REVISED REPORT ON RESOURCE MANAGEMENT

PLANNING IN WEST KITIKMEOT





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WEST KITIKMEOT RESOURCE MANAGEMENT PLANNING WORKING GROUP

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List of Abbreviations

Canadian Wildlife Service	CWS
Community Land and Resources Committee	CLARC
Department of Economic Development and Tourism, GNWT	DEDT
Department of Natural Resources	DNR
Department of Energy, Mines and Petroleum Resources	EM&PR
Department of Fisheries and Oceans	DFO
Department of Indian Affairs and Northern Development	DIAND
Department of Municipal and Community Affairs, GNWT	MACA
Department of Renewable Resources, GNWT	DRR
Department of the Environment	DOE
Department of Transport, Government of Canada	DOT
Department of Transportation, GNWT	GNWT DOT
Designated Inuit Organization	DIO
Environmental Assessment and Review Process	EARP
Federal Environmental Assessment and Review Office	FEARO
Government of the Northwest Territories	GNWT
Nunavut Impact Review Board	NIRB
Nunavut Planning Commission	NPC
Nunavut Tunngavik Incorporated	NTI
Nunavut Water Board	NWB
Nunavut Wildlife Management Board	NWMB
Prince of Wales Northern Heritage Centre	PWNHC
Surface Rights Tribunal	SRT
Tungavik Federation of Nunavut	TFN

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Foreword

In December of 1993, Nunavut Tunngavik Incorporated (NTI) was asked by the Minister of Indian Affairs and Northern Development to implement a resource management planning process for the West Kitikmeot region. NTI appointed the West Kitikmeot Resource Management Planning Working Group to carry out this task.

The mandate of the Working Group is to fully involve government, industry and the residents of the region, especially Inuit, in a planning process that will develop consensus around issues concerning future resource developments. The main focus of the work is on proposals concerned with:

- 1. the potential development of the Izok Lake deposit;
- 2. marine and terrestrial transportation routes;
- 3. other infrastructure development (i.e. hydro);
- 4. other resource development in the region;
- 5. conservation.

The identification of sites requiring clean-up was also given priority.

The Working Group is chaired by Bob Lyall and other members are David Mablick, Tongola Sandy, Robert Hornal, Edna Elias (replacing Joe Otokiak), Hal Mills, Jon Pierce and Arthur Boutilier. The Working Group met in December and agreed that it was essential to meet with representatives of all parties with a direct interest in the management of West Kitikmeot resources to determine their goals for the region.

In early February the Working Group held a workshop in Coppermine. Forty representatives from government, industry and the communities participated in a three day discussion of the resource management issues in West Kitikmeot, the various responsibilities of the stakeholders, and how various problems might be resolved.

The **Report on Resource Management Planning in West Kitikmeot** was issued by the Working Group at the end of March 1994. The report summarized the Group's reflections and suggested the outline of a research program and a plan of action to resolve the various issues and reach consensus on moving forward. It was distributed for review and comment to all participants in the Coppermine workshop and to other government and industry representatives. The Working Group then visited Coppermine, Omingmaktok and Cambridge Bay to present the report and to listen to community concerns about the report and the issues discussed in it.

This revised report attempts to incorporate comments received from residents of the region, government and industry. The Working Group will present the revised report at a workshop, scheduled for Cambridge Bay, June 14-16, 1994, which will again bring together representatives from government, industry and the communities. It is hoped that this workshop will see agreement on a process for dealing with the issues and concerns, and for continuing the development of a land use plan for West Kitikmeot.

The main recommendation of the revised report is that the Nunavut Planning Commission Transition Team should proceed, without delay, to develop a land use plan for West Kitikmeot region.

The Working Group notes that the Implementation Panel has already given the Nunavut Planning Commission Transition Team some direction on this point. (See Record of Decision, Implementation Panel, Appendix I)

In this light the Working Group has some confidence that the work suggested in this report will be carried out by the Transition Team and, later, by the Nunavut Planning Commission.

Chapter One: Background

The Region

The West Kitikmeot planning region stretches from the Viscount Melville Sound in the north to Contwoyto Lake in the south and from the Victoria Strait in the east to Bluenose Lake in the west (Figure 1). It covers almost a quarter million square kilometres of tundra, lakes and oceans, most of it north of the Arctic Circle.

The People

The region has been the home of Inuit since the ice retreated from the area some 5000 years ago. Inuit comprise the majority of the population. Most of the residents live in four communities with a combined population of 2,240 (Statistics Canada, 1991 Census). The two largest communities, Cambridge Bay (Ikaluktutiak) and Coppermine (Kugluktuk), have populations of 1,116 and 1,059 respectively. Bathurst Inlet (Kingaok) and Omingmaktok (Bay Chimo) are much smaller, with populations of 12 and 53.

Although Inuit society has experienced profound social, economic and cultural changes in the past century, and more particularly since the Second World War, use of the land and its resources remains essential to Inuit cultural and economic well-being.

Inuit in the region have recently finalized a land claims agreement with the federal government as part of the Nunavut Claim. Inuit have received surface and sub-surface ownership to a significant amount of land as well as enhanced rights to participate in the management of the land and resources of the entire region.



Renewable Resources

There is an abundance of wildlife in the region. Some of the most significant areas for wildlife are shown on Figure 2. There are important permanent populations of marine mammals such as seals, and terrestrial wildlife including Caribou, Muskoxen and Polar Bear. The region also provides very important habitats for migratory waterfowl, raptors, furbearers and whales. A variety of fish are found in abundance throughout the area.

The wildlife resources play a significant role in the region's economy. The availability of country food greatly reduces the cost of importing essentials from the South. Of prime importance is the abundance of caribou, the main food staple of residents. The calving-grounds of three caribou herds are in the region. The calving-grounds of the Bathurst herd are in the area around Bathurst Inlet, those of the Bluenose herd are in the extreme west of the region, and there are several calving areas on Victoria Island.

A commercial fishery in Cambridge Bay exports Arctic Char to the South. Before the collapse of the sealing industry in 1982-3, sealskin production was the major, non-government source of community income.

Tourism is growing in economic importance. In spite of high transportation costs, a number of tourist lodges and camps are operated in the region. Sports hunting, and fishing, and wildlife viewing are popular activities with visitors. The Coppermine, Hood and Burnside Rivers are becoming popular with canoeists. The Tree River is designated as a Char trophy river. The level of tourism ship traffic is on the rise and there is concern about the possible use of ice-breaking ships for tourism.



Non-Renewable Resources

The West Kitikmeot region has a high potential for mineral development, more particularly, in the mainland area from Kent Peninsula in the east to Bluenose Lake in the west and south to the region's boundary. There exist several known medium to large deposits of base metals such as copper, zinc, and lead and several sizable gold deposits in addition to the Lupin deposit currently under production (see Figure 3). Some of these deposits are actively being considered for development as mines. Uranium occurrences are also present in this area. In recent years much of this area has been staked by diamond prospectors.

Inuit around Coppermine have used native copper for centuries. From Samuel Hearne's expedition in search of copper, to the present, a significant amount of mineral exploration has occurred in the region. In the past, a small mine operated briefly at Hope Bay and, at present, on the southern edge of the region, Lupin Mine is producing gold at Contwoyto Lake. Employees at the mine, a number of whom come from Coppermine and Cambridge Bay, work two weeks at the minesite and then are flown out for two weeks on a year round basis. In recent years the interest of mining companies in the area has increased and a number of properties are currently being assessed for their development potential.¹ 1993 witnessed record levels of staking, prospecting and diamond drilling and the level of activity appears to be increasing this year.

It is possible that a number of deposits could be developed as mines in near future. Technically, the major limiting factor in the development of new mines is the cost of transportation and energy.

'NWT Chamber of Mines



Transportation

Transportation to West Kitikmeot communities is by air year-round, and by water during the short summer shipping season when the communities are re-supplied by barge. There are no regional all-weather roads at present. A winter road supplies fuel and other bulk supplies to Lupin Mine from the south. Winter roads have also been built on occasion from Lupin westward to Izok Lake and northwest to allow supplies to be moved to mineral exploration camps.² Air transport means high costs, not only for residents, but for government and industry. The lack of infrastructure means that electricity, entirely diesel-generated, and fuel are expensive.

²NWT Chamber of Mines; GNWT DOT

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Chapter Two: Planning Issues

The Environment, Renewable Resources, and Conservation

The region's renewable resources, through such activities as the commercial harvesting of fish and wildlife, provide significant benefits at present. These benefits should be protected and enhanced. Tourist lodges also rely on a clean environment and healthy wildlife populations.

All agencies with responsibilities in this area were asked to provide up to date information on the status of the environment and renewable resources, and on environmental issues related to potential developments in the West Kitikmeot. Information received to date is included in this revised report, but submissions from some departments are still being prepared.

The following information on Victoria Island caribou is being included now because community representatives have already expressed their concerns about the possible impact of Coronation Gulf shipping on caribou migrating between Victoria Island and the mainland.

There are two types of caribou on Victoria Island. Caribou on the extreme north-west corner of the Island (Minto Inlet herd) are similar to Banks Island Peary caribou, whereas those on the rest of the Island are similar to barren-ground caribou of the mainland. Hunters and biologists have several concerns about Victoria Island caribou. First, there is no good population estimate upon which to evaluate the present harvest. Second, Holman hunters will be shifting their efforts from the Minto Inlet herd (which seems to have dramatically declined since 1987) to other Island caribou. And third, Island caribou are resuming a migration pattern of moving to the mainland for the winter which was last seen in the late 1920's. A substantial but unknown number of Island caribou are killed on the mainland by hunters from Omingmaktok and Coppermine.

During community consultations, Omingmaktok hunters noted changing patterns of caribou migrations between the mainland and Victoria Island during their lifetimes. In the 1950s there were few if any caribou on Victoria Island, whereas now there is a large annual migration. Other animals, such as grizzly bears and wolverines are migrating as well, probably following the caribou. Figure 4 maps current thoughts on the location of calving areas on Victoria Island, the winter distribution of animals, and the spring movements from the mainland. The return migration over-ice to the mainland is thought to occur in November. Renewable Resources initiated a 5-year research program in 1993 to determine calving areas, the number of animals in each population, the location and number of animals harvested, and caribou movements. One objective is to better understand movements to and from the mainland to ensure that commercial shipping does not interfere with the migration. Conventional VHF collars and low level flights along Coronation Gulf will be used to better understand these movements.

In addition, the Kitikmeot HTA is undertaking a study to determine the extent of the harvest of Victoria Island caribou and the extent of the range of Victoria Island caribou. The project would be in support of community management plans for caribou, and would include an effort to document traditional knowledge of Island caribou, their habits and characteristics as noted by harvesters. Work on the project will be completed in March 1995.

The Holman Island, Coppermine and Cambridge Bay HTA's have reached an agreement under which Holman will temporarily suspend the hunting of Peary caribou. Coppermine and Cambridge Bay hunters are carrying out a commercial harvest to supply Holman residents with caribou meat.

At community meetings people have expressed concerns about the impacts of mineral exploration on wildlife. Specific concerns were raised about the disturbance of caribou by the noise from low flying helicopters. It was suggested at a meeting in Omingmaktok that exploration activities should be stopped during the caribou calving season.

It may be desirable for development activities to be restricted within important calving areas during calving season. It is recommended that the Nunavut Planning Commission Transition Team should investigate whether the implementation in Kitikmeot of caribou protection measures, similar to those in force in Keewatin (see Appendix III), is necessary or desirable at this time.



FIGURE 4 : **CARIBOU CALVING AREAS**

The only established conservation area in the region is the Queen Maud Bird Sanctuary which straddles the eastern boundary of the region. Federal and territorial departments and agencies have made a number of proposals to establish various types of protected areas in a variety of locations. Parks Canada at one time considered the Bathurst Inlet area to be eligible as a National Park. Currently they are proposing an area to the west, around Bluenose Lake and north to the Arctic Coast. The Coppermine and Back Rivers are under the initial stages of consideration for designation as Heritage Rivers. The Department of Renewable Resources considers the calving grounds of the Bluenose and Bathurst herds to be critical wildlife areas. The International Biological Program has identified three sites in the region as areas of significance: the Islands of Dolphin and Union Strait, the Bathurst Inlet area, and area of the Queen Maud Bird Sanctuary.

The size and boundaries of the Queen Maud Gulf Bird Sanctuary is under review. CWS is presently finishing a remote sensing inventory of habitat within the Sanctuary for nesting waterfowl. This information will then be used to make recommendations on the present boundary location based on wildlife distribution and abundance within the Sanctuary and the distribution of important habitat. Completion of this report is scheduled for late 1994 or early 1995.

There was general consensus at a community meeting in Coppermine that the community would like to examine all of the conservation options available for the Bluenose Lake area, one of which would be the establishment of a national park. It was felt that a separate workshop or special session at a general planning workshop should be held in the fall where all of these options could be explored by the community at large.

It is recommended that the Nunavut Planning Commission Transition Team, in conjunction with the Nunavut Wildlife Management Board, examine all existing proposals to establish new conservation areas within the region in the context of preparing a regional land use plan.

Environmental degradation has occurred in the region and while some corrective measures have been initiated, more are needed to remedy the situation. Garbage on the land should be cleaned up as should all toxic waste sites, abandoned camps, abandoned Dew line sites, hunting camps and shacks. Contwoyto Lake and its watershed should be examined for water contamination. At community meetings, several specific sites have been identified. At a meeting in Coppermine a number of people commented on the amount of refuse left at numerous sites in the Hope Lake area. People from Omingmaktok are concerned about a site on Arctic Sound where there is a lot of refuse from an old camp including trucks and dynamite; a site on Galena Island contains a lot of metal debris, old stoves and barrels; barrels used for helicopter refuelling litter a site on Chapman Island. People from Cambridge Bay discussed various problems they saw with the land use activities associated with the North Warning System Bases and the old Dew Line Bases including garbage left behind and inadequate restoration of sites; concerns about land degradation caused by the use of tracked vehicles by personnel from the base outside of Cambridge Bay was specifically mentioned.³

It is recommended that the Nunavut Planning Commission Transition Team prepare a detailed catalogue of all known contaminated sites as a first step in cleaning-up these sites. Reference is made to Section 11.3.2 of the Nunavut Final Agreement (Appendix II). The information collected would include location, description, responsibility, priority (degree of hazard), and options for cleanup. DIAND has prepared a preliminary catalogue of such sites.

It was also pointed out in Coppermine that the problem of garbage and refuse being left on the land comes not just from mining exploration activities or other activities by 'outsiders' but from community residents as well. Rules are needed to control garbage and waste at camps used by residents.

It is recommended that the Nunavut Planning Commission Transition Team should investigate the need for additional measures to prevent new occurrences of pollution, garbage and contamination and to encourage all land users to follow a code of good conduct for land use practices.

Individual development activities may have little effect on the environment, while the cumulative effects of many activities may be significant. However, there is insufficient baseline information available for the West Kitikmeot from which to assess cumulative effects, and procedures for determining the significance of cumulative effects have yet to be established. A recent workshop on "Cumulative Effects of Development in the Slave Geological Province" identified a number of issues that must be resolved before it can be confidently stated that

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¹Community meetings May 4 th and 5th, Umingmaktok and Cambridge Bay. The Cambridge Bay CLARC would like to discuss the latter matter in more detail at the workshop in June.

environmentally sound development is occurring in the region. It is recommended that the Nunavut Planning Commission Transition Team encourage the appropriate agencies to resolve the issues preventing accurate cumulative environmental effects assessment.

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Mineral Development

West Kitikmeot has a high potential for mineral development, which could make a significant contribution to the regional economy. A good part of the region, on the Arctic mainland south of Coronation Gulf, is in the Slave Geological Province, an area now undergoing extensive mineral exploration.

The best known mineral deposit in the region was put into production in 1982 as the Lupin Mine, a gold mine. A smaller mine, the Hope Bay silver mine, operated intermittently between 1973 and 1975. Many additional precious and base metal deposits are within the Slave Province, the most significant of which are shown on Figure 3. Base metal discoveries include Izok Lake (a zinc, lead, copper and silver deposit), Hackett River, High Lake, Yava, Hood River and Musk. Gold discoveries include the Ulu, Boston, George Lake, and the Arcadia or Canuc deposits. There are also mineral showings outside of the Slave Province, such as the copper and uranium deposits to the south and west of Coppermine, and base metals in the Minto Arch on Victoria Island.

This development potential introduces a number of planning issues related to: the impact on renewable resources of region (such as caribou); the impact on the environment; the potential impact of transportation corridors required to support mineral development; and the social and economic impacts and benefits for Inuit of the region. Other issues specifically relate to the particular development of each new mine such as the siting of mine buildings, tailings ponds, airstrips and other infrastructure.

The Working Group recognized the need for adequate baseline information concerning the environment and renewable resources of the region in order to conduct an initial evaluation of development proposals as they arise. It is recommended that the Nunavut Planning Commission Transition Team undertake the preparation of an integrated resource management database for West Kitikmeot.

The Kitikmeot Inuit Association has been designated by NTI as the DIO responsible for negotiating socio-economic agreements for proposed development projects in the region. This will lead to the negotiation, among other matters, of Inuit employment at each new mine and the preferred type of employment for all mine workers.

It is recommended that the Nunavut Planning Commission Transition Team investigate

- a) measures necessary to provide for the restoration of abandoned exploration camps following, where possible, the principal of "The polluter pays."
- b) measures necessary to ensure that mining developments include plans for the mine closure and restoration of the site.
- c) measures to encourage the mining industry to continue to participate in identifying carving-stone deposits.
- d) measures, such as hunting restrictions for employees at development projects such as mines, to reduce the local impact on wildlife.

Transportation and Regional Infrastructure

In the past few years a number of proposals have arisen from government and industry that would see major changes to the existing transportation system.

Land Transportation

In 1990, the Government of the Northwest Territories proposed the construction of an all-weather road from Yellowknife to the Arctic Coast near Bathurst Inlet or, alternately, to Coppermine (Figure 5a; GNWT 1990b).

FIGURE 5a: PROPOSED TRANSPORTATION ROUTES, 1990



A more recent report (GNWT 1993) has proposed a transportation corridor linking Yellowknife with the Arctic Coast that eventually would see the construction of an all-weather road. The suggested route would link Yellowknife with the Lupin mine (along the existing winter road route), Lupin with Izok Lake, and Izok Lake to a port site situated near Coppermine (see Figure 5b). The rationale for these proposals has included the expected stimulation of mineral production and of new tourism activities and the anticipated reduction in transportation costs for communities in the region.

FIGURE 5b: PROPOSED TRANSPORTATION ROUTES, 1993



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The mining industry has also proposed the development of new transportation infrastructure. In 1991 the NWT Chamber of Mines suggested a network of winter roads (capable of being up-graded to all-weather roads in the future) connecting a number of mineral deposits (NWT Chamber of Mines 1991). In 1993 the Chamber suggested an all-weather road along a routing similar to that of the most recent GNWT proposal (NWT Chamber of Mines 1993). Most recently, the Chamber has suggested that various route options be considered, but that one running almost directly north from Izok Lake to the Arctic Coast would appear preferable since it would allow access to greenstone belts in the region.⁴

Metall Mining Corporation is pursuing a proposal to develop and operate a new mine near Izok Lake and to connect it with winter roads to the existing Lupin mine at Contwoyto Lake and to a new port facility at Maligut about 22 km (14 miles) east of Coppermine. In March 1994, Metall announced a "delay in the construction and production decision," citing as reasons, in part, the high infrastructure costs of the road and port facilities. Metall is of the opinion that the Izok mine, by itself, could not support a winter road and port as currently proposed.

As noted above, a number of concepts or proposals have been suggested for the routing of winter roads and/or seasonal roads. There are two major categories under which a number of issues are grouped: location of a transportation corridor (or corridors) and leadership.

With respect to location, there seems to be two points of general agreement. First, to the south, the corridor should connect with the existing terminus of the winter road from Yellowknife to Lupin mine at Contwoyto Lake. Second, that the terminus to the North should access tidewater.

In terms of planning, what this means is that the southern terminus is fixed, while the northern end could be located anywhere within the region on the Arctic Coast or even Bathurst Inlet. Except for the winter road route from the Izok deposit to the Arctic Coast near Coppermine, it appears that little detailed work has been done to investigate potential corridors. Comments have been made that if the corridor was to be established along the Izok-Coppermine winter road, lateral routes would be necessary to connect other mineral deposits in the region since most

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^{*}NWT Chamber of Mines

of these lie to the east much nearer to Bathurst Inlet. The length of the laterals required could argue against their feasibility.

The second category points to the confusion as to who is taking, or who is to take the leadership role in determining the location and feasibility of such a transportation corridor. The GNWT is currently coordinating the relatively large number of diverse interests supporting this development, but even if the GNWT is successful in gaining political approvals and securing financing, consensus might break down over the actual location of the corridor.

The March report contained the following paragraph: "It is recommended that the Nunavut Planning Commission Transition Team form a working group consisting of appropriate representatives from Inuit, the mining industry and the territorial and federal governments to undertake a transportation corridor study. This study should determine the location of a winter road or all-weather road corridor or corridors. Issues surrounding the possible use of the roads by hunters and the impacts on wildlife must also be investigated. Other issues should also be considered such as potential charges to use a road."

The GNWT Department of Transportation has responded that "details such as route location or infrastructure financing should not be included in a land use planning exercise. Also....infrastructure planning and financing in the West Kitikmeot is currently being studied by the territorial government under the guidance of the Slave Province Mining Development Steering Committee which consists of representatives from the territorial and federal governments, the mining industry, business and aboriginal groups including the Kitikmeot Inuit Association."⁵

The Working Group agrees with the suggestion that matters concerning the financing of infrastructure required for a transportation corridor are not matters appropriate to a land use plan. The Working Group will remove reference to considering potential charges to use a road.

Concerning the suggestion that the location of a transportation corridor, as opposed to a specific route within the corridor, should not be included in a land use planning exercise, the following sections from the

'GNWT DOT

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Nunavut Final Agreement (also attached as Appendix 2) are relevant to the issue:

- 11.2.3In developing planning policies, priorities and objectives, factors such as the following shall be taken into account:
 - (a) economic opportunities and needs;
 - (b) community infrastructure requirements, including housing, health, education and other social services, and transportation and communication services....
- 11.3.1A land use plan shall be a document containing text, schedules, figures and maps for the establishment of objectives and guidelines for short-term and long-term development, taking into account factors such as
 - (d) transportation and communication services and corridors;

The Working Group therefore believes that the proposed location or locations of one or more transportation corridors should be an important consideration in the preparation of a land use plan for West Kitikmeot. The Working Group is not alone in this opinion. Metall Mining Corporation, in its response to the March report, has strongly recommended that the Working Group identify the transportation corridor as its primary task, while pointing out that the Honourable John Todd has already proposed a working group to undertake a transportation corridor study. It is apparent that there exists some agreement as to the necessity and the objective of a corridor study. The question that remains is how it should be done and by whom.

In order to complete a land use plan for West Kitikmeot the Working Group believes that such a study is necessary. The study should examine such alternatives as route alignments, and questions of all-weather or winter only use. These alternatives should be reviewed during the land use planning public consultation process. Finally, recommendations should be included in the West Kitikmeot land use plan on the alignment of the transportation corridor and on measures required to minimize impacts on the wildlife and environment of the region. The Working Group therefore requests that the Department of Transportation present its plans for undertaking a transportation study to the workshop in Cambridge in June. Discussion should then take place concerning the integration of this process with the land use planning process.

Marine Transportation

As part of a development strategy for West Kitikmeot, several suggestions have been made that would see the development of a port (or ports) on the Arctic Coast. The location of any port is dependent on finding a suitable development site that is accessible to ships of an adequate size during a shipping season of sufficient duration and that could be linked by roads (all-weather or winter) to mines in the interior.

A study was undertaken by Canarctic (Canarctic 1993) to analyze certain of these factors. Three potential shipping routes to Coronation Gulf were considered: a western route via Amundsen Gulf and the Beaufort Sea, to points west; and northern and southern routes to Lancaster Sound and points east (see Figure 6). The study analyzed the main constraints facing shipping to Coronation Gulf, including the presence of sea ice, navigable water depths and environmental impacts. As a partial result of the study, the northern route was rejected.

There are a number of issues regarding the impact of shipping on people and wildlife. Vessel traffic could affect marine mammals in two ways: by physically impinging on individuals, both in open water and while breaking ice, and by interfering with their sound production and hearing.

Vessels can present a hazard for marine mammals in their path, particularly slower moving whales, and occasional collisions might be expected. Vessels also can exert detrimental effects on animals inhabiting close pack ice or fast ice. The species that would be most frequently encountered is the ringed seal. The most serious effect would occur in the spring from physical impacts with birthing lairs. The authors of the "Integrated Route Analysis" (Petro-Canada 1981) for the Arctic Pilot Project estimated that a maximum of 1% of the ringed seal pups born in Parry Channel could be destroyed by the two proposed LNG tankers.



> Abundoned due to ice conditions

Ship noise could affect marine mammals in two ways: it could cause high levels of disturbance which might result in detrimental changes in behaviour, and it could increase the ambient noise level to the point where vocalisations were masked, and communication and echolocation were interfered with. The actual effects are difficult to evaluate since little is known about the behavioural context of the species which could be affected. However, increased vessel traffic noise could have some effect on ringed seals in the West Kitikmeot, and on a broader range of marine mammals outside the planning region.

Inuit in West Kitikmeot have well established over-ice travel routes linking communities with hunting areas, outpost camps, and other communities. At this point in time little commercial shipping takes place in the region through ice-covered waters. The communities are concerned that an extension of the shipping season using commercial icebreakers could disrupt normal over-ice travel, and possibly create a safety hazard.

Icebreaking by a commercial vessel leaves a "ship track" filled with broken rubble which generally refreezes into a visibly thicker and rougher ice formation. Depending upon local conditions Inuit may be able to cross over ice fragments in the track, or they may have to wait for it to refreeze. The time required for tracks to refreeze depends upon air temperature, and there is a possibility that tracks in spring may not refreeze at all. There is one documented case (near Arctic Bay) where a spring track allegedly cut loose an entire section of landfast ice, stranding hunters at the floe edge. Aside from temporary travel disruptions, there are serious concerns about the potential loss of people, equipment and caribou through ship tracks.

Figure 7 maps significant over-ice travel routes in West Kitikmeot and the neighbouring region in 1992. With respect to potential marine transportation routes to a Coronation Gulf port, there are 4 key areas where travel routes would cross ship tracks: in the vicinity of Dolphin and Union Strait where people from Coppermine regularly cross to outpost camps on Victoria Island; through the Duke of York Archipelago along the lengthy route connecting Coppermine to Cambridge Bay; through Dease Strait on frequently used routes linking Omingmaktok and Bathurst Inlet to Cambridge Bay; and across hunting routes in the vicinity of Jenny Lind island.



Some industry consultants have documented factors mitigating against potential impacts on human over-ice travel, and concluded that a ship track does not represent an obstacle or hazard to over-ice travel (Canarctic 1992). However, community representatives at the February 1994 Workshop on Resource Management Planning for the Kitikmeot West region strenuously objected to this conclusion, using their own knowledge and experience to state that their concerns are valid and must be addressed.

During community consultations in May 1994, all communities clearly stated that they do not want shipping through Coronation Gulf after ice forms in the autumn. Their concerns relate to caribou migrations and travel routes used by residents.

In recent years there have been three comprehensive reviews of potential problems related to shipping in Arctic waters, tanker traffic, marine spills, and vessel traffic management. The Beaufort Sea Environmental Assessment and Review Process (BEARP) Panel Report was issued in 1984, the final report of the Public Review Panel on Tanker Safety and Marine Spills Response Capability was issued in 1990, and the Lancaster Sound Regional Land Use Plan was issued in 1991. The second report summarised "all previous reviews" of concerns about Arctic vessel traffic, including:

- a) the effects of shipping on wildlife, including the effects of noise, physical injury from passing tankers, and human (tanker) presence.
- b) the fact that tanker courses, in certain seasons, would intersect Inuit cross-ice travel routes.
- c) the possibility of tankers affecting break-up timing by opening artificial leads in the ice, thus affecting wildlife migration patterns and local climate.

b) that the present Vessel Traffic Management system be made mandatory for all vessels which enter Canadian Arctic Waters. (Note: the Arctic Canada Traffic System of the Canadian Coast Guard presently monitors all vessel traffic north of 60 degrees from its seasonal base in Iqaluit.⁶)

The Public Review Panel on Tanker Safety and Marine Spills Response Capability made the following recommendations relevant to oilspill response in the region:

- a) In order to facilitate response, the federal government provide a dedicated oilspill monitoring and clean-up vessel for operation during each Arctic shipping season. (Note: the Canadian Coast Guard Northern is currently developing a comprehensive oil spill response plan, and identifying suitable dedicated response vessels.⁷)
- b) In order to enhance local response capability, the Canadian Coast Guard ensure that Arctic communities where oil is handled be supplied with oilspill containment and clean-up packages, and that sealift communities be equipped to handle a spill consistent with the worst-case scenario. In order to improve response times, Arctic response equipment, including life support equipment, be relocated to the Arctic and regional depots be established for rapid deployment to spill locations.

It is recommended that during the preparation of a West Kitikmeot Regional Land Use Plan the following issues should be analyzed and resolved:

- a) the ability of hunters to cross the ship's track where over-ice travel routes intersect the ship's path;
- b) the effect of the ship's transit on the timing and pattern of ice break-up and related effects on local over-ice travel;
- c) the effect of ship noise and icebreaking on distribution of whale and seal populations and associated hunting activities;

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- d) the ecological effect of underwater noise on marine mammal populations in the Coronation Gulf;
- e) the effect of ship tracks in consolidated ice on inter-island caribou movement;
- f) the effect of ship operations, particularly accidental spills, on wildlife and waterfowl in the region;
- g) the location of port(s) and the implications for community and regional development;
- h) the length of the shipping season and the seasonal impacts on Inuit and wildlife;
- i) the cumulative impacts of shipping (i.e. number of transits);
- j) communications between ships, ship companies, and hunters;
- k) the potential use of ship monitors; and
- the need for a regional shipping advisory committee made up of representatives from Coast Guard, the communities and the shipping industry to exchange information about ship movements and community concerns.

Regional Infrastructure

In 1993, the Northwest Territories Power Corporation evaluated potential hydro developments that could provide energy to the mining industry. Some of the potential hydro developments are south of the planning region on the Snare and Lockhart rivers, while two are within West Kitikmeot on the Coppermine and Hood rivers. The Rocky Defile site is on the Coppermine, about 145 km from the mouth and 10 km upstream from the confluence with the Kendall River. It has the potential to produce 397.3 GWh average annual energy. The Wilberforce Falls site is on the Hood River, about 5 km from the mouth of the river on Bathurst Inlet. It has the potential to produce 228.6 GWh average annual energy (Northwest Territories Power Commission 1993). Development of the hydro potential at these sites could have environmental impacts of several different types, including: impacts from the construction of the facility and the filling of the reservoir; impacts on the downstream ecology (habitat and wildlife) from the changes to the flow regime; and impacts related to transmission corridors.

The Northwest Territories Power Corporation also evaluated a potential hydro development at Bloody Falls on the Coppermine River to the south of Coppermine. The study concluded that development at the site was not economically viable.

It is recommended that analysis of the present hydro potential of the West Kitikmeot region be included in the preparation of a regional land use plan.

The demand of communities for adequate gravel supplies is often difficult to meet in the Arctic. This issue is especially important for Coppermine where gravel is relatively difficult to access and expensive to obtain. The regional land use plan should identify gravel sources, outside of community boundaries, that may be required for future community use.

Heritage Resources

The regional plan should identify archaeological and historic sites and ensure that they are adequately protected. A comment at a meeting in Coppermine was that the Inuit Heritage Trust should contact the Community Land and Resource Committee (CLARC) before issuing an archaeological permit.

It is recommended that the Nunavut Planning Commission Transition Team, working with regional and community people, locate on maps all known archaeological sites.

It is recommended that the Nunavut Planning Commission Transition Team investigate its relationship and that of the CLARCs with the Inuit Heritage Trust.

Tourism

More and more tourists are visiting the West Kitikmeot. While tourists are welcome and few problems have occurred that warrant attention in a land use planning exercise, a few concerns have been expressed at community meetings. People in Coppermine are concerned that with the increased use of the Coppermine River by canoe campers, the potential increases for garbage being left on the land and environmental degradation at heavily used campsites. Similar concerns were expressed at a community meeting in Cambridge Bay about the mess that some canoeists recently left on the Surrey River. It was suggested that it may be time to institute better controls over the activities of such visitors. In Cambridge Bay it was suggested that tourists should contact the CLARC before venturing onto the land.

Concerns were also expressed in Cambridge Bay about the increased use of the Northwest Passage by tourist ships, the removal of artifacts by tourists from these ships, and the anticipated use of nuclear-powered ships.

It is recommended that the NPCTT investigate whether land use controls, a code of good conduct for land use practices, or both are needed for tourists who are land users. NPCTT should also investigate the present and anticipated use of the Northwest Passage by tourist ships.

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Scientific Research

In general, concerns exist that a better consultation process for land use be developed by government, the communities and the scientific community. The communities, at present, have problems responding adequately to scientific and land use permit applications, and residents often feel they are not informed of what is happening on the land. There is a perception that the results of scientific research are not being sufficiently communicated to residents.

It is recommended that the Nunavut Planning Commission Transition Team investigate measures to ensure that

- a) the approval process for all scientific research, including research conducted by government departments and agencies, require the involvement of local residents.
- b) research programs conducted in the West Kitikmeot rely on local services and local employment where possible.
- c) all scientific researchers communicate with the communities in clear, non-technical language in Inuinnaqtun and English and that scientific researchers communicate the results of their research to the communities.
- d) academic and scientific researchers should consider the research priorities of residents in the design of their research programs.

Chapter Three: Responsibilities

Part of the following summary of responsibilities has been borrowed, in a modified form, form the 1991 Keewatin Regional Land Use Plan. However, the responsibilities of agencies have changed since the Plan was written through government reorganization and the Nunavut land claim settlement. All agencies are asked to review their responsibilities in this light and provide the Nunavut Planning Commission Transition Team with updated information and comments. Submissions received to date are included in a separate volume that accompanies this report.

Local Authority

Within Municipal Boundaries

All of the Kitikmeot communities have Hamlet Councils which are largely responsible for land use within their municipal boundaries.

The Councils are assisted by the GNWT Department of Municipal and Community Affairs (MACA) in developing strong and responsible local governments and in facilitating community planning for future community development and services. As well MACA administers Commissioner's lands inside and outside of community boundaries.

Outside Municipal Boundaries

Each regulatory or management agency has some requirement to consult with or inform communities about current and planned activities. Often the point of contact is the Hamlet Council. Government agencies concerned with the management of fish and wildlife resources actively consult with the Hunters and Trappers Associations.

NTI and the Kitikmeot Inuit Association are responsible for implementing a land claim agreement with the federal government. This agreement includes matters of Inuit land ownership and greater participation in the management of all land and resources. KIA manages the surface of Inuit Owned Lands in the region while NTI manages the subsurface (mineral) rights.

The Environment, Renewable Resources, and Conservation

DIAND is the principal manager, on behalf of the federal government, of land, water and non-renewable resources in West Kitikmeot. Although this is now changing with the settlement of land claims and further political development, currently DIAND has the overall responsibility for managing land and resources and for coordinating other federal agencies with management interests. Commissioner's Land, which is for the most part the land within municipal boundaries, is the responsibility of the GNWT.

DIAND uses a number of tools to manage the land including land use permits, quarrying permits and surface leases. In conjunction with the Northwest Territories Water Board, the department administers water use licenses. DIAND also directly regulates mineral exploration and development, and issues permits for oil and gas exploration and development. The Arctic Waters Advisory Committee, which has members from the federal and territorial governments and Aboriginal groups, provides advice to DIAND on the environmental consequences of marine industrial activities in arctic waters.

The Department of the Environment (DOE) has a general mandate for managing and enhancing the environment. Four agencies within DOE have specific responsibilities: Environmental Protection (EP) is responsible for protecting the environment through the Canada Environmental Protection Act and section 36 of the Fisheries Act (see paragraph below concerning the Department of Fisheries and Oceans (DFO); the Canadian Wildlife Service (CWS) is responsible for conserving migratory birds and endangered wildlife in Canada, and managing Migratory Bird Sanctuaries and National Wildlife Areas; The Atmospheric Environment Service is responsible for providing climatological data for planning purposes, and observations and forecasts of weather, ice, sea state and air quality.

The federal Minister of the Environment is also responsible for the federal EARP, an interdepartmental and intergovernmental screening and evaluation process. EARP is a self assessment process in which proponents of any proposals involving federal lands or monies or jurisdictions subject their proposals to environmental screening and evaluation. DIAND and other licensing agencies help meet their EARP responsibilities through committees such as the Lands Advisory Committee and the Regional Environmental Review Committee. DFO assesses proposals to determine their acceptability under the Fisheries Act.

A proposal with potentially significant environmental effects may be subjected to a full public review coordinated through FEARO. This process will be modified when the Canadian Environmental Assessment Act takes effect.

DFO is responsible for managing and protecting fish and marine mammals and their habitats. This is achieved through the Fisheries Act which contains provisions to protect fish habitat and to prevent pollution of habitat (the latter responsibility is administered by DOE on behalf of DFO) and through EARP.

Several federal agencies are responsible for regulating pollution of arctic waters through the Arctic Waters Pollution Prevention Act. These include the Department of Transport (DOT) for shipping activities and DIAND for non-shipping activities. The NEB and DIAND regulate pollution from offshore oil and gas exploration and development.

DOT is responsible for regulating the transport of dangerous goods. A number of federal and territorial agencies have responsibilities for preventing, containing and clean-up of spills of hazardous substances on land and water. These include DOT, DIAND, EP and NEB on federal lands and the GNWT on Commissioner's Land.

DOE is responsible for managing migratory birds; the GNWT Department of Renewable Resources (DRR) manages, regulates and encourages the sustainable use of all other wildlife species.

The GNWT Department of Economic Development and Tourism (DEDT) is responsible for promoting economic activity in the renewable resources sector including interests in territorial parks and lodge and outfitter activity. DEDT administers a number of acts and regulations guiding these activities including the Territorial Parks Act, the Travel and Tourism Act, the Tourism Establishment Regulations and the Outfitter Regulations.

The Nunavut Final Agreement (Tungavik and Department of Indian Affairs and Northern Development 1993) provides for the establishment of cooperative institutions of public government to fulfill land and resource management functions related to wildlife management, land use planning, environmental assessment, and the management of water. The Agreement also describes the functions, structures and interrelationships of these institutions.

The Nunavut Wildlife Management Board (NWMB) has been established subsequent to the ratification of the Agreement and is now operational. It is a cooperative institution of public government consisting of four members appointed by Designated Inuit Organizations (DIOs), four members appointed by government, and a Chairperson appointed from nominations provided by the NWMB. It is the main instrument of wildlife management in the Nunavut Settlement Area and the main regulator of access to wildlife. The NWMB has discretionary powers related to the management and protection of wildlife and wildlife habitat and the direction of wildlife research. The NWMB may establish wildlife reserves and protection programs.

The Nunavut Planning Commission (NPC) will be a cooperative institution of public government with responsibilities and powers relating to the planning and regulation of land use in the Nunavut Settlement Area. It will be established by the second anniversary of the date of ratification of the Agreement, 9 July 1995. The size and makeup of the membership of the NPC may vary, but the federal government and the territorial government will each recommend at least one member and the DIO will nominate a number of members equal to the total number recommended by government. A further member will be appointed as Chairperson from nominations provided by the NPC. The Implementation Contract (Department of Indian Affairs and Northern Development 1993) provides for a NPC Transition Team with funding to lay the groundwork for the establishment of the NPC.

The Nunavut Impact Review Board (NIRB) will be a cooperative institution of public government with responsibilities generally for the environmental assessments of projects in the Nunavut Settlement Area. It will be established by the second anniversary of the date of ratification of the Agreement, 9 July 1995. NIRB will be composed of nine members, four appointed upon nomination by the DIO, four from government, and a Chairperson appointed from nominations provided by NIRB.

The Nunavut Water Board (NWB) will be a cooperative institution of public government with responsibilities and powers over the regulation, use and management of waters in the Nunavut Settlement Area. It will be established by the second anniversary of the date of ratification of the Agreement, 9 July 1995. NWB will be composed of nine members, four appointed upon nomination by the DIO, four from government, and a Chairperson appointed from nominations provided by NWB.

The Surface Rights Tribunal (SRT) will be cooperative institution of public government which the DIO has a right to require government to establish and maintain. It was to be established six months after the ratification of the Agreement. Its responsibilities include

- a) issuing entry orders subject to the payment of an entry fee;
- b) holding hearings to determine compensation payable to surface rights holders;
- c) periodically reviewing the level of compensation payable under an entry order;
- d) terminating an entry order, after a hearing, where lands are no longer being used for the purpose authorized; and
- e) settling disputes for claims for wildlife compensation.

Mineral Development

DIAND currently has the major responsibility for managing mineral exploration and development, subject to the environmental protection responsibilities outlined above.

NTI has an important new role in managing mineral exploration and development on Inuit Owned Lands with subsurface rights.

The transfer of many DIAND responsibilities to the GNWT Department of Energy, Mines and Petroleum Resources (EM&PR), and then to the Nunavut government, will reduce DIAND's role in the next few years.

DIAND is responsible for issuing prospecting permits, registering mineral claims and mineral leases on Crown land.

NTI is responsible for issuing exploration licenses, and concession agreements and leases on Inuit Owned subsurface lands. The Kitikmeot Inuit Association is responsible for issuing Inuit land use permits, leases, and other surface instruments as they pertain to the surface estate of Inuit Owned Lands. The Canada Oil and Gas Lands Administration (COGLA) was, until recently, responsible for managing oil and gas exploration and development, on behalf of the Minister of Indian Affairs and Northern Development, in the West Kitikmeot. As of April, 1991, the personnel of COGLA have been assigned to DIAND, DNR and the National Energy Board. Responsibility for the regulatory approvals associated with oil and gas exploration and development is now being administered by the NEB, on behalf of the Minister of DIAND for West Kitikmeot activities.

The GNWT has assumed many of the DIAND responsibilities outlined above for Commissioner's Land. DEDT has a specific program dealing with carving-stone supply.

Heritage Resources

All archaeological sites are protected by legislation which is currently under review by the Department of Canadian Heritage.⁸ The Prince of Wales Northern Heritage Centre (PWNHC) issues archaeologists permits to qualified individuals to conduct investigations of archaeological sites which may include the systematic recovery of artifacts. It is also responsible for investigating, recording, and salvaging sites prior to development. PWNHC also reviews all federal land use permit applications and advises DIAND on conditions necessary to preserve archaeological sites within the permit area.

The Inuit Heritage Trust is to be established by NTI before 9 July 1994. The Trust will assume increasing responsibilities for supporting, encouraging, and facilitating the conservation, maintenance, restoration and display of archaeological sites and specimens in the Nunavut Settlement Area, in addition to other responsibilities set out in the Final Agreement.

Parks Canada is responsible for establishing and managing national historic sites and monuments. DEDT has the mandate to establish

^{*}Parks Canada, Yellowknife

territorial historic parks. Parks Canada administers the national secretariat for the Canadian Heritage Rivers Board, while responsibility for the Heritage Rivers program in the NWT falls jointly to DIAND and DEDT.⁹

Transportation and Regional Infrastructure

The responsibility for Arctic shipping, marine spills, and the quality of the marine environment is shared among a number of Federal departments, including DIAND, DOE, DFO and the Coast Guard. The "lead-role" varies depending upon the issue being addressed (Lamson and Vanderzwaag 1988).

DOT is responsible for developing and operating a safe and efficient national transportation system and has a particular mandate to regulate air and marine transportation in the North.

The GNWT DOT is responsible for the reconstruction, operation and maintenance of highways and community wharves. The responsibility for the majority of community airports has been transferred to the GNWT DOT. The GNWT DOT prepared a transportation strategy for the NWT in 1990. This strategy is presently being updated.¹⁰

An agency of DOT, the Canadian Coast Guard, is responsible for providing marine services in arctic waters including ice breaking, navigational aids, search and rescue, vessel traffic management and pollution control (from vessels).

As part of its responsibilities the Environmental Protection Service of DOE is preparing a Coronation Gulf Oilspill Atlas. Community consultations are planned for Coppermine and Cambridge in the Spring of 1994.

The Department of National Defense is responsible for all military activities and facilities in the Kitikmeot.

DIAND and the National Energy Board are responsible for regulating pipeline development.

*GNWT DOT

^{*}Parks Canada, Yellowknife

The Northwest Territories Power Corporation is responsible for providing power to communities.

Scientific Research

Generally, all researchers require permits before conducting research in the NWT. PWNHC issues permits to archaeologists, DRR to scientists researching wildlife except for research into migratory birds which is regulated by CWS, and fish and marine mammals which is regulated by DFO. The Science Institute of the Northwest Territories licenses all other researchers.

Many government departments and agencies are also mandated to conduct their own research.

Other permits, such as land use permits, may also be required from the appropriate agency.

Chapter Four: Suggestions for a Future Planning Process

In December of 1993, Nunavut Tunngavik Incorporated (NTI) was asked by the Minister of Indian Affairs and Northern Development to implement a resource management planning process for the West Kitikmeot region. NTI appointed the West Kitikmeot Resource Management Planning Working Group to carry out this task.

The mandate of the Working Group is to fully involve government, industry and the residents of the region, especially Inuit, in a planning process that will develop consensus around issues concerning future resource developments. The main focus of the work is on proposals concerned with:

- 1. the potential development of the Izok Lake deposit;
- 2. marine and terrestrial transportation routes;
- 3. other infrastructure development (i.e. hydro);
- 4. other resource development in the region;
- 5. conservation.

The identification of sites requiring clean-up was also given priority.

The Working Group is chaired by Bob Lyall and other members are David Mablick, Tongola Sandy, Robert Hornal, Edna Elias (replacing Joe Otokiak), Hal Mills, Jon Pierce and Arthur Boutilier. The Working Group met in December and agreed that it was essential to meet with representatives of all parties with a direct interest in the management of West Kitikmeot resources to determine their goals for the region.

In early February the Working Group held a workshop in Coppermine. Forty representatives from government, industry and the communities participated in a three day discussion of the resource management issues in West Kitikmeot, the various responsibilities of the stakeholders, and how various problems might be resolved.

The **Report on Resource Management Planning in West Kitikmeot** was issued by the Working Group at the end of March 1994. The report summarized the Group's reflections and suggested the outline of a research program and a plan of action to resolve the various issues and reach consensus on moving forward. It was distributed for review and comment to all participants in the Coppermine workshop and to other government and industry representatives. The Working Group then visited Coppermine, Omingmaktok and Cambridge Bay to present the report and to listen to community concerns about the report and the issues discussed in it.

This revised report attempts to incorporated comments received from residents of the region, government and industry. The Working Group will present the revised report at a workshop, scheduled for Cambridge Bay, June 14-16, 1994, which will again bring together representatives from government, industry and the communities. It is hoped that this workshop will see agreement on a process for dealing with the issues and concerns, and for continuing the development of a land use plan for West Kitikmeot.

The main recommendation of the revised report is that the Nunavut Planning Commission Transition Team should proceed, without delay, to develop a land use plan for West Kitikmeot.

The Working Group notes that the Implementation Panel has already given the Nunavut Planning Commission Transition Team some direction on this point. (See Record of Decision, Implementation Panel, Appendix 1)

In this light the Working Group has some confidence that the work suggested in this report will be carried out by the Transition Team after it is appointed and, later, by the Nunavut Planning Commission.

The Working Group would suggest the following workplan for the Transition Team in order to attain the goal of a draft regional land use plan by the fall of this year.

- 1. We request that government agencies that have not already done so provide a short (one page) summary of the current state of knowledge concerning any of the matters covered in the report they may have responsibility for, as appropriate to the Kitikmeot planning region. We would also request a list, and copies if available, of relevant research reports. We also request that these agencies review the responsibilities section and provide up to date information if this is required. We would request that this information be provided to the Transition Team without delay.
- 2. The Working Group has prepared a series of maps (close to 200) documenting knowledge about wildlife and harvesting in the

planning regions. The data for these maps is largely based on the Nunavut Atlas. These maps should be reviewed and corrected by the CLARCs and other Inuit or Inuit organizations as appropriate.

3. In late June, the Transition Team will hold a workshop in Cambridge Bay to review the second report. Representation will be similar to that of the Coppermine workshop in February. After the workshop, the Transition Team should assess the state of the planning process and plan the steps necessary to produce a draft plan by the fall of 1994.

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Appendix I

Record of Decision Implementation Panel Nunavut Final Agreement

Implementation Panel Meeting: November 9, 1993

Agenda Item: Land Use Planning in the Kitikmeot

Record of decision (1993-1-6):

Panel agreed to instruct the Transition Team to initiate land use planning data collection and related activities in the Kitikmeot region to the extent possible within the NPC Transition Team budget and terms of reference.

APPROVED:

1 GNWT : Canada Terry Henderson

NTI: <u>V >6.46</u> Paul Okalik

NTI: <u>hiellie</u> Lois Leslie

Appendix II

ARTICLE 11

LAND USE PLANNING

PART 1: APPLICATION

- 11.1.1 Until such time as the Nunavut Planning Commission is established, land use planning in the Nunavut Settlement Area shall be conducted according to the July 28, 1983 Basis of an Agreement for Land Use Planning in the NWT, subject to any interim changes that may be agreed to by the Tungavik Federation of Nunavut or its successor and Government.
- 11.1.2 In this Article:

"land" includes water and resources including wildlife.

- 11.1.3 The appropriate government departments and agencies shall be responsible for the implementation of land use plans approved in accordance with Section 11.5.9.
- 11.1.4 This Article applies to both land and marine areas within the Nunavut Settlement Area and the Outer Land Fast Ice Zone.

PART 2: PLANNING PRINCIPLES, POLICIES, PRIORITIES AND OBJECTIVES

- 11.2.1 The following principles shall guide the development of planning policies, priorities and objectives:
 - (a) people are a functional part of a dynamic biophysical environment, and land use cannot be planned and managed without reference to the human community; accordingly, social, cultural and economic endeavours of the human community must be central to land use planning and implementation;
 - (b) the primary purpose of land use planning in the Nunavut Settlement Area shall be to protect and promote the existing and future well being of those persons ordinarily resident and communities of the Nunavut Settlement Area taking into account the interests of all Canadians; special attention shall be devoted to protecting and promoting the existing and future wellbeing of Inuit and Inuit Owned Lands;
 - (c) the planning process shall ensure land use plans reflect the priorities and values of the residents of the planning regions;
 - (d) the public planning process shall provide an opportunity for the active and informed participation and support of Inuit and other residents affected by the land use plans; such participation shall be promoted through various

means, including ready access to all relevant materials, appropriate and realistic schedules, recruitment and training of local residents to participate in comprehensive land use planning;

- (e) plans shall provide for the conservation, development and utilization of land;
- (f) the planning process shall be systematic and integrated with all other planning processes and operations, including the impact review process contained in the Agreement; and
- (g) an effective land use planning process requires the active participation of both Government and Inuit.
- 11.2.2 The objective of the planning process shall be:
 - (a) to develop planning policies, priorities and objectives regarding the conservation, development, management and use of land in the Nunavut Settlement Area;
 - (b) consistent with Sub-section (a), to prepare land use plans which guide and direct resource use and development in the Nunavut Settlement Area; and
 - (c) the implementation of land use plans.
- 11.2.3 In developing planning policies, priorities and objectives, factors such as the following shall be taken into account:
 - (a) economic opportunities and needs;
 - (b) community infrastructural requirements, including housing, health, education and other social services, and transportation and communication services and corridors;
 - (c) cultural factors and priorities;
 - (d) environmental protection and management needs, including wildlife conservation, protection and management; and
 - (e) energy requirements, sources and availability.

PART 3: LAND USE PLANS

- 11.3.1 A land use plan shall be a document containing text, schedules, figures and maps for the establishment of objectives and guidelines for short-term and long-term development, taking into account factors such as the following:
 - (a) demographic considerations;
 - (b) the natural resource base and existing patterns of natural resource use;

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- (c) economic opportunities and needs;
- (d) transportation and communication services and corridors;
- (e) energy requirements, sources and availability;
- (f) community infrastructural requirements, including health, housing, education and other social services;
- (g) environmental considerations, including Parks and Conservation Areas, and wildlife habitat;
- (h) cultural factors and priorities, including the protection and preservation of archaeological sites and outpost camps; and
- (i) special local and regional considerations.
- 11.3.2 The purpose of a land use plan shall be to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, taking into account the interests of all Canadians, and to protect, and where necessary, to restore the environmental integrity of the Nunavut Settlement Area.
- 11.3.3 A land use plan shall contain an implementation strategy.

PART 4: NUNAVUT PLANNING COMMISSION (NPC)

Establishment

- 11.4.1 A Nunavut Planning Commission (NPC) shall be established with the major responsibilities to:
 - (a) establish broad planning policies, objectives and goals for the Nunavut Settlement Area in conjunction with Government;
 - (b) develop, consistent with other provisions of this Article, land use plans that guide and direct resource use and development in the Nunavut Settlement Area; and
 - (c) generally, fulfill the objectives of the Agreement in the manner described, and in accordance with the general principles mentioned in Section 11.2.1, as well as such additional functions as may be agreed upon from time to time by Government and the DIO.
- 11.4.2 The head office of the NPC shall be in the Nunavut Settlement Area.
- 11.4.3 The costs of the NPC shall be the responsibility of Government. The NPC shall prepare an annual budget, subject to review and approval by Government.

Role and Responsibility

11.4.4 Consistent with the Agreement, the NPC shall:

- (a) identify planning regions;
- (b) identify specific planning objectives, goals and variables that apply to planning regions and are consistent with the broader objectives and goals;
- (c) contribute to the development and review of Arctic marine policy;
- (d) disseminate information and data;
- (e) solicit opinions from municipalities, residents and others about planning objectives, goals and options of the region;
- (f) prepare and circulate draft land use plans;
- (g) promote public awareness and discussion and conduct public hearings and debate throughout the planning process;
- (h) recommend plans to the Ministers;
- (i) consider modifications requested by the Ministers in the event that a draft plan is rejected;
- (j) consider amendments to a land use plan in accordance with Part 6;
- (k) determine whether a project proposal is in conformity with a land use plan;
- (1) monitor projects to ensure that they are in conformity with land use plans; and
- (m) report annually to the Ministers and the DIO on the implementation of land use plans.

Composition and Appointment

- 11.4.5 The size and makeup of the membership of the NPC may vary, but the Government of Canada and Territorial Government shall each recommend at least one member and the DIO shall nominate a number of members equal to the total number recommended by Government. The NPC members shall be appointed by the Minister of Indian Affairs and Northern Development from the above-noted recommendations and nominations.
- 11.4.6 Federal and territorial public servants shall not be appointed to the NPC.
- 11.4.7 At least half of the membership of the NPC shall be residents of the Nunavut Settlement Area.

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- 11.4.8 The DIO shall have the right to substitute from time to time alternates for its nominated members in order to ensure appropriate representation from the region for which planning is being conducted at any one time. Such alternates shall be appointed in a manner consistent with Section 11.4.5.
- 11.4.9 Subject to Section 11.4.11, members shall be appointed for a term of three years.
- 11.4.10 From nominations provided by the NPC, the Minister of Indian Affairs and Northern Development, in consultation with the Territorial Government Minister responsible for Renewable Resources, shall appoint a further member to act as a chairperson. A member of the NPC may be nominated as chairperson and another member appointed under Section 11.4.5.
- 11.4.11 The chairperson or other member of NPC may be removed for cause.
- 11.4.12 Where a vacancy occurs, a replacement member may be nominated or recommended for the remainder of the term of the vacant member by the body nominating or recommending the member under Sections 11.4.5 or 11.4.10. Upon receiving the recommendation or nomination the Minister shall appoint the replacement member.
- 11.4.13 A member may be reappointed.

Matters Binding on the Nunavut Planning Commission

- 11.4.14 The chairperson and other members shall perform their duties in accordance with:
 - (a) an oath following the form set out in Schedule 5-4, taken and subscribed before assuming office before an officer authorized by law to administer oaths;
 - (b) rules relating to conflict of interest set out in applicable federal and territorial laws, provided that, where a matter before the NPC affects Inuit in a general way, a member shall not be considered to have a conflict solely on the basis that the member is an Inuk; and
 - (c) the terms of the Agreement.
- 11.4.15 The NPC shall conduct its business in Canada's official languages as required by legislation or policy and, upon request of any member, also in Inuktitut.

By-laws and Powers

- 11.4.16 The NPC may make by-laws and rules respecting:
 - (a) the calling of meetings and sittings of the NPC;

- (b) the conduct of business at meetings of the NPC and the establishment of technical panels of the NPC;
- (c) the procedures for making submissions, representations and complaints to the NPC;
- (d) the procedures for collecting information and opinion, including the procedures for conducting formal and informal public hearings;
- (e) generally the manner of conducting the business of or before the NPC; and
- (f) the admissibility of evidence.
- 11.4.17 In conducting its hearings, the NPC shall:
 - (a) at all times, give weighty consideration to the tradition of Inuit oral communication and decision making; and
 - (b) allow standing at all hearings to a DIO.
- 11.4.18 The NPC may, within its approved budget, engage and fix the remuneration of experts or persons having technical or special knowledge to assist the NPC.

PART 5: DEVELOPMENT AND REVIEW OF LAND USE PLANS

- 11.5.1 A Nunavut land use plan shall be formulated by the NPC in accordance with Section 11.5.4 to guide and direct short term and long term development in the Nunavut Settlement Area. Regional or sub-regional components of the land use plan shall be implemented where approved pursuant to Section 11.5.9.
- 11.5.2 The first stage of the formulation of a land use plan, after such consultation as the NPC finds appropriate, shall be the preparation of a draft land use plan by the NPC.
- 11.5.3 The NPC shall prepare a draft land use plan in accordance with Section 11.5.4 and, upon completion, shall make the draft land use plan public and solicit written and oral comments from all appropriate federal and territorial government agencies, DIOs, communities and the general public.
- 11.5.4 The NPC shall:
 - (a) conduct public hearings on the draft plans;
 - (b) evaluate the draft plans in light of representations made at the public hearings; and
 - (c) as appropriate, revise the draft plans.

- 11.5.5 Upon completion of the process in Section 11.5.4, the NPC shall submit the draft plan as revised along with a written report of the public hearings to the Minister of Indian Affairs and Northern Development and the Territorial Government Minister responsible for Renewable Resources. The NPC shall also make the revised draft land use plan public.
- 11.5.6 Upon receipt of the revised draft land use plans, the Ministers jointly shall, as soon as practicable:
 - (a) accept the plan; or
 - (b) refer it back to the NPC for reconsideration accompanied by written reasons; the NPC may make the reasons of the Ministers public.
- 11.5.7 The NPC shall reconsider the plan in light of written reasons and shall resubmit the plan to the Ministers for final consideration.
- 11.5.8 Upon accepting a plan, the Minister of Indian Affairs and Northern Development shall seek Cabinet approval and commitment, and the Territorial Government Minister responsible for Renewable Resources shall seek approval and commitment of the Executive Council.
- 11.5.9 Upon approval by Cabinet and the Executive Council, the plan shall be implemented on the basis of jurisdictional responsibility. All federal and territorial government departments and agencies shall conduct their activities and operations in accordance with the plan as approved.
- 11.5.10 The NPC shall review all applications for project proposals. Upon receipt and review of a project proposal, the NPC or members thereof or officers reporting to the NPC shall:
 - (a) determine whether the project proposals are in conformity with plans; and
 - (b) forward the project proposals with its determination and any recommendations to the appropriate federal and territorial agencies.

The land use plan may make provision for the NPC to approve minor variances.

- 11.5.11 Where the NPC has determined that a project proposal is not in conformity with the plan, the proponent may apply to the appropriate Minister for exemption. The Minister may exempt the project proposal from conformity with the plan and shall, subject to Sections 12.3.2 and 12.3.3, refer it to NIRB for screening. Non-conforming project proposals shall not be sent to NIRB until such exemption is obtained or a variance has been approved.
- 11.5.12 Where the appropriate Minister exempts a project proposal, the Minister shall supply the NPC with written reasons and such reasons shall be made public.
- 11.5.13 Sections 11.5.10 to 11.5.12 shall apply where a land use plan has been approved pursuant to Section 11.5.9.

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PART 6: AMENDMENT AND PERIODIC REVIEW OF LAND USE PLANS

- 11.6.1 Government, a DIO, or any person affected by a plan, may propose amendments to the plan to the NPC.
- 11.6.2 The NPC shall consider a proposed amendment and, if it deems a review appropriate, review the proposal publicly.
- 11.6.3 Upon completion of the process in Section 11.6.2, the NPC shall recommend to the Minister of Indian Affairs and Northern Development and the Territorial Government Minister responsible for Renewable Resources that:
 - (a) the proposed amendment be rejected in whole or in part; or
 - (b) the proposed amendment be accepted, in whole or in part.
- 11.6.4 If the Ministers reject the recommendations of the NPC, Sections 11.5.6 and 11.5.7 shall apply *mutatis mutandis*.
- 11.6.5 An amendment to a plan shall be effective when approved by the Ministers.

PART 7: MUNICIPALITIES

- 11.7.1 Sections 11.7.2 to 11.7.5 shall guide land use planning for municipalities and the involvement of municipalities in regional land use planning.
- 11.7.2 The principles of land use planning as set out in this Article shall be applied in the development of municipal plans. The development of municipal plans shall be the responsibility of the municipalities as provided for in territorial government legislation.
- 11.7.3 In the development of a regional land use plan, the NPC shall give great weight to the views and wishes of the municipalities in the areas for which planning is being conducted.
- 11.7.4 The NPC and municipal planning authorities shall cooperate to ensure that regional and municipal land use plans are compatible.

PART 8: INTERPRETATION

- 11.8.1 Land use plans shall be developed and implemented in a manner consistent with Articles 5 and 7.
- 11.8.2 The land use planning process shall apply to Inuit Owned Lands. Land use plans shall take into account Inuit goals and objectives for Inuit Owned Lands.

PART 9: WASTE CLEAN-UP

11.9.1 The NPC shall identify and priorize the requirement to clean-up waste sites in the Nunavut Settlement Area, including hazardous waste sites, inactive mining sites, abandoned DEW Line sites, and non-hazardous sites near communities. The NPC shall consider waste sites in the Kitikmeot region on a priority basis. To the extent possible, this initiative shall be co-ordinated with the development of land use plans.

Appendix III

CARIBOU PROTECTION MEASURES (QAMANIRJUAQ AND BEVERLY HERDS) 1988

(a) The Permittee shall not, without approval, conduct any activity between May 15 and July 15 within the Caribou Protection Areas depicted on the map certified by the Engineer as the "Caribou Protection Map" annexed to this Land Use Permit.

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CARIBOU PROTECTION AREAS

- (b) A Permittee may, upon approval by the Land Use Inspector, operate within the said Caribou Protection Areas beyond the May 15 deadline set out in 1(a), provided that when monitoring information indicates that caribou cows are approaching the area of operation, the Permittee will implement 1(c).
- (c) On cessation of activities pursuant to 1(a) or 1(b), the Permittee will remove all personnel from the zone who are not required for the maintenance and protection of the camp facilities and equipment unless otherwise directed by the Land Use Inspector.
- (d) The Permittee may commence or resume activities prior to July 15 within those parts of the Caribou Protection Areas released by the Land Use Inspector for the reason that caribou cows are not expected to use those parts for calving or post-calving (note 1).

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(a) In the event that caribou cows calve outside of the Caribou Protection Areas, the Permittee shall suspend operations within the area(s) occupied by cows and/or calves between May 15 and July 15. CARIBOU PROTECTION GENERAL

- (b) In the event that caribou cows and calves are present the Permittee shall suspend:
 - (i) blasting,
 - (ii) overflights by aircraft at any altitude of less than 300 metres above ground level, and
 - (iii) the use of snowmobiles and ATV's (all-terrain vehicles) outside the immediate vicinity of the camp.
- (a) During migration of Caribou, the Permittee CARIBOU shall not locate any operation so as to block PROTECTION or cause substantial diversion to migration. MIGRATION
 - (b) The Permittee shall cease activities that may interfere with migration, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.
- (a) The Permittee shall not, between May 15 and CARIBOU September 1, construct any camp, cache any CROSSING fuel or conduct any blasting within 10 km of any "Designated Crossing" as outlined on the map certified by the Engineer as the "Caribou Protection Map" and annexed to this Land Use Permit.

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(b) The Permittee shall not, between May 15 and September 1, conduct any diamond drilling operation within 5 km of any "Designated Crossing" as outlined on the map certified by the Engineer as the "Caribou Protection Map" and annexed to this Land Use Permit.

NOTE

- 1. The Land Use Inspector's decision will be based on the existing caribou information.
- 2. Concentrations of caribou should be avoided by low level aircraft at all times.

