the Western Arctic: whaling (1800's), fur trade (1920-1950's), and especially oil and gas (1960's-1990's), has given the Inuvialuit an perception of the concept of development. This understanding is not as comprehensive or entrenched as the broader meaning of development in the academic, social sciences or natural resource management fields. When the Inuvialuit talk of development, they tend to mean extractive economic development on a large scale, generally initiated from outside the region, and with a flow of goods out of the region and a flow of money into the region.

In the preface to interviews, I told people that I wanted to talk about "how they use the land" and about development, including oil and gas exploration and extraction, tourism, reindeer herd (Kuññek Development Corporation proposal), and the all-weather road between Inuvik and Tuktoyaktuk. The interview format was semi-directed, so the responses varied considerably. Some people did not want to express an opinion as to the desirability of certain types of development; some basically said that it didn't matter what they thought or what they told me, because those in power would not be interested in that

information when making decisions. However, through the interviews, I did get a sense of the various points of view.

I asked most interviewees what they say as the benefits (or positive impacts) and costs (or negative impacts) of the four types of development. Through the responses, several themes emerged. Because I did not specify whether I was talking about oil and gas exploration and extraction in Husky Lakes, in the Husky Lakes “area”, or generally in the area around Tuktoyaktuk, there was some variation in the way interviewees interpreted my questions. Similarly, because I did not distinguish (separate) between exploration and extraction activities, the answers were mostly very general. I felt that I was already being given so much information, that I was loath to expand the interviews any farther. Also, many interviews took upwards of two hours, and most interviewees were fairly tired by that time, so I tried not to prolong interviews at the end (which tended to be the development questions).

Finally, I think that any one aspect of the interview (land use, any of the developments, management, etc.) could have been the sole focus of the interview; interviewees had plenty of information, and I had many questions. However, since I was trying to develop a general understanding of the *participants' perspectives* of issues which would be implicated in an integrated management planning process, I had to stay on the surface at many times when it would have been nice to delve a little deeper.

One of the particularly interesting concerns about oil and gas development which was brought up by interviewees was that oil and gas would “come fast and leave suddenly”, as it did in the past. Interviewees hoped that this time, because the controls were more in the hands of local people, that this could be managed. However, I think that it has been shown over the last twelve months or so that oil and gas companies do move hard and fast. Some people in the Inuvialuit Settlement Region feel that development is happening too quickly again: the people are not trained, land management plans are not in place, and proposals are being pushed through the approval process too rapidly to get meaningful input from local communities. The benefits of oil and gas

exploration and development could be substantial. Well-managed industrial development, especially if slowed down and spread over more years, could provide excellent opportunities for training and skill development, as well as injecting some money into the economy and indirectly contributing to infrastructure development. However, at the current pace (and activity seems to be accelerating), many of the benefits may pass by the local people, as not everybody is ready to take advantage of the opportunities.

I asked some interviewees about the level of activity (oil and gas exploration and extraction) that would be acceptable in the ISR; this question was suggested by ILA as a good starting point or discussion point if interviewees were not voluble. I think in retrospect that this was not an ideal question, since peoples' perceptions of past activity, coupled with the length of time since that activity existed, may have led to perfunctory responses. Again, I would mention that the interviews, while dealing with many key issues, were relatively short, and therefore necessarily superficial. Most interviewees who were in favour of oil and gas development suggested that an acceptable level of activity would be the level of activity present at the height of past (1970's-1980's) oil and gas exploration activity. How realistic is this? How relevant is this in the context of current technology and the socio-political environment? When interviewees were in favour of extensive oil and gas development, this assessment was based on the perceived benefits of oil and gas extraction: jobs, money, opportunities. The assumption behind the individual's support was that the management structures already in place (land and environment management, socio-political structures, education, and economic management) would mitigate or eliminate negative impacts.

When I returned to the ISR in the summer of 2001, after there had been one winter of oil and gas exploration activity, there was more support for industrial development, and at the same time uneasiness about some of the negative impacts from the activity that had just concluded. When I revisited interviewees, I was told that the companies weren't consulting enough, that the jobs were not all going to local people,

that there was racism in the camps, that the land was being damaged that wildlife migrations were being affected. These were all seen as problems, but the only solutions suggested were that the companies be more responsible and/or that the damaging activity cease. There seems to be a general lack of understanding about the roles and responsibilities of the parties involved. Local people do not know when and where they should be providing input, registering complaints, or forestalling detrimental activity. The boards and committees appear to be sometimes uncertain of their obligations and vague on the way the system functions. There are few people in the community (members of the general public or sitting on any of the boards or committees) who understand the legislative framework, rules and procedures that govern how development and management operate.

On the question of tourism, there is generally more clarity. Because tourism (as it occurs in the Husky Lakes area) is primarily locally-based and driven, many community members know the issues, benefits, and drawbacks of tourism activity. Interviewees who were in favour of more tourism activity were those who were already involved in tourism and stood to gain by increased tourism: operators, entrepreneurs, and artisans. Those who opposed tourism (either current level or increased level) were against tourism for personal reasons: didn't like being "watched" by tourists when performing traditional activity, felt that tourists did not benefit the community, believed that tourism activity resulted in harvesting which competed with local subsistence users. The way to increase local support and appreciation for tourism development would be to increase the distribution of benefits to more members of the community. Building a stronger tourism industry would be sustainable if the income is equitably shared.

The Kuññek reindeer herd development proposal did not elicit universal endorsement. As with tourism, those who have benefited in the past from the operation of the reindeer herd or will benefit in the future from the Kuññek development tended to be supportive of the proposal. Many other members of the communities felt that the reindeer herd had never created wealth or opportunity for the general population and that

it would not do so in the future. Other opponents of the proposed reindeer development were concerned about potential limitation of subsistence hunting rights, or habitat destruction by the reindeer which may create scarcity of forage for caribou. As stated in the results section, the Kuññek proposal was approved by the Environmental Impact Review Board in December of 2000 so that the input gathered from interviewees for this project is somewhat less relevant than comments on oil and gas, tourism, or the all-weather road, all of which are current and future developments, with some decisions yet to be made.

The all-weather road between Inuvik and Tuktoyaktuk has been a focus of contention ever since it was first proposed in the 1970's. Some issues have changed but many remain the same; thirty years ago there were vehement proponents and vehement opponents of the all-weather road and this is the same today. The concerns about possible negative impacts are notable; the expectations of benefits also are substantial.

The true weighting of the benefits against the costs can really only be done after the road is built, and the actual impacts, positive and negative, can be measured. However, an open and transparent exploration of the balancing equation would certainly be beneficial to the community. One could consider other similar projects that have been done in the past, and look at some of the positive and negative effects. Two roads that come to mind are the Dempster Highway, completed in 1979, an all-weather road between Inuvik and the North Klondike highway in the Yukon (linking Inuvik to southern road systems), and the Barrow highway, between Barrow Alaska and the Alaska road system. If a road is built, expectations will change, as the community's point of reference changes. If the road were to have unexpected and substantial negative impacts, it would not be decommissioned; the impacts would be mitigated or dealt with as well as possible. Likewise, when a road is being built, the anticipated negative impacts are mitigated in its construction.

There is always uncertainty in development; one cannot foresee all possibilities. Many of the people I interviewed in Inuvik and Tuktoyaktuk felt that the benefits of the

all-weather road were economic and social: groceries would be cheaper, jobs would be created, and Tuk residents would have access to the “south” (Inuvik as well as larger southern centres). The anticipated negative impacts tended to be cultural and environmental: encroachment upon the traditional way of life and subsistence harvesting, damage to habitat and wildlife, increased incidence of alcohol and drug use, and overcrowding and over-harvesting of Husky Lakes by “outside” people. It also became apparent during the interviews that the greatest advocates of the road tended to be the young and middle-aged interviewees, especially the males. Opponents of the all-weather road were often female, and especially elders. This division of opinion seems noteworthy. It is the women who hold primary responsibility for the social and cultural well-being of the community, traditionally and currently; their view is more long-sighted and wider. I had not been aware of the field of ecofeminism, a central tenet of which is that women see issues more holistically than men, and make decisions based on “an ethic of responsibility or care” (Gilligan, 1982). Men in Tuktoyaktuk seem to wield a lot of power, but their interests tend to be in the short term. A smaller proportion of the men I interviewed spoke about the well-being of their children and grandchildren than women; most women raised social and cultural issues when I asked about land use and development.

### *Management of the Husky Lakes Area: A Discussion of Comments*

When I asked interviewees about management (how should Husky Lakes be managed, who should be involved, and whether the current management structure adequately meets their needs), most people told me that the current structure is generally good. However, few interviewees were comfortable with the critical examination of the decision-making institutions. When asked direct questions like, “do you feel that the boards and committees that exist now represent your interests and needs?” most interviewees answered yes, occasionally with a qualification (for example, “those young guys don’t listen when you go to the meetings though”). The major concerns with the current land and resource management structures seem to be communication and

representation. Many interviewees noted that “no one ever says what happens at those meetings” – the information does not trickle down to the general public from the boards and committees. Interviewees also said that the same people sit on various decision-making and advisory bodies, so that a few people seem to hold a lot of power. Participants noted that the few people with power are not always the best people; elders are generally experienced and knowledgeable, yet many boards and committees are predominantly or totally made up of young (35-50 years old) people. One interviewee told me,

*“Young men think they know so much, but they really only can concentrate on themselves, on their family, when they are young. When they start to get older, and their children grow up, then they can start to look outside their family, to the community. Then they have something to say, and then they can represent their people. But young people just can’t think of things outside of themselves.”*

Another interviewee said,

*“If you have questions, you go to an elder, because they aren’t raising a family anymore, not worried about kids. Elders are concerned with the people and can look at things more as a people, not a family. Aboriginal people find elders valuable because they have the broader interest; it’s different from when raising a family. When your family is grown up, it’s not personal anymore. They grow up and issues get beyond being personal.”*

Because all positions on decision-making and advisory bodies are elected, the onus is on individuals to get involved: seek nomination, election, and re-election. Those who are already in and familiar with the system tend to be the ones who continue to be involved. The upshot of this is that in a relatively small community like Tuktoyaktuk with a population of approximately 1000, many individuals hold more than one elected position.

## *Methods: Some Strengths and Weaknesses*

### Interviews, visiting, meetings

I was trained as a biologist, and had experience finding, collecting, identifying, and analysing mushrooms. Social sciences research, designing surveys and administering interviews was new to me with this study. The people of the Western Arctic, on the other hand, had extensive experience being interviewed, and being studied. I know that my awkwardness was acute in the early days. I had an idea in my head of how it should all be done, with a couple introductory visits, to allow people a chance to get to know me and to become familiar with the project. Then the interview would take place, followed by other visits to clarify any points of confusion and to allow participants a chance to revise their responses, after having given more thought to the questions. However, the reality was that the on-the-ground research was much more difficult – fun and interesting as well – than expected. Making the initial contacts was slow; I found myself shy to knock on doors of people to whom I had not been introduced. Convincing people to be interviewed and explaining the project to participants was not easy either. Finally, the content and phrasing of the questions was reworked considerably in the first weeks, as I became aware of how best to solicit the information I desired. The interviews were the most interesting, and decidedly most challenging part of my research method.

I alluded to visiting in the previous paragraph. Visiting occurred throughout the project in all stages, and in every way. The technique first was used on my first visit to Husky Lakes, in May of 2000. I travelled to Husky Lakes with a local family (the Pokiaks) and spent much of the week visiting with extended family and other Inuvialuit harvesters who were camping and trout fishing. Upon my arrival in Tuktoyaktuk in June, I was welcomed into the home of a local family (Calvin and Lucille Pokiak; I later moved to James and Maureen Pokiak's place). All my hosts introduced me to other members of the community, often suggesting people I should interview and calling to make arrangements for me to go visit. Lucky Pokiak, a summer student at the Inuvialuit Land

Administration, Simon Adam, James Pokiak, Barry Jacobson, and other introduced me to various people in Tuktoyaktuk. Introductory visits were often very short, just a chance to tell people who I was and what the study was about, and to ask if the people would be willing to be interviewed.

Besides the introductory visits, I also visited extensively with people I knew better. Short visits to the mayor, the HTC resource person, elders, and other knowledgeable people were often very enlightening. Many times, these very informal discussions clarified for me issues, as well as illuminating relationships and histories, which provided the context for very complicated subjects. Riedlinger (2001) and Stevenson (2001) have both described how visiting contributed to their research. My own father, when I described to him my planned research, told me about his preferred methods in small communities in the north; he called it, "the drink-tea-and-pee tour" – the practice of visiting from home to home throughout a community to exchange information.

Attendance at meetings was another approach for both gathering and disseminating information. At the beginning of my field season, I attended meetings of the Tuktoyaktuk Elders Committee, Tuktoyaktuk Hunters and Trappers Committee, and Tuktoyaktuk Hamlet Council to explain the project and to solicit input on my planned methods as well as suggestions for whom I should interview. In the course of the summer and return trip in the falltime, I met again with the Hunters and Trappers Committee and Elders Committee to update the members on my progress. I found that these meetings, while important for explaining the project, were not as effective as I had hoped in the exchange of information. The committees seldom had criticisms or suggestions for me.

Participant observation was one of the methods proposed in my research protocol. It evolved into a participation and observation method. I lived and travelled with local families. I baby-sat kids, checked the fishnet, made dryfish, skinned caribou, drove a skidoo, gathered firewood, etcetera. While participating in these tasks, much information

directly related to my research was communicated. However, through the practice of these activities, I believe I gained a greater understanding of the context of the people and the region than through any other technique or method. Clandinin and Connelly (1994) and Adler and Adler (1994) describe some of the strengths and shortcomings of observational research. I found participation in the life of the community key to my developing an understanding of the context of participants comments. My participation in community activities was also invaluable in opening doors for me: one interviewee, when I was introducing myself, said, yes – I met you one time at Maureen's, you were changing the oil in her van. Another told me he knew who I was because he watched me check the net and cut dryfish every day.

### Maps and Mapping

The mapping section of the project was important from the beginning. Both ILA and DFO had an interest in seeing what parts of Husky Lakes were used (and for what purposes) as well as the landward extent of Husky Lakes "area" use. Past work in mapping land use (Freeman et al., 1976; ISL, 1977) also provided the basis for some comparisons over time. Furthermore, the people who participated in the study were interested both to see what their land use looked like on a map, and were very keen to see what might emerge in the community's land use pattern. The colour scheme and methodology were derived from a variety of sources: Freeman et al., 1976; Tobias, 2000; MKO, 2000. Instead of using overlays, I was able to print separate paper maps for each interview. These have travelled well, and hopefully will be easy to store and have a good shelf life.

There are a few things that one could change in a future similar project. The scale of the maps was very coarse, as the study concerned a large area. It would have been useful to have very fine scale maps for those areas that are either intensively used, or for landmarks which are precisely identifiable. The quality of maps could have been thus improved, at the time of transferring the data to GIS. Furthermore, the level of skill and

knowledge necessary to digitise these maps was beyond me, so I contracted that work to GIS technicians (GeoMap Manitoba).

### Verification of the Results

The study design included a return visit to the communities of Tuktoyaktuk and Inuvik after the completion of the data analysis, to verify the results with the participants. The verification visit included presentations to community groups (Tuktoyaktuk Elders Committee, Tuktoyaktuk Hunters and Trappers Committee, Tuktoyaktuk Hamlet Council, Tuktoyaktuk Community Corporation, Inuvik Hunters and Trappers Committee, Beaufort Sea Integrated Management Planning Initiative Working Group, Inuvialuit Game Council, and the Fisheries Joint Management Committee) and visits with interviewees to discuss the results. The results were well received and many useful suggestions and insights were gathered from all parties. It was noted by several individuals (at public meetings and in private discussions) that the return visit was very important, as the community is interested in finding out the results of studies that relate to them. Some suggestions were made on the word choice in describing issues and concerns, so that the language is understandable while not being inflammatory. Many people were interested in receiving copies of the final report and maps for reference, which suggested to me that the participants felt that the work was valuable.

### **Where does this lead for Husky Lakes Management Planning?**

The participants in this study – the interviewees, members of boards, committees, and councils, and other community members – raised many issues of great importance for any management or planning of the Husky Lakes area. The balancing of values (economic/social/environmental as well as traditional/modern), conservation, control, power and accountability, and scale (temporal and geographical) were recurrent themes throughout discussion. Communication, participation and representation, co-operation, and integration were elements of proposed solutions. Interviewees observed that

decision-making is reactive and fragmented; the various boards and committees do not communicate between themselves and there seems to be no vision for management or planning.

When I talked to people about management, I was looking for input on how interviewees felt that Husky Lakes would best be managed. Most people were not concerned about management. Many people felt that the current management structures, including federal and territorial government, Inuvialuit government, co-management bodies, and local decision-making organisations, were sufficient to manage the land and resources of the region. However, many people pointed out that the powers that are given to each body are not always used. If an organisation does not implement the legislation or responsibilities it has, then there is a problem. But the problem is not that no one is responsible, but that the responsible parties aren't enforcing, or acting on their responsibility.

Another concern that did come up regarding management is that the people elected do not always listen to or report back to the people they are supposed to represent. This means that the people lose their power to participate in the process as well.

Another concern raised was that the various bodies do not necessarily work together or co-operate in their actions, so there is duplication and contradiction. Interviewees felt there should be more and better communication, that the people in decision-making and enforcement positions should answer to the community, that the people in power should be more representative of the community, and that the management bodies be more proactive and collaborative.

In defining development, I found that many people had a very narrow definition; development is often seen as extractive activity on a large scale, generally initiated from outside the region, with a flow of goods out of the region and a flow of money into the region. An alternative definition might look at development as a process of change. Usually *economic* change, *environmental* change, and *social* (or cultural) change are

interconnected. Increases in sophistication do not have to have high environmental costs. Holistic or integrated approaches are more likely to benefit communities than constrained isolated tactics.

When I asked people about specific types of development, most people had an opinion about oil and gas - they'd been around for the last oil and gas boom. Some people were totally in favour of oil and gas development. They felt generally that the Inuvialuit would be protected by the land claims agreement and by the processes and bodies in place. Some people did not think the Inuvialuit were ready for oil and gas development, or at least were not ready to take advantage of opportunities that might arise. Some of the benefits that people expected to see with oil and gas were jobs, money (income, royalties, secondary business), infrastructure development, training, and increased self-sufficiency or independence for local people. Some of the disadvantages of oil and gas development identified were negative impacts on wildlife, disturbance of subsistence activity, "that oil and gas companies leave suddenly", oil spills, too much money, disrespect for wildlife, and aesthetics. The reindeer question was resolved before this study was completed, so the information gathered was not too relevant. Tourism was not a major issue. Everyone had an opinion about the all-weather road. The benefits were seen to be cheaper groceries and access to the south, business opportunities and job creation. Concerns centred on harm to people, over-harvesting/poaching, and damage to the land and wildlife.

The suggested solutions to concerns about current management include: more communication, between decision-making and advisory bodies *and* community, increased co-operation between levels and arms of governments, co-management bodies, and committees/boards, integration of environmental, social, cultural, and economic goals and values and of plans and actions, and better attempts at balance of issues, interests, and values.

So a management plan must be fairly inclusive, of issues and people. It must also be large in scope, temporal and geographical. Oil and gas, tourism, and the all-weather

road must be addressed in a management plan. The cabins issue will have to be dealt with. More clarity would be appreciated, more transparency in the process. Strategic (long-term, wide view) directions must also be considered; simply reacting to specific issues as they arise will not work in the long term.

Some of the residual issues (which were not solved nor consensual solutions identified) include: cabins (and applicability of restrictions on beneficiaries), disagreement between Inuvik and Tuktoyaktuk on who should be involved in management of Husky Lakes area, strategic directions for oil and gas exploration and extraction activity, strategic directions for tourism activity, and a strategy for the all-weather road between Inuvik and Tuktoyaktuk (figuring out what the true concerns and expectations are to find the best way to meet the needs and minimise negative impacts).

### ***Summary of Chapter***

The interview process answered some questions and raised many more. I feel fairly confident that the land use maps are representative (not exhaustive) of current land use in the Husky Lakes area by Tuktoyaktuk residents. Land use mapped for Inuvik residents was less complete, but still illustrative of contemporary land use in the Husky Lakes region. The issues raised on the subject of development (oil and gas, Kufñiek reindeer herd, tourism, and all-weather road) were comprehensive, although there was no clear consensus on many issues. To develop consensus, there would have to be some community (collective) group exploration of issues and decision-making. Management, which I had expected to be a significant (and sensitive) topic, did not seem to be so. Although some interviewees had concerns about management, most said that the current management regime is adequate. There were a few management issues which were sensitive, particularly that of Inuvik involvement in management of Husky Lakes. This issue will have to be addressed in management planning, as well as strategic directions for development (tourism, oil and gas, and all-weather road).

## CHAPTER 7: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

### *Summary*

This research project was initiated by the Department of Fisheries and Oceans, under its *Oceans Act* responsibility for integrated management. DFO approached the Inuvialuit Land Administration to find opportunities for the two organisations to work together, in order to foster the relationship between DFO and Inuvialuit organisations. Husky Lakes is an area of intense use for subsistence harvesting and there has been mounting pressure for commercial development (tourism, oil and gas exploration and extraction, large-scale reindeer herding, and road construction). Furthermore, the Husky Lakes area has a history of special status. This area has traditionally been known as a resource reservoir, an area of plenty in times of deprivation. Husky Lakes was also granted a degree of protection in section 8 of the Inuvialuit Final Agreement, where it is stated that no development be allowed unless the proposed activity meets “acceptable environmental standards” as established by the Environmental Impact Review Board. This research project was done to provide the Inuvialuit Land Administration with the basis for an integrated management plan in the Husky Lakes area.

In 1999, the Department of Fisheries and Oceans approached the Inuvialuit Land Administration regarding the possibility of co-operating on integrated management initiatives in the Inuvialuit Settlement Region. The Inuvialuit Land Administration was amenable to a project that would concentrate on Husky Lakes, as they had already been working on a management plan for this area, and there were indications of accelerating development. ILA wanted a study that would provide the groundwork for management planning, specifically looking for baseline research on the biophysical and sociocultural environments. The research evolved into a review of best practices for community-based research in the Western Arctic, study of Inuvialuit values and attitudes towards land use,

conservation, management, and development, and assessment of opportunities for integrated management. This research project describes the framework within which management and planning occurs, and provides the technical basis for the development of an integrated management plan.

The Husky Lakes integrated management planning study was accomplished through a review of literature, field visits (including visiting, interviews, mapping, attendance at meetings, and participation in community activities), verification of results, and reporting back. Background research looked at past work on land use and occupancy, management, and planning, methods for community-based studies and research in indigenous communities. Through this examination and analysis, I developed a methodology of best practices, applicable to, and personalised for, the Inuvialuit Settlement Region, and more specifically the communities of Tuktoyaktuk and Inuvik. This theory of best practices was applied in the fieldwork portion of the research. Visiting, interviews, attendance at meetings, and participation in community activities were all aspects of the relationship-building that was central to my methodology. The primary value underpinning all interactions with the community and community members was respect, in the sense of recognising the individuality of all participants and trying to be sensitive to the subtleties of interactions and relationships.

This work presents the framework within which planning occurs as well as the technical basis for planning, providing the foundation for the development of an integrated management plan, which the Inuvialuit Land Administration may pursue in future. The background knowledge required for an integrated management plan presented here includes a review of the historical context of management and planning. Descriptions of the Husky Lakes area environment (land, water, and wildlife) and use (local subsistence and recreational as well as current and potential commercial or industrial use) are included. The values and attitudes of the Inuvialuit, the people for whom the plan is intended, are described. This project attempted to be sensitive to the needs of the Inuvialuit people. Preliminary work included a review of best practices in

resource management, particularly with regard to indigenous communities. The literature review combined with the experiential learning of fieldwork generated a methodology in which relationships are central and methods and timelines are responsive to local interests and realities.

## ***Conclusions***

Participants in this research project had complex opinions and viewpoints on subsistence land use and economic development in the Husky Lakes area. Most interviewees felt strongly that subsistence harvesting was key to maintaining cultural identity, traditions, and a healthy society. At the same time, participants recognised that controlled economic development is essential for the well-being of communities and therefore individuals. Although few could say exactly where the balance lay, there was a strong feeling that through effective communication and co-operation the Husky Lakes area could be managed to meet today's needs without compromising the opportunities for future generations to provide for themselves.

The Husky Lakes area is highly valued by residents of Tuktoyaktuk and Inuvik for its subsistence harvesting and recreational opportunities as well as historical and cultural significance. At the present time, commercial and industrial interests also have claims on the area. There is some tourism at Husky Lakes, and at least one other tour operator has applied for a "class C" commercial licence. Oil and gas exploration leases extend to the west shore of first and middle Husky Lakes. Potential conflicts between the interests in and uses of the land and water of the Husky Lakes area create an opportunity for integrated management. Integrated management could assist decision-making through conflict resolution, co-ordination of management efforts, encouragement of community participation, and through helping to balance subsistence and industrial land and resource use.

Interviewees indicated some concerns with land use, development, and management. Concerns centred on lack of balance in resource allocation decision-

making, poor conflict resolution, inadequate participation in management, and need for more sharing of information. Although many participants were confident that the management structures created under the Inuvialuit Final Agreement were adequate to look after Inuvialuit interests, there were concerns that, through lack of communication and co-operation, management efforts were not optimally effective. Participants also saw many opportunities for management, development and land use. Interviewees discussed the benefits of economic development, the improvements in management over the last two decades, and the constructive effects of subsistence and recreational land use on communities. Integrated management could address concerns about development, management, and land use, while helping to strengthen positive aspects.

The Husky Lakes research project examined land use through interviewing a selection of Tuktoyaktuk and Inuvik residents. Although the communities in their entirety were not surveyed, land use as shown on the maps in Chapter 4 and in the map pockets at the end of this volume is characteristic of the extent of community land use. Through the verification process, I ascertained that most community members, even those who were not involved in the interviews, were confident that the maps accurately demonstrated the extent of land use. Maps of hunting, fishing, trapping, berry-picking, wood-gathering, and camping reveal extensive coverage of the entire Husky Lakes area, with particular concentration of use in first and middle Husky Lakes. These maps form a benchmark for land use and subsistence harvesting in the Husky Lakes area. Future developments result in adjustments in resource use, and these changes can be measured against the information provided in this thesis.

This research project has laid the groundwork for integrated management planning in the Husky Lakes area. Although only a start to the process, the information provided here shows the extent of current land use, raises issues relating to economic development and land and resource management, and indicates some values and aspirations of local residents. From this foundation, effective management and planning could be implemented through integrating current levels of management, increasing local

participation, and encouraging co-operation, communication, and co-ordination of decision-making and advisory bodies.

The central question in land use and management of the Husky Lakes area is sustainability. Managers, decision-makers, and community members are all concerned that the resources and livelihoods of Husky Lakes be maintained for the use of future generations. Governments talk in terms of sustainable development, while the Inuvialuit speak of making sure that great-grandchildren will have access to the land, resources, and traditions.

One hundred years ago, the communities of Tuktoyaktuk and Inuvik did not exist. The entire, extensive land base of the Western Arctic was used by the Inuvialuit to provide for their needs: hunting, fishing, and travelling. Husky Lakes was one harvesting area among many. After the Inuvialuit moved into towns, resource use became more limited according to accessibility of areas from the communities. Because of its proximity to Tuktoyaktuk, as well as its wealth of resources (fish, caribou, fur, berries), Husky Lakes has become the primary harvesting area for the community.

In the future, there will be adjustments to the way and extent of land use in Husky Lakes. As wage employment increases, subsistence harvesting will likely decrease. However, one hundred years from now, despite changes in land use, harvesting techniques, and livelihoods, the culture of the Inuvialuit will continue to be defined by, and shared through subsistence land use. Husky Lakes will always be important to the Inuvialuit because of the traditions that are nurtured when the people travel and harvest on the land, as their grandparents and great-grandparents did before them.

### ***Recommendations:***

#### ***Recommendation 1: Oil and Gas***

Develop a strategic plan for oil and gas exploration and extraction development; this plan should:

- a) delineate areas (geographical extent) within the Husky Lakes region which will be excluded from oil and gas activity, differentiating between exploration, extraction, and access, and areas in which oil and gas activity will be promoted;
- b) determine whether exploration or extraction activity *under* Husky Lakes will be permitted;
- c) specify temporal limitations on oil and gas activity (i.e. whether certain types of activity be disallowed during specific seasons);
- d) describe acceptable timelines for the development of the oil and gas industry in the Husky Lakes area;
- e) clarify the desired benefits and anticipated disadvantages, and include strategies to ensure that intended outcomes ensue while negative impacts are minimised and mitigated;
- f) include a clear description of the allocation of responsibility in oil and gas promotion, development, and management as well as a description of known oil and gas reserves and ownership.

**Rationale:**

Oil and gas exploration and extraction are hot topics in the Western Arctic in 2001. The last year has seen a wave of activity, the first large scale oil and gas activity in about a decade. Interviewees were in general quite clear on the benefits that they hoped to see from development, and many people were also cognisant of the likely negative impacts. However, few interviewees saw conflict between the need for benefits and the likelihood of costs or had suggestions for the balancing of the former and latter.

Therefore, there must be some collective community visioning and decision-making to bring out some of the issues and to increase the depth of understanding on the connections between costs and benefits. The important aspects of planning described above must be addressed by the community as a whole, in concert with governing, advisory, and decision-making bodies, to ensure that the benefits are equitably shared throughout the community, and that the costs are likewise shared. By drafting an innovative and forward-looking plan for oil and gas development, a stronger, more resilient, and more sustainable industry may be built.

### **Who should be involved?**

This planning process should be co-ordinated by the Inuvialuit Regional Corporation (as chief promoters of oil and gas exploration in the region). Other parties which should be included are: Elders (for example, representatives from the Elders Committees), the ILA and DIAND (as land “owners”), Hunters and Trappers Committees (representing wildlife and conservation interests), Community Corporations (representing community interest in land and economic development), and representatives of oil and gas interests (for example Canadian Association of Petroleum Producers). Members of the public should be consulted throughout the process.

### **Guidance and Direction to Decision-Makers**

There are cost and procedural implications to the development of a plan. The process may be protracted, especially if consensus-building practices are used and if the plan is comprehensive and effective. IRC would have to make a financial commitment to support the planning process. Additional funding could come from the federal government (DIAND for economic development or DFO for integrated management and conservation of marine areas) and from private industry (oil and gas companies might be interested in encouraging planning for increased clarity). The benefits would be long-term: besides promoting economic development through a proactive planning exercise,

the process will aid in monitoring resources and will build capacity and empowerment in the community through involving community-members in the decisions that affect their future.

***Recommendation 2: Tourism***

Develop a strategic plan for tourism; this plan should:

- a) delineate acceptable areas (geographical extent) within the Husky Lakes region for tourism activity;
- b) specify temporal limitations on tourism activity (i.e. whether activity be disallowed in certain seasons);
- c) identify types of tourism activity to be promoted and allowed;
- d) describe how tourism activity will be promoted and consider timelines for the development of the industry;
- e) clarify beneficiaries' rights to conduct commercial tourism activity on the basis of residential leases administered by ILA.

**Rationale:**

Many participants identified tourism as a viable industry in the Western Arctic and in the Husky Lakes area. There were some concerns that the benefits of tourism are not well distributed in the communities, that tourism is not managed, and that the benefits of tourism industry are not maximised. By drafting an innovative and forward-looking plan for tourism, these concerns will be addressed and a stronger, more resilient, and more sustainable industry may be built.

### **Who should be involved?**

The drafting of this strategic plan should be co-ordinated by the Department of Resources, Wildlife, and Economic Development (GNWT). Planning should also include representatives from the ILA (as land “owner”), Hunters and Trappers Committees (representing wildlife and conservation interests), Community Corporations (representing community interest in land and economic development), representatives of tour operators and organisations. Members of the public should be consulted throughout the process.

### **Guidance and Direction to Decision-Makers**

There are cost and procedural implications to the development of a plan. The process may be protracted, especially if consensus-building practices are used and if the plan is comprehensive and effective. The GNWT would have to commit to financially support the planning process. Additional funding could come from the Community Corporations and federal government (DIAND for economic development or DFO for conservation of marine areas). The benefits would be long-term: besides promoting sustainable economic development through a proactive planning exercise, the process will build capacity and empowerment in the community through involving community-members in the decisions that affect their lives.

### ***Recommendation 3: Transportation***

Develop a strategic plan for transportation between Inuvik and Tuktoyaktuk, particularly considering the proposed all-weather road; this plan should:

- a) determine the best ways to meet the need for transportation, looking at options as diverse as opportunities for railway and aircraft as well as road routing alternatives;

- b) consider the anticipated long and short term benefits (social, environmental, and economic) of an all-weather road, compare and contrast with other forms of transportation, and determine ways to maximise positive impacts;
- c) consider the anticipated long and short term costs (social, environmental, and economic) of an all-weather road, compare and contrast with other forms of transportation, and determine minimisation and mitigative measures to alleviate costs;
- d) address dual issues of timing and longevity: when implementation of road or other transportation means will occur, and what the lifetime of the construction will be;

### **Who should be involved?**

The Department of Transportation (GNWT) should have primary responsibility for co-ordinating this planning process. Other parties that should be involved in the development of a plan include the federal government (DIAND, DFO, and Department of Transportation), ILA or IRC (representing ownership interests for 7(1) a and 7(1) b lands), Hunters and Trappers Committees (representing wildlife and conservation interests), and Elders (representing the long-term view of best interests of the Inuvialuit people).

### **Rationale**

There was unanimity in responses from research participants that an all-weather road between Inuvik and Tuktoyaktuk would significantly impact the lives of Tuktoyaktuk residents, socially and economically, and that significant environmental consequences were likely. Given the expected benefits and the perceived costs of an all-weather road between Inuvik and Tuktoyaktuk, communities and governing bodies must work together to determine whether a road would be beneficial. Through drafting a plan in which a long-term view of options and preferences for transportation development is articulated, an assessment of how to maximise the benefits and minimise the costs will be

accomplished and the best interests of the local people will be safeguarded. A strategic plan considering the best way to meet needs and balance cost and benefits is of fundamental importance.

### **Guidance and Direction to Decision-Makers**

Issues to be considered include identification of the prospective users of the road, equitable distribution of benefits and compromises relating to the road, the assumption of financial costs, and the distribution of decision-making and administration powers. It is clear to me from interviews that the perceived benefits of an all-weather road are short-lived and the anticipated costs are long-term. In drafting a strategic plan for transportation in the Inuvik-Tuktoyaktuk corridor, decided efforts must be made to balance the positive and negative impacts and for decision-makers to be creative and not be bound by routine or convention to a single approach to meeting transportation needs.

### ***Recommendation 4: Cabins***

Develop a strategic plan for cabins and subsistence/recreational land use at Husky Lakes; this plan should:

- a) clarify roles and responsibilities in terms of decision-making, monitoring, and enforcement of beneficiaries' use of the Husky Lakes area (ILA, RWED, HTC's, Community Corporations);
- b) establish transparency in the cabin regulation process;
- c) describe the consultation process when a new cabin lease is granted;
- d) determine the desired or allowable concentration of cabins in the Husky Lakes area, perhaps through designating zones of use;

- e) address the issue of enforcement: define limits of responsibility for monitoring and enforcement regarding garbage disposal, littering, residential lease disorder and refuse, and disposal of unused or destroyed buildings and materials.

### **Rationale**

Because Husky Lakes has been used primarily for subsistence harvesting and recreational use in recent years, cabins and residential leases were an important issue for many interviewees. Interviewees observed that the number of cabins at Husky Lakes has increased drastically in the last decade and that there is already a problem with congestion. Currently the Inuvialuit Land Administration asks all beneficiaries who have permanent structures on Inuvialuit private lands to register a residential lease. The ILA asserts that, since 7(1) a and 7(1) b land have been granted to the Inuvialuit collectively, any exclusionary rights must be protected by way of leases, and also that in order to protect and manage Inuvialuit private lands, ILA must know what lands are being used and by whom. There is no charge for beneficiaries to register residential leases and all beneficiaries have the right to lease private land for subsistence and recreational use. Concerns were raised by interviewees about the current consultation practice, which solicits comments from other land users within five miles of the proposed residential lease. This is not a requirement in the rules and procedures of ILA. Enforcement of provisions of residential leases has not always been undertaken by ILA; interviewees indicated that they would like to see better enforcement actions to be taken.

### **Who should be involved?**

The Inuvialuit Land Administration is responsible for addressing the cabins issue at Husky Lakes, since ILA grants residential leases. The Hunters and Trappers Committees should also be very involved in developing a strategic plan for cabins at Husky Lakes, since the HTC's represent subsistence harvesting interests. Elders must be

included in the development of a plan. An RWED officer and representatives of the Community Corporations would also have much to contribute to the process.

### **Guidance and Direction to Decision-Makers**

The cost implications should be borne by the Inuvialuit Land Administration because the ILA is charged with responsibility for administering Inuvialuit private lands under the Inuvialuit Final Agreement. In the strategic plan, allowance may be made for recovering some expenses through residential lease allocation. I think that this measure would be unlikely to be approved by local people.

### ***Recommendation 5: Inuvik-Tuk Conflict***

Solve the Inuvik-Tuktoyaktuk disagreement on sharing decision-making responsibility to enable progress on Husky Lakes Management Plan; this should be addressed through:

- a) co-operative agreements between representatives of Inuvik and Tuktoyaktuk to mutually support decision-making, and participate only in decisions which affect themselves;
- b) agreement between the groups involved (HTC's, Elders' Committees, and Community Corporations) on a way to address the apparent power struggle; this could possibly occur with the intervention of, or assistance in conflict resolution from, the Inuvialuit Land Administration or Inuvialuit Regional Corporation
- c) the Husky Lakes Management Working Group should strive to create a positive and co-operative working relationship that will best serve the Inuvialuit people's needs for effective and efficient management decision-making.

## **Rationale**

Many interviewees both in Inuvik and Tuktoyaktuk expressed deep concern, regret, and anger about the ongoing inability of the two communities to solve the power struggles between them and progress on land management and decision making, particularly in advancing the work of the Husky Lakes Management Plan. Good management decisions are made through co-operation, compromise, and commitment to the process. As long as there are factions in the working group, and community members at large are encouraged to think of it as an us-them issue, there will be insignificant or unsatisfactory management decisions made.

## **Who should be involved?**

The Husky Lakes Working Group/Advisory Committee should address this issue. The Working Group is responsible for advising the Inuvialuit Land Administration on Husky Lakes management issues, and includes membership from the Inuvik and Tuktoyaktuk Hunters and Trappers Committees, Inuvik and Tuktoyaktuk Community Corporations, and Inuvik and Tuktoyaktuk Elders' Committees. If these bodies collectively resolve the conflict situation, antipathy in the community will dissipate as well.

## **Guidance and Direction to Decision-Makers**

There should be no significant costs involved in the resolution of the Inuvik-Tuk conflict; conversely, there should be substantial gains in effectiveness and efficiency of the Husky Lakes Management Working Group. Process implications are all positive; the constructively confronting a conflict situation will build capacity in members and skills gained will be transferable to other similar situations.

## ***Recommendation 6: Enforcement***

Define and clarify enforcement roles and facilitate enforcement activities, by:

- a) describing all parties with enforcement responsibilities and the extent of their enforcement duties;
- b) public education on the laws, rules, and regulations in place, as well as consequences of offences;
- c) reinforce with enforcement personnel the desire by community members to have rules and regulations enforced;
- d) encouraging all decision-making and advisory bodies, community groups, and Elders to support enforcement of laws, rules, and regulations, for the protection of the wider community interest;
- e) encouraging community members to self-monitor and take responsibility for their own and their family members' actions, particularly regarding subsistence and recreational land use.

### **Rationale**

Many interviewees expressed concerns about enforcement of the existing rules and regulations. Generally participants believed that the current management regime is adequate and that there are good and sufficient regulations already on the books, but that these rules are not enforced by the agencies responsible.

### **Who should be involved?**

Interviewees suggested that the Hunters and Trappers Committees take a lead role in monitoring subsistence and recreational land use, particularly in enforcing stewardship behaviour such as not littering and not wasting meat. Participants also said that DFO and RWED should increase their enforcement activities, through increased monitoring on the

land and being responsive to public reports of illegal activity. The Inuvialuit Land Administration is perceived to be shirking its duty for enforcing the provisions of residential leases (garbage disposal and cleanliness around cabins). In the case of criminal activity, participants felt that the RCMP must take a larger role in monitoring and enforcement. Ultimately, however, enforcement is a community-wide responsibility, encompassing self-monitoring as well as enforcement by legislated authorities.

### **Guidance and Direction to Decision-Makers**

Cost should be carried by the enforcement agencies: RWED, DFO, ILA, and the RCMP primarily, with some education and monitoring assumed by the Hunters and Trappers Committees and Elders' Committees. If enforcement agencies could contribute financially to the Hunters and Trappers Committees, the HTC's could take a more direct role in enforcement as well.

### ***Recommendation 7: Communication***

Develop a communication strategy, which establishes and maintains lines of communication between communities, decision-making, and advisory bodies to assist in exchanging information; this strategy should:

- a) define and describe lines of communication between decision-making and advisory bodies;
- b) define and describe effective modes of communication between management bodies and local communities;
- c) establish clear and simple system to report concerns and make recommendations.

## **Rationale**

There are a plethora of decision-making and advisory bodies involved in management decisions. The federal and territorial governments have responsibilities for land and wildlife management. DIAND manages federal crown lands; DFO manages fish and fish habitats; RWED manages wildlife populations and is involved in economic development decisions as well; Municipal and Community Affairs (GNWT) and the Department of Transportation (GNWT) are involved in decision-making also. The Inuvialuit Land Administration is in charge of making management and administrative decisions for Inuvialuit private lands; the Inuvialuit Regional Corporation, in its role of implementing the land claim, is involved in economic, cultural, and social decision-making. The Inuvialuit Game Council and Hunters and Trappers Committees are involved in decision-making for the conservation of the environment and healthy wildlife populations, and the preservation of the subsistence lifestyles. Co-management boards such as the Fisheries Joint Management Committee, Environmental Impact Screening Committee and Review Board, and Wildlife Management Advisory Councils assist in communication between local decision-makers and federal and territorial governments, but have their own roles to fulfil also in decision-making and environmental and resource management. With so many entities, many of whom have over-lapping responsibilities as well as crossover appointments, there exists in some community members confusion over roles and responsibilities.

## **Who should be involved?**

All decision-making and advisory bodies must be involved to create an effective communication plan.

## **Guidance and Direction to Decision-Makers**

The financial costs of this process should be carried in the ongoing operations of management and decision-making. The benefits of improved communication are increased involvement by residents in decision-making, more buy-in from community members, and capacity-building at the local level. The benefits will be felt throughout the community.

### ***Recommendation 8: Integrated Management***

Develop an integrated management planning process through which all of the above issues are addressed by:

- a) defining a vision, purpose, and objectives of land and resource management in the Husky Lakes area;
- b) integrating economic, social, and environmental aspects in all land and resource allocation decisions;
- c) using sustainability (over a long temporal scale) as a standard to assess decisions;
- d) addressing the issues identified above as a guideline of the topics to be included in an integrated management plan, while remaining open to other emerging or overlooked opportunities and concerns;
- e) clarifying roles and responsibilities of decision-making and advisory bodies, facilitating communication between bodies and community members, and ensuring enforcement of rules, regulations, and laws through enhanced personal responsibility and increased support for enforcement personnel.

## **Rationale**

Integrated management refers to management of sectoral components as part of a functional whole, and recognises that human behaviour (rather than physical stocks of natural resources, such as fish, land or water) is typically the focus of management. Integrated management means involving everyone, looking at all the issues, and taking a long-term view. In an integrated management process, each party relinquishes some power or control, but the plan benefits ultimately when a robust, resilient, and effective process is implemented.

## **Who should be involved?**

The Beaufort Sea Integrated Management Planning Initiative (BSIMPI) Working Group has been working for over a year to promote integrated management in the waters of the Inuvialuit Settlement Region and should be involved in any integrated management planning in the Husky Lakes area. BSIMPI includes representatives from the federal government (DFO and DIAND), Inuvialuit Game Council, and Canadian Association of Petroleum Producers. The Inuvialuit Land Administration (as land “owner” of the area around and under Husky Lakes), Wildlife Management Advisory Council (NWT) (co-management board under the land claim responsible for the land around Husky Lakes, and co-ordinators of the Community Conservation Plans), the Fisheries Joint Management Committee (co-management board under the land claim responsible for the water of Husky Lakes), and Inuvialuit Elders should also bear lead roles. The Inuvialuit Game Council or Hunters and Trappers Committees, IRC or Community Corporations, tour operators and associations, oil and gas companies and operators, Federal Government (DFO, DIAND, Department of Transportation), Government of the Northwest Territories (RWED, Transportation, Health and Social Services), Hamlet and Town councils, and other advisory and decision-making bodies, service providers, and community groups may also participate to varying degrees in developing an integrated management plan.

## **Guidance and Direction to Decision-Makers**

There are significant costs (financial and time) and process implications in the development of an integrated management plan. The process will only advance through the co-operation of many bodies representing diverse interests. Because it is a lengthy and expensive undertaking, integrated management requires the commitment of all major groups before the process can be initiated. Furthermore, integrated management can be very challenging, particularly in its requirement for consideration of social and environmental as well as economic impacts, and long-term effects as well as short-term. Finally, because integrated management is a time-consuming (albeit ultimately valuable) planning process, governments are not always eager to participate. Once commitment has been achieved, the process can be very rewarding.

## ***Concluding Comments***

Through visits, interviews, meetings, discussions, and travel on the land, I have gained an understanding of the various ways the land and water of Husky Lakes are used, the importance and significance of the area for the Inuvialuit, and some of the complexities of land and resource management. Husky Lakes is a beautiful and bountiful area, rich in fish, caribou, and berries, wood for fuel, furs for clothing and crafts. The land has been used by the Inuvialuit for many centuries and there are sites of special cultural significance: burial grounds, story sites, old houses, as well as today's cabins and community gathering areas. Most of the residents of Tuktoyaktuk and many people from Inuvik travel to Husky Lakes in the springtime to be with family, jiggle for trout, visit with friends, hunt geese, and stop occasionally for smoke tea, fried fish, and geese soup. Hunters also travel throughout the area in the falltime, to provision for the winter, hunting caribou on the fall migration. There is also tourism at Husky Lakes, oil and gas exploration leases in the area, and a proposal for an all-weather road which could approach the shores of Husky Lakes.

The message that I received from interviewees, friends, hosts, and advice-givers was that the people of the region want a healthy society, vigorous environment, and robust economy, and that they would be best served by making decisions for themselves. At the same time, people saw the contributions of governments and external organisations, and said that the local communities must work together with these outside interests to ensure the best long-term benefits for the Inuvialuit. An integrated management plan, led by Inuvialuit interests (in the form of co-management boards and ILA) and with wide community and external participation, would ensure sustainable development. Such a plan would integrate traditional values and knowledge, and meet the social, environmental, and economic needs of the people today while enhancing the ability of future generations to meet their needs.

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### *Personal Communications*

Berkes, Fikret. November 1999. Discussion of sustainability indicators. Winnipeg, Manitoba.

Hornal, Robert. October 2001. Discussion of management and Husky Lakes. Yellowknife, Northwest Territories.

Pelletier, Bernard. May, 2000. Telephone conversation and e-mail communication.

Solomon, Steve. February, 1999. Discussion of coastal processes. Dartmouth, Nova Scotia.

## APPENDICES

# **APPENDIX 1: LIST OF INTERVIEW QUESTIONS AND CONSENT FORM**

## Husky Lakes Integrated Management Study Consent Form

The purpose of this study is to document current and traditional land use of the Husky Lakes, east of Tuktoyaktuk, NWT. Your interview will provide some of the background information for integrated management, and will provide direction for the Inuvialuit Land Administration, the Department of Fisheries and Oceans and the Tuktoyaktuk Hunters and Trappers Committee to do long-term land use planning. This study is being funded by the Department of Fisheries and Oceans, as part of their Integrated Management program.

I would like to find out more about how you and your family use the Husky Lakes, and also what direction you feel any development should take. I am interested in hearing about past use and development as well. The interview will take about two hours and you can withdraw at any time.

You can choose whether to discuss any of these topics. The information you give me will be kept confidential. I hope that by talking to you, and other people in the community, we can build on past work which has been done, like the Tuk Community Conservation Plans the Sustainability of Arctic Community project, and the Marine Ecosystem Health workshops.

This form is a consent form that shows that you agree to this interview. Please feel free to ask me any questions. I will be happy to send you a summary of the results after I have brought together all the information, and a copy of the complete thesis will be available through the ILA office after the study is finished.

This research protocol has been reviewed by the Natural Resources Institute Research and Ethics Approval Committee at the University of Manitoba. If you have any questions, you may contact Dr. John Sinclair by phone at (204) 474-8374.

Consent: I agree to participate in this interview, part of the Husky Lakes Integrated Management Planning project. I understand that this is voluntary, and that I can refuse to answer any question or stop the interview at any time.

**Signature of Participant:** .....

Thank you.

Andrea Hoyt  
Natural Resources Institute



6. Do you have any concerns about current or future use of the area?
7. Do you think there should be development in the Husky Lakes area? For example, a road, tourism, oil and gas exploration and development, pipelines, mining, etc.
8. What do you think would be positive things that would come out of development?
9. What negative things would you expect to come out of development?
10. How do you think the land and water in Husky Lakes area should be managed?
11. Who should be involved in making a plan? In carrying it out? In enforcing the regulations?
12. Do you feel that the various government departments, councils, committees, and other agencies represent you and your family, the people of Tuk, and the Inuvialuit in general?

**C: Recommendations** (any specific recommendations for land use planning, direction to government, concerns, other.)

Do you have any other comments or suggestions for planning for Husky Lakes?

Do you have any comments or questions about this survey?

Are there things I should have asked but didn't?

## **Thank you**

Thank you very much for your time. If you have any other questions or comments, feel free to come talk to me anytime.

## **APPENDIX 2: RESEARCH LICENCES AND ETHICS APPROVAL**

SCIENTIFIC RESEARCH LICENCE

Licence # 13110N

File # 12 402 624

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

**ISSUED TO:** Ms. Andrea Hoyt  
Natural Resources Institute  
University of Manitoba  
Winnipeg, MB R3T 2N2  
(204)474-8373

**ON:** 05-May-00

**TEAM MEMBERS:** Hans Arends, Jack Mathias

**AFFILIATION:** Natural Resource Institute

**FUNDING:** Fisheries and Oceans Canada

**TITLE:** Integrated Coastal Zone Management Planning for the Husky Lakes in the Inuvialuit Settlement Region

**OBJECTIVES OF RESEARCH:**

This study will explore concerns of Tuktoyaktuk residents regarding development of the coastal, marine and aquatic zones in the Husky Lakes area and will develop a coastal zone plan to guide management decisions. The study will concentrate on human uses and ecological processes, looking at the land-water interface in this unique area. The objectives are to identify interested parties and their use of Husky Lakes estuarine environment and coastal resources, to map Husky Lakes and related environmental management areas, to identify where development and other uses may be in conflict, to evaluate awareness of the Ocean Act priorities and the effectiveness of working relationships amongst stakeholders and to make recommendations appropriate to improved integrated coastal zone management and planning. This research will partly fulfill the requirements for the researcher's Masters in Natural Resource Management and will provide valuable information to the Inuvialuit Land Administration and Department of Fisheries and Oceans.

**DATA COLLECTION IN THE NWT:**

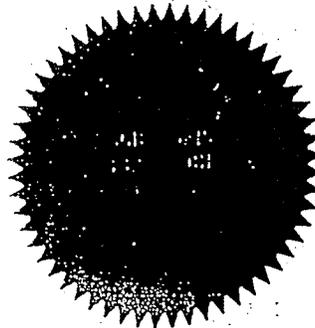
**DATE(S):** May 15th - August 15th, 2000

**LOCATION:** Tuktoyaktuk - Husky Lakes

Licence# 13110 expires on December 31, 2000.

Issued at the Town of Inuvik on Friday, May 5, 2000

Valoree Walker, Ph.D.  
Science Advisor



SCIENTIFIC RESEARCH LICENCE

Licence # 13204R

File # 12 402 624

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

**ISSUED TO:** Ms. Andrea Hoyt  
Natural Resources Institute  
University of Manitoba  
Winnipeg, MB R3T 2N2  
(204)474-8373

**ON:** 05-Jun-01

**TEAM MEMBERS:** Hans Arends, Dr. Helen Fast, Thomas Henley, Dr. Kelly McKay

**AFFILIATION:** Natural Resource Institute

**FUNDING:** Fisheries and Oceans Canada, NSTP

**TITLE:** Integrated Management Planning in the Husky Lakes Area of the Inuvialuit Settlement Region.

**OBJECTIVES OF RESEARCH:**

The objective of the study is to identify human use of the Husky Lakes and potential industrial activities in the area, and to describe residents concerns or expectations of development. The study will be done through individual and group interviews, using maps and semi-directed interviews. The data is being collected at the request of the Inuvialuit Land Administration and the Department of Fisheries and Oceans, to facilitate future integrated management planning initiatives in the area.

**DATA COLLECTION IN THE NWT:**

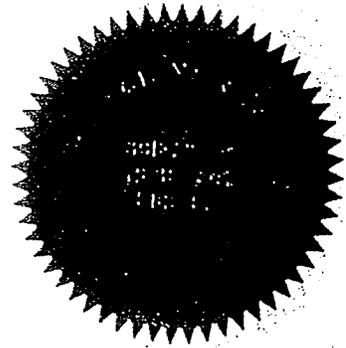
**DATE(S):** 6 June-1 July, 2001

**LOCATION:** Tuktoyaktuk - Husky Lakes

Licence# 13204 expires on December 31, 2001.

Issued at the Town of Inuvik on Tuesday, June 5, 2001

Vaforce Walker, Ph.D.  
Science Advisor





THE UNIVERSITY OF MANITOBA

NATURAL RESOURCES INSTITUTE

Winnipeg, Manitoba  
Canada R3T 2N2

Tel: (204) 474-8373  
Fax: (204) 261-0038

March 13, 2000

To: Professor Thomas Henley and Ms. Andrea J. Hoyt

From: Dr. John Sinclair ~~JS~~

Re: Ethics Review Application 4-2000

The Natural Resources Institute Ethics Review Committee has reviewed your recent application and has given their approval to the study as proposed. We note that this approval does not take the place of others you may need for work in the north like ISR. Best of luck with your research.

### **APPENDIX 3: LIST OF PARTICIPATING INSTITUTIONAL BODIES**

Beaufort Sea Integrated Management Planning Initiative Working Group  
Fisheries and Oceans Canada  
Fisheries Joint Management Committee  
Inuvialuit Game Council  
Inuvialuit Regional Corporation  
Inuvialuit Land Administration  
Inuvialuit Land Administration Commission  
Inuvik Hunters and Trappers Committee  
Tuktoyaktuk Hunters and Trappers Committee  
Tuktoyaktuk Hamlet Mayor and Council  
Tuktoyaktuk Community Corporation  
Tuktoyaktuk Elders' Committee  
Tuktoyaktuk Youth Committee

For confidentiality reasons, I have not included a list of interviewees and individual participants. Everyone who participated in the interviews and meetings contributed greatly to my understanding and I hope that this has been reflected in the quality of the work presented in this thesis. Many apologies if I have left out any groups from the list above; your input was greatly appreciated, and I had help from so many people! Thank you to everybody who took part in the project in various ways.

**APPENDIX 4: SUMMARY REPORT DISTRIBUTED TO  
COMMUNITIES**

**JUNE, 2001**

# HUSKY LAKES

## Integrated Management Study

### *Introduction*

The Husky Lakes Integrated Management Planning Study was designed to gather background information on land use and development in the Husky Lakes region of the Inuvialuit Settlement Region. The project involves interviewing residents of Tuktoyaktuk and Inuvik to discuss how they use Husky Lakes and also what they see as opportunities for and concerns about development in the area. The information gathered will be used by the Inuvialuit Land Administration (ILA) and the Department of Fisheries and Oceans (DFO) to work on integrated management planning in the Western Arctic.



In the interviews, I asked people about how they use the land and water, where they go, and if there are areas they would consider special. I also asked about developments: oil and gas, an all-weather road between Inuvik and Tuktoyaktuk, tourism, and the reindeer herd. I asked people what opportunities there are for

development and what concerns they might have. Finally, I asked residents about management: how do they feel the area should be managed and do they have any concerns about management.

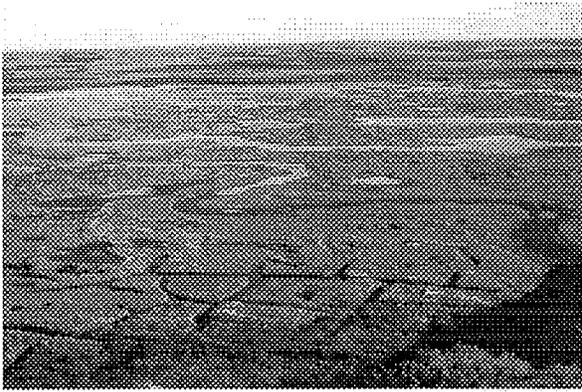
### *Land Use: Hunting, Fishing, Camping*

Almost everybody in Tuktoyaktuk and many people in Inuvik go to Husky Lakes at some time during the year for hunting, fishing, berry-picking, trapping, camping, or recreation. Husky Lakes is considered one of the most important traditional use areas for Inuvialuit from Tuk. Because it is so intensively used and unique, many people had strong opinions about development.

### *Oil and Gas*

Most interviewees felt that oil and gas development in the Western Arctic is beneficial. Positive impacts include job creation, revenue from royalties and access fees, investment in community infrastructure, and generally creating wealth. Concerns about negative impacts include disturbance and destruction of wildlife and habitat, oil spills, and development practices which show disrespect for wildlife and the environment. Many interviewees felt that the main negative impact is when companies come in really fast, make everyone dependent on the jobs and high wages, and then leave suddenly, like they did after the last boom. Some of the social problems which people felt would come

with oil and gas development include increased alcoholism and drug use, neglect of children and elders, and loss of the traditional lifestyle and skills. However, most people felt that the positive impacts would outweigh the negative and overall, were supportive of oil and gas development in the area, as long as the development does not go too close to Husky Lakes and the fish and wildlife are not harmed.



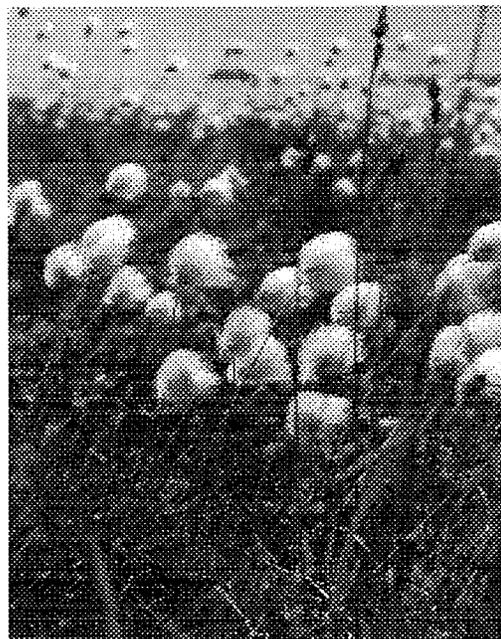
#### *All-Weather Road*

The majority of interviewees wanted an all-weather road between Inuvik and Tuk and felt that it would be beneficial. The advantages would be cheaper consumer goods (especially groceries), access to “outside”, a decrease in isolation, more business opportunities, and job creation. The disadvantages included negative impacts on wildlife and habitat, more illegal hunting, increase in drugs and alcohol in the community, more accidents, and possibly the road would “take away Tuk’s specialness, remoteness”. Some interviewees felt that the road was not likely to be built because of the prohibitive cost. Many felt that the road should be used as a transportation corridor only, to decrease negative impacts on wildlife. There was no consensus on how far the road should be from Husky Lakes, although some people felt that it should go right to the shore of the Lakes, some felt 2-3 km would be sufficient, others at least 10-15 km, and some wanted the road to go along the East Channel. More interviewees were in favour of the road than against it, and very few

people felt that it would be “all good” or “all bad”.

#### *Tourism*

Tourism was not a topic that raised a lot of emotion, either for or against. Just under half of the interviewees felt that the current level of tourism activity is fine; some people felt there could be more and a few people felt there should be less (or none). Common sentiments were that tourism is well-managed now and it brings money into the community. A minority felt that the benefits from tourism go to a small portion of the community, and that they should be more distributed. Concerns raised were that the tourists and tour operators do not always respect laws; they take over their limit in fish, and they don’t always take care of the land or follow environmental regulations. Some people were concerned that Husky Lakes might become over-fished. Some interviewees felt that tourism should be promoted and that the bureaucracy that controls tourism should be decreased. Overall, most people are in favour of tourism but do not necessarily support a drastic increase in tourism activity.



*Reindeer*

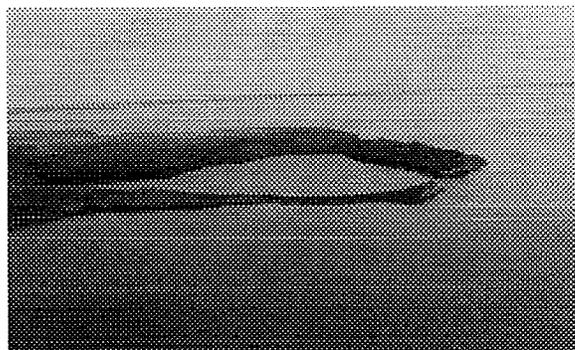
Some people were strongly in favour of the proposal to move the reindeer herd from its current range south to the Richards Island, southern end of Husky Lakes area, between Inuvik and Tuk, while others were concerned about negative impacts to the environment and subsistence harvesting. The main concerns for people not in favour of the development were that the reindeer would crowd out the caribou, by competing with the caribou for food or because of the disturbance, or that hunters who usually harvest caribou there would be excluded because of reindeer herding in the area. People who support the reindeer development felt that it would create jobs and promote economic development in the Inuvialuit Settlement Region. About one third of people interviewed were in favour of the development, one third were against, and one third had no opinion.

*Other comments and concerns*

Some other issues were raised in the interviews. Two major concerns for many people were garbage at Husky Lakes and meat wastage. Another issue many people raised was crowding, cabins, and residential leases. Finally, almost everyone interviewed talked about the beauty and "specialness" of Husky Lakes.

Many people interviewed were concerned about the amount of garbage at Husky Lakes. Suggestions on how to deal with it included putting up signs, having monitors or inspectors, laying charges for littering, and educating people. Many people felt that the HTC and ILA should be responsible for making sure people don't litter and ensuring they clean up after themselves. There were similar concerns with meat wastage. Most interviewees felt that although everyone knows they should not waste meat, some people still do. Therefore there should be more enforcement as well as education. With meat wastage, most people felt that RWED is mainly responsible and some

people thought that the HTC should also take some responsibility.



Many of the interviewees also talked about crowding at Husky Lakes. Some people, especially elders, were concerned that there are too many cabins at Husky Lakes, and that for people who like to set up tents, there is no where left for them to camp. There was not a solution for this concern; some people felt that ILA is already interfering too much, while others thought that someone has to make a limit before Husky Lakes is too crowded.

Everyone talked about how unique and beautiful Husky Lakes is. This is an area that many people love and hold very close in their hearts. One person told me, "Husky Lakes is beautiful: falltime, summertime, even in springtime, when everything is covered with snow. As long as you go to Husky Lakes, you feel at home. It's really hard to go home to Tuk when you're out at Husky Lakes! It's so beautiful." From young people to elders, those who travel to Husky Lakes and spend time out there all felt that this place is important for families to spend time together and for everyone to pass on the culture and skills of the Inuvialuit.

*Management*

Most people interviewed feel that the boards and committees that are in place now are sufficient to manage Husky Lakes. Many people in Tuk felt that they should be in charge of deciding what happens at Husky Lakes, because it is on Tuk

private lands; interviewees in Inuvik felt that they should also be involved in planning and decision-making. People are confident that the community corporations, ILA, Hunters and Trappers Committees and co-management boards will look out for the interests of the Inuvialuit people. Some interviewees pointed out that they could work together more, and that they should use their power more to enforce regulations or plans. Many people pointed out that all the organisations who are representing the Inuvialuit have to come back and keep the beneficiaries informed as well.

### *Conclusions*

Husky Lakes is special and important to the Inuvialuit people. Mostly, people from Tuktoyaktuk spend a lot of time at Husky Lakes, but people from Inuvik also use the area. Because it is rich in fish, wildlife, berries, and everything you need to live, it should be managed carefully so that these resources will be available for future generations. However,

everyone recognises that development is necessary to provide jobs and money for the people who live in this area. The people I talked to think that development can happen as long as it is done carefully so that the local people benefit, and the environment is not damaged.

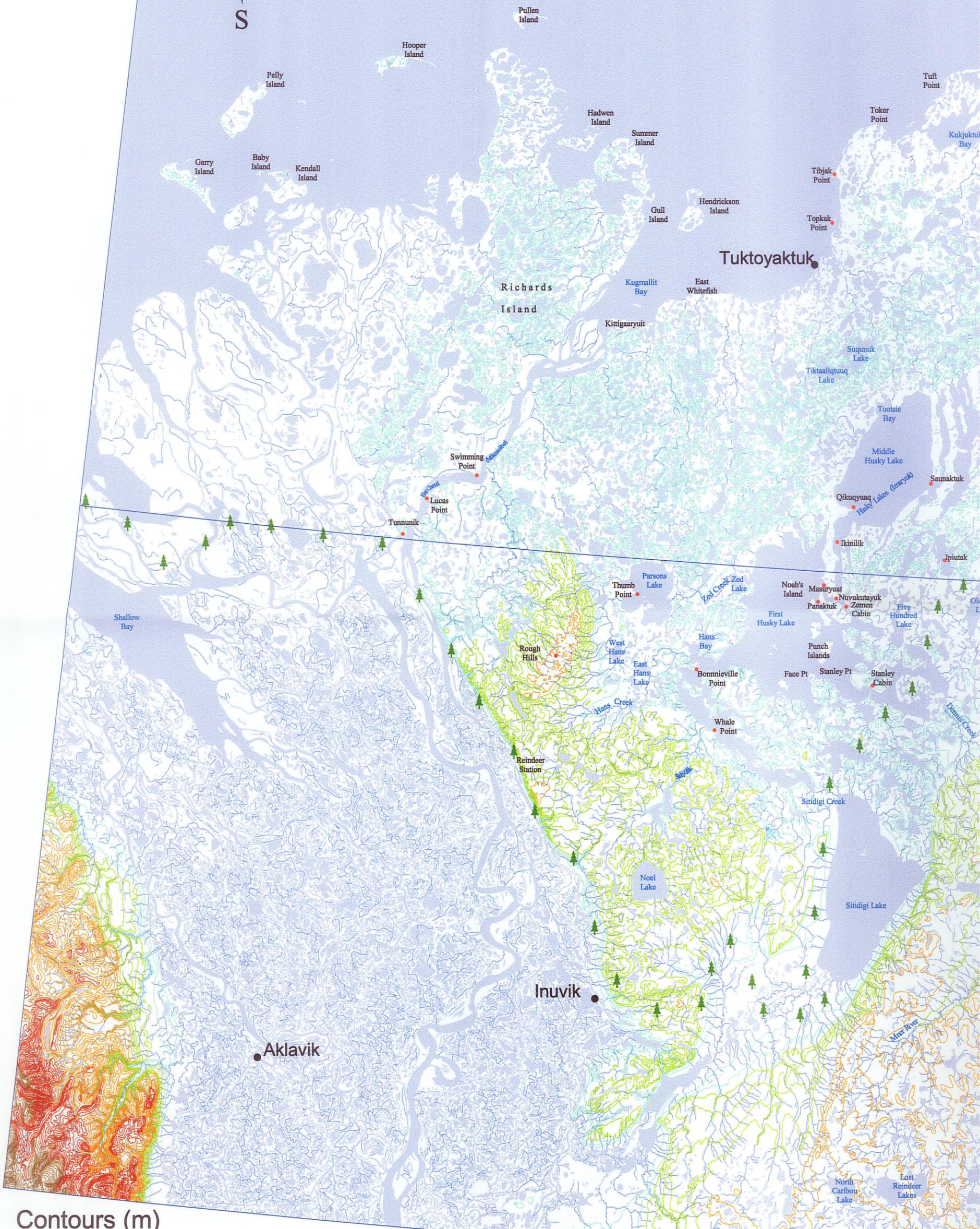
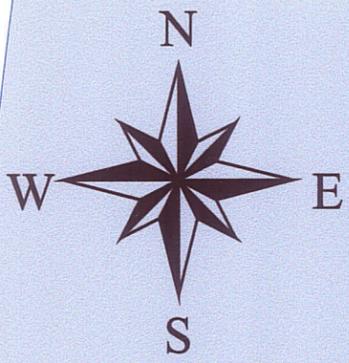
### *Next steps: Suggestions*

1. Research fish stocks, spawning, and habitat: find out how many fish there are in Husky Lakes (trout especially), if populations are healthy, where the different species of fish spawn, and where the fish travel in Husky Lakes.
2. More enforcement:
  - RWED: monitoring meat wastage
  - DFO: monitoring fish harvesting, especially by non-beneficiaries
  - ILA: monitoring whether people follow their leases and keep their camps clean
  - HTC, ILA, and RWED: should be monitoring garbage and give people fines for littering.



*Report produced by Andrea Hoyt, graduate student at the Natural Resources Institute. The final report will be completed in the fall of 2001. If you have any questions, comments or concerns, please do not hesitate to contact me at the ILA (Inuvialuit Land Administration) at (867) 977-2202 or DFO (Department of Fisheries and Oceans) at (867) 777-7500. I am in Inuvik and Tuk from May 30-June 27.*

*For more information:  
Andrea Hoyt  
c/o Natural Resources Institute  
Sinnott Building, University of Manitoba  
Winnipeg, Manitoba R3T 2N2*



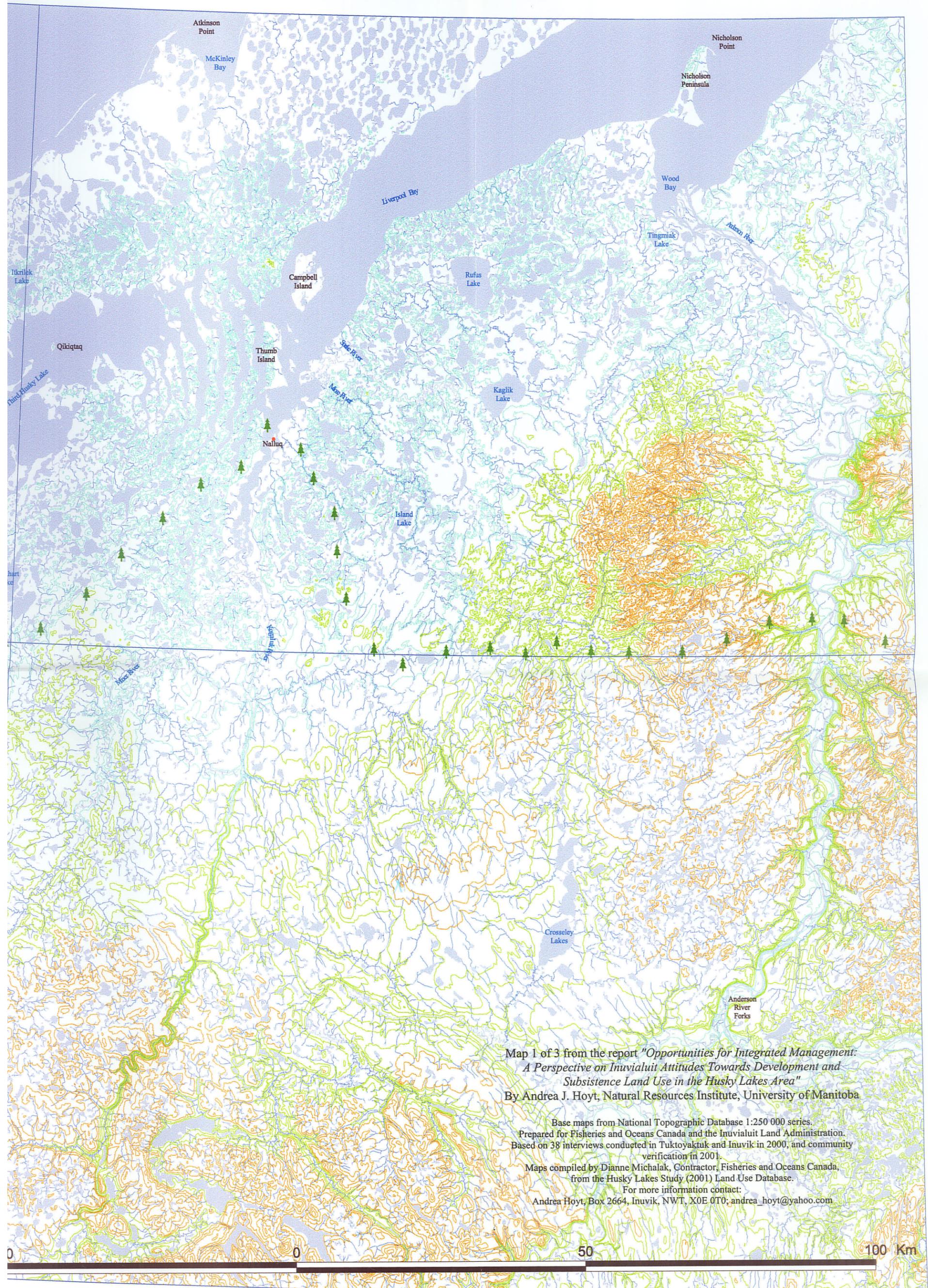
Contours (m)

-  30 - 61
-  62 - 183
-  184 - 396
-  397 - 701
-  702 - 1128

 Treeline



Map 1: Base map with waterbodies, rivers, towns, treeline, contours and some Inuvialuktun and English place names.



Map 1 of 3 from the report "Opportunities for Integrated Management: A Perspective on Inuvialuit Attitudes Towards Development and Subsistence Land Use in the Husky Lakes Area" By Andrea J. Hoyt, Natural Resources Institute, University of Manitoba

Base maps from National Topographic Database 1:250 000 series. Prepared for Fisheries and Oceans Canada and the Inuvialuit Land Administration. Based on 38 interviews conducted in Tuktoyaktuk and Inuvik in 2000, and community verification in 2001. Maps compiled by Dianne Michalak, Contractor, Fisheries and Oceans Canada, from the Husky Lakes Study (2001) Land Use Database. For more information contact: Andrea Hoyt, Box 2664, Inuvik, NWT, X0E 0T0; andrea\_hoyt@yahoo.com



*Beaufort  
Sea*

Tuktoyaktuk

Inuvik

Aklavik

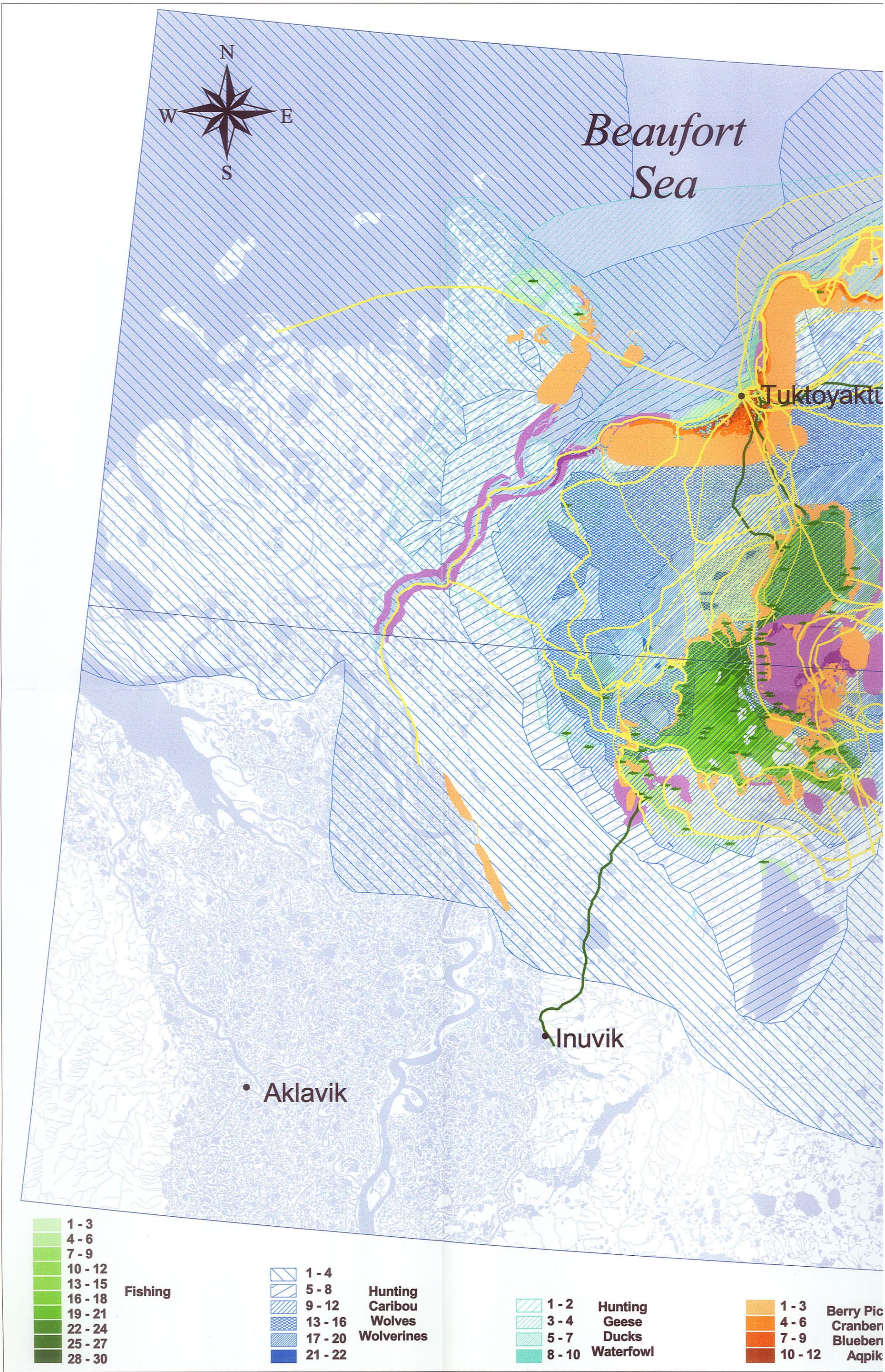
- 1 - 3
- 4 - 6
- 7 - 9
- 10 - 12
- 13 - 15
- 16 - 18
- 19 - 21
- 22 - 24
- 25 - 27
- 28 - 30

Fishing

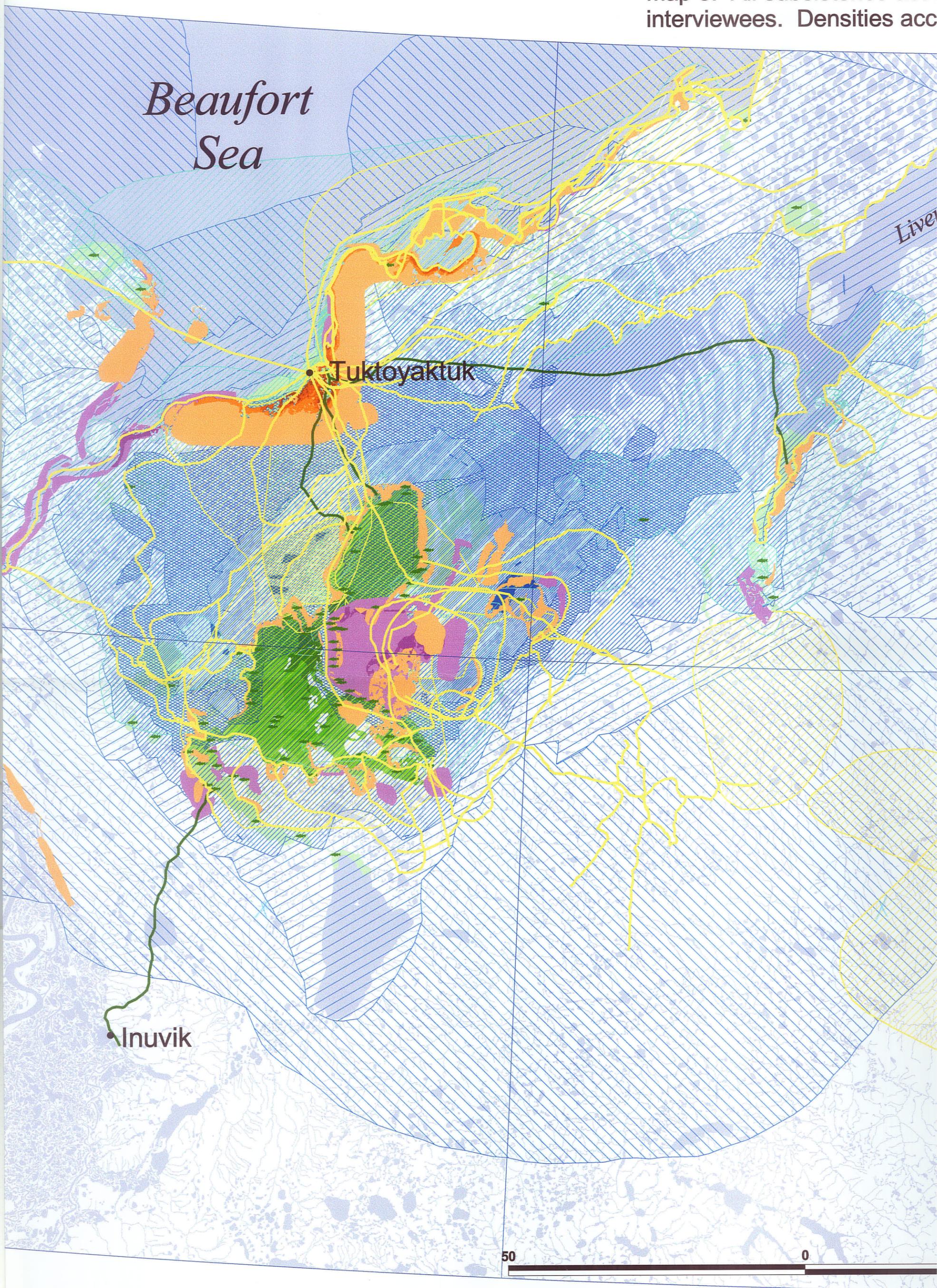
- 1 - 4
  - 5 - 8
  - 9 - 12
  - 13 - 16
  - 17 - 20
  - 21 - 22
- Hunting  
Caribou  
Wolves  
Wolverines

- 1 - 2
  - 3 - 4
  - 5 - 7
  - 8 - 10
- Hunting  
Geese  
Ducks  
Waterfowl

- 1 - 3
  - 4 - 6
  - 7 - 9
  - 10 - 12
- Berry Pic  
Cranber  
Blueber  
Aqpik



Map 3: All subsistence activity interviewees. Densities acc



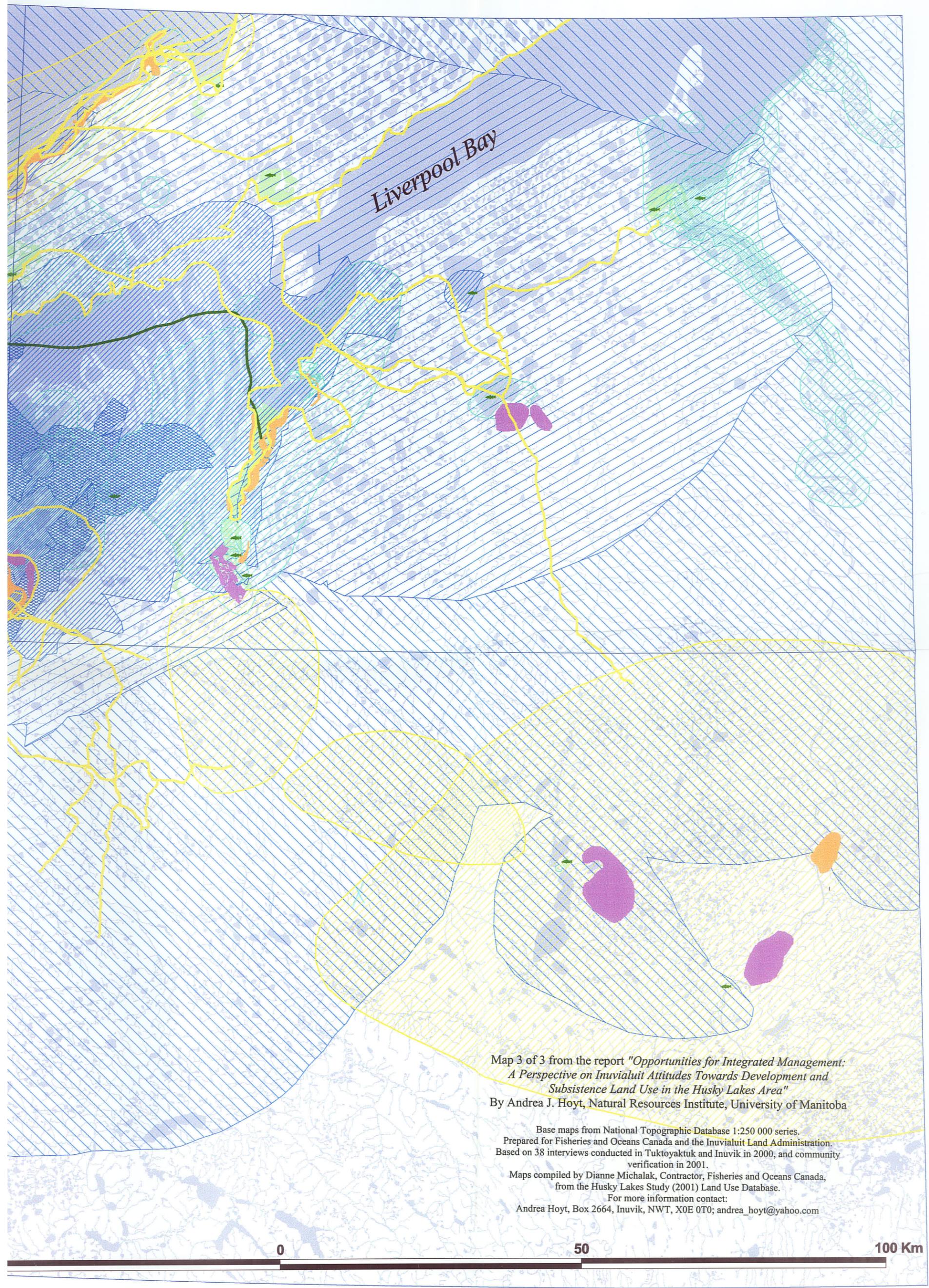
	1 - 2	Hunting
	3 - 4	Geese
	5 - 7	Ducks
	8 - 10	Waterfowl

	1 - 3	Berry Picking
	4 - 6	Cranberries
	7 - 9	Blueberries
	10 - 12	Aqpiqs

	1 - 2	Wood Harvesting
	3 - 4	Deadwood
	5 - 6	Driftwood
	7	

	1	Trail
	2	
	3	

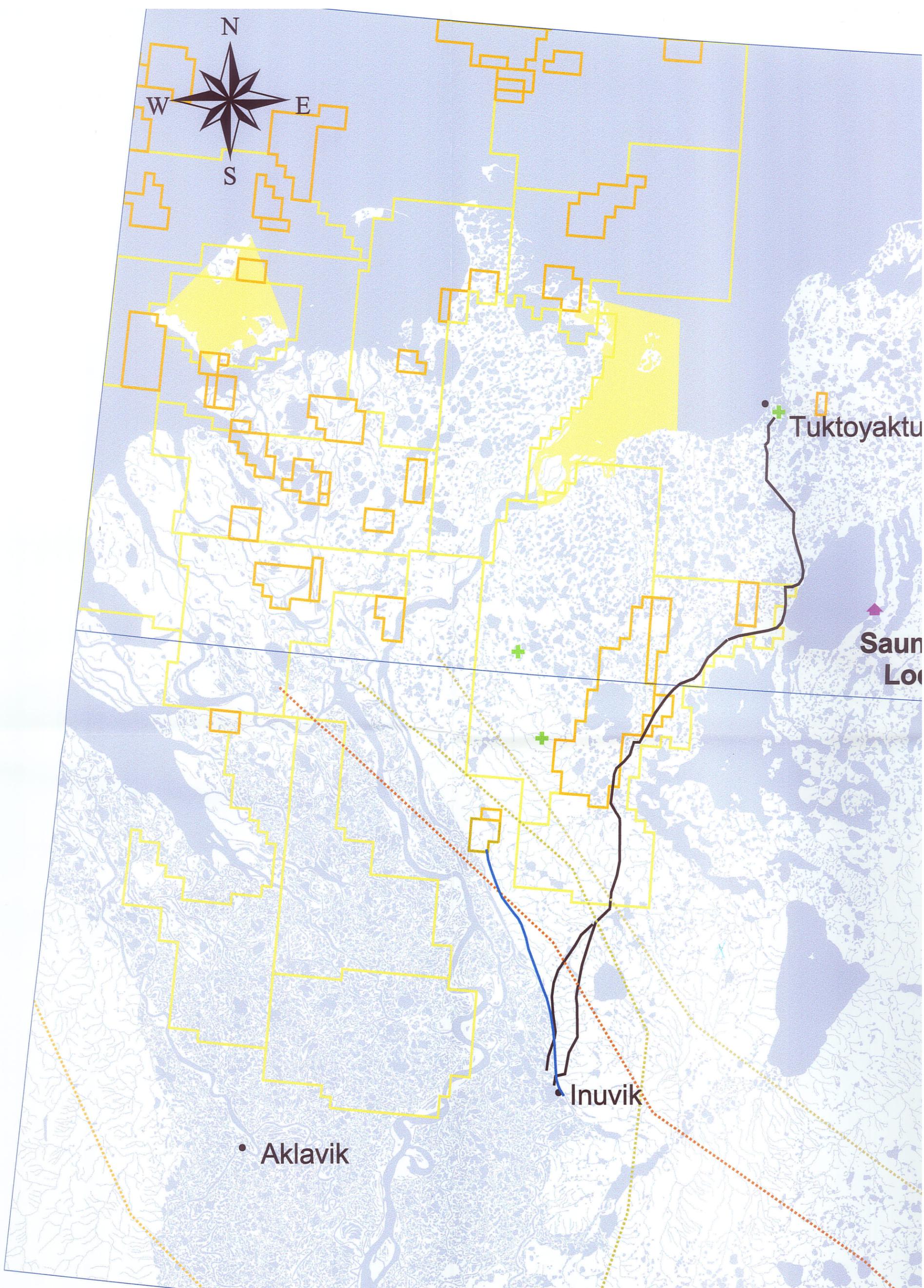
Map 3: All subsistence activities in the Husky Lakes Area as indicated by interviewees. Densities according to number of interviewees.



Map 3 of 3 from the report "Opportunities for Integrated Management: A Perspective on Inuvialuit Attitudes Towards Development and Subsistence Land Use in the Husky Lakes Area"  
 By Andrea J. Hoyt, Natural Resources Institute, University of Manitoba

Base maps from National Topographic Database 1:250 000 series.  
 Prepared for Fisheries and Oceans Canada and the Inuvialuit Land Administration.  
 Based on 38 interviews conducted in Tuktoyaktuk and Inuvik in 2000, and community verification in 2001.  
 Maps compiled by Dianne Michalak, Contractor, Fisheries and Oceans Canada, from the Husky Lakes Study (2001) Land Use Database.  
 For more information contact:  
 Andrea Hoyt, Box 2664, Inuvik, NWT, X0E 0T0; andrea\_hoyt@yahoo.com





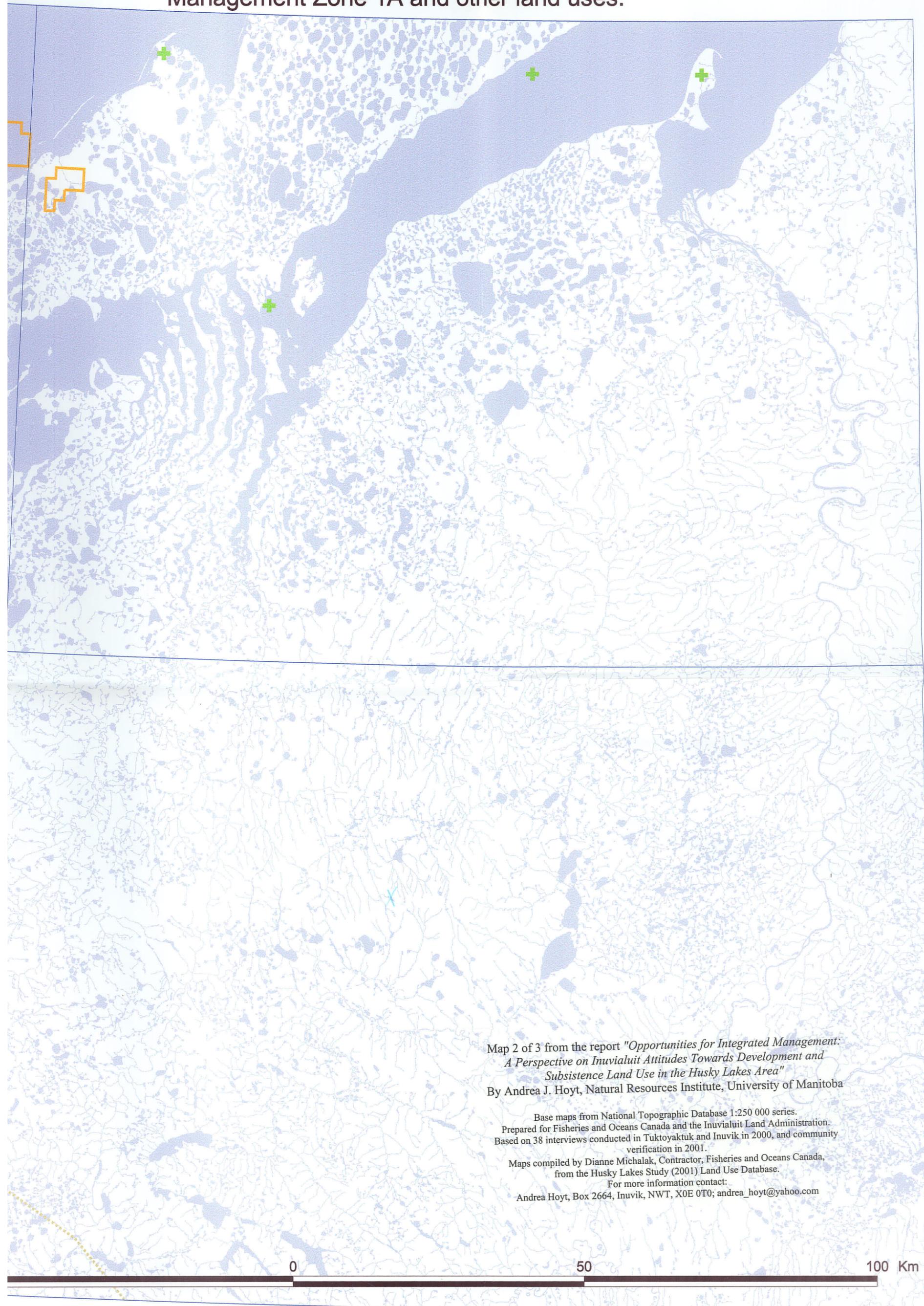
**Oil and Gas Leases**

- |   |                               |   |  |
|---|-------------------------------|---|--|
|  | Exploration Licence           |  | Dempster Lateral (Foothills)                                   |
|  | Significant Discovery Licence |  | Proposed Mackenzie Valley to Delta (TransCanada Pipelines)     |
|  | Production Licence            |  | Mackenzie Valley to Beaufort Sea/Alaska (Arctic Resources Co.) |

Map 2: Allocation map showing Tukttoyaktuk, current oil and Management Zone 1A and



Map 2: Allocation map showing proposed road between Inuvik and Tuktoyaktuk, current oil and gas leases, Saunatuk Lodge, Beluga Management Zone 1A and other land uses.



Map 2 of 3 from the report "*Opportunities for Integrated Management: A Perspective on Inuvialuit Attitudes Towards Development and Subsistence Land Use in the Husky Lakes Area*"  
 By Andrea J. Hoyt, Natural Resources Institute, University of Manitoba

Base maps from National Topographic Database 1:250 000 series.  
 Prepared for Fisheries and Oceans Canada and the Inuvialuit Land Administration.  
 Based on 38 interviews conducted in Tuktoyaktuk and Inuvik in 2000, and community verification in 2001.

Maps compiled by Dianne Michalak, Contractor, Fisheries and Oceans Canada,  
 from the Husky Lakes Study (2001) Land Use Database.  
 For more information contact:  
 Andrea Hoyt, Box 2664, Inuvik, NWT, X0E 0T0; andrea\_hoyt@yahoo.com

0 50 100 Km

- Kenzie Valley to Delta (TransCanada Pipelines)
- Beluga Management Zone 1A
- Tourism Lodge
- Proposed Road
- Dew Line
- Inuvik Pipeline