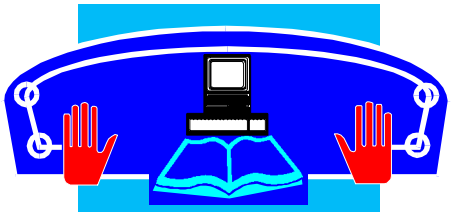

Report On Resources Managment Planning In West Kitikmeot

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REPORT ON

RESOURCE MANAGEMENT PLANNING IN

WEST KITIKMEOT

31 MARCH **1994**

Nunavut Tunngavik Incorporated
130 ***Albert Street, Suite 1510***
Ottawa, Ontario KIP 5G4

Tel: (613) 238-1096
Fax: *(613) 238-4131*

Memorandum

To: West Kitikmeot Resource Management Planning Working Group

From: Jon Pierce

Date: 11 April, 1994

Here is the much revised draft of the Report. I've circulated it to everybody **who attended the workshop in Coppermine and a number of other contacts and asked for comments by April 30.**

The meeting **planned for Winnipeg will have to be** cancelled. **The appointment of the Transition Teams has been delayed yet again. I'm working with our implementation people to see if we can get funding in the interim to continue with the program including the community tour the last week of April. I'll be in touch next week when I know more.**

If you have any questions, give me a call.

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List of Abbreviations

Canadian Parks Service	CPS
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	GNWTDOT
Designated Inuit Organization	D1O
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 @corporate	NTI
Nunavut Water Board	NWB
Nunavut Wildlife Management Board	NWMB
Prince of Wales Northern Heritage Centre	P W C
Surface Rights Tribunal	SRT
Tungavik Federation of Nunavut	TFN

List of Figures

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 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, Joe Otokiak, Robert Horrid Edna Elias, 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 Working Group has reviewed the proceedings at the workshop and offers this report to those who participated and to DIAND and NTI. This report summarizes the Group's reflection and suggests the outline of a

research program and plan of action to resolve the various issues and reach consensus on moving forward.

The main recommendation of this report is that comprehensive land use planning is immediately required in the West Kitikmeot region and that the Nunavut Planning Commission Transition Team take over the work started by the Working Group.

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 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.

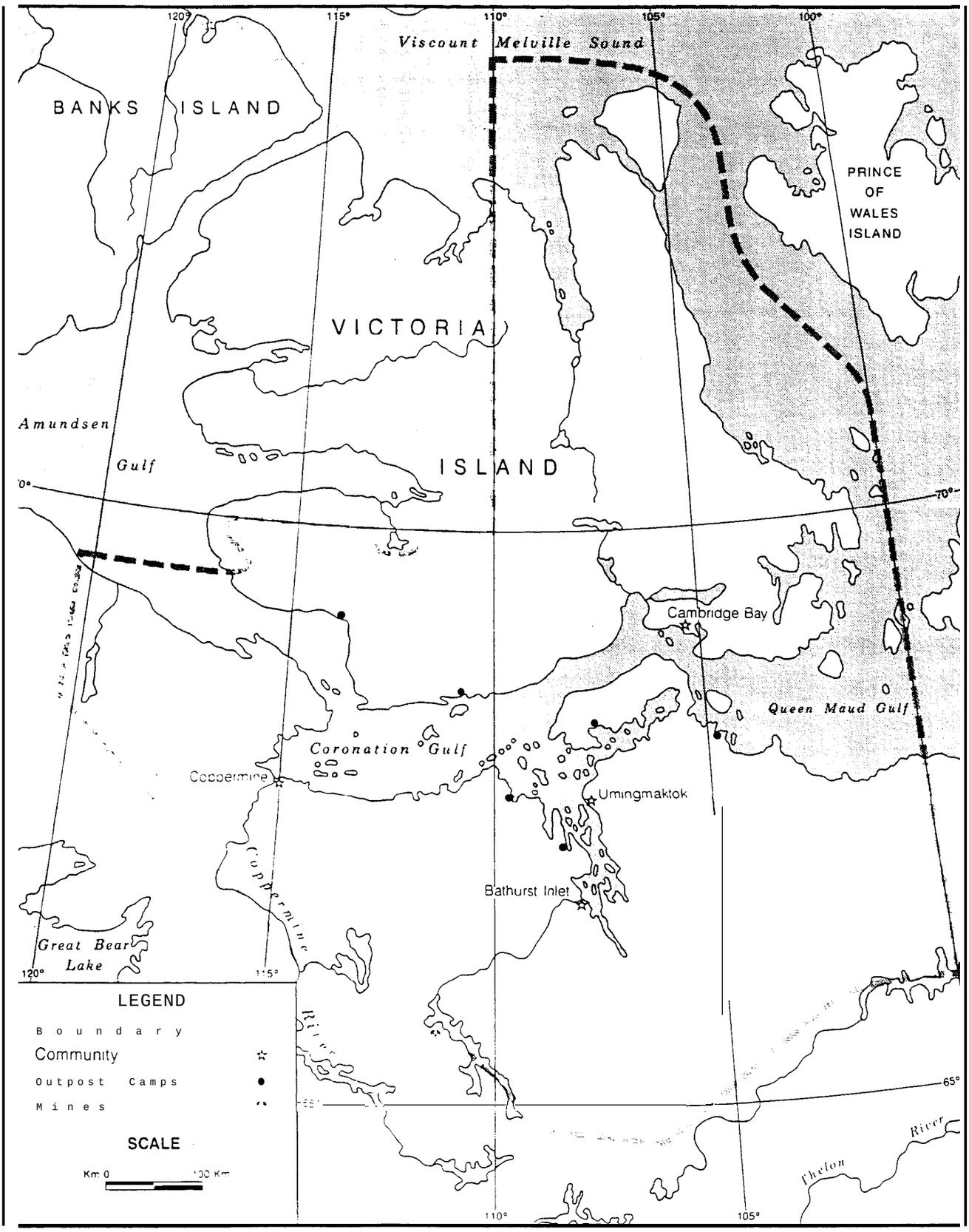
The People

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 Umingmaktok (Bay Chimo) are much smaller, with populations of 12 and .s3.

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.

FIGURE 1 : WEST **KITIKMEOT** PLANNING REG1ON



Renewable Resources

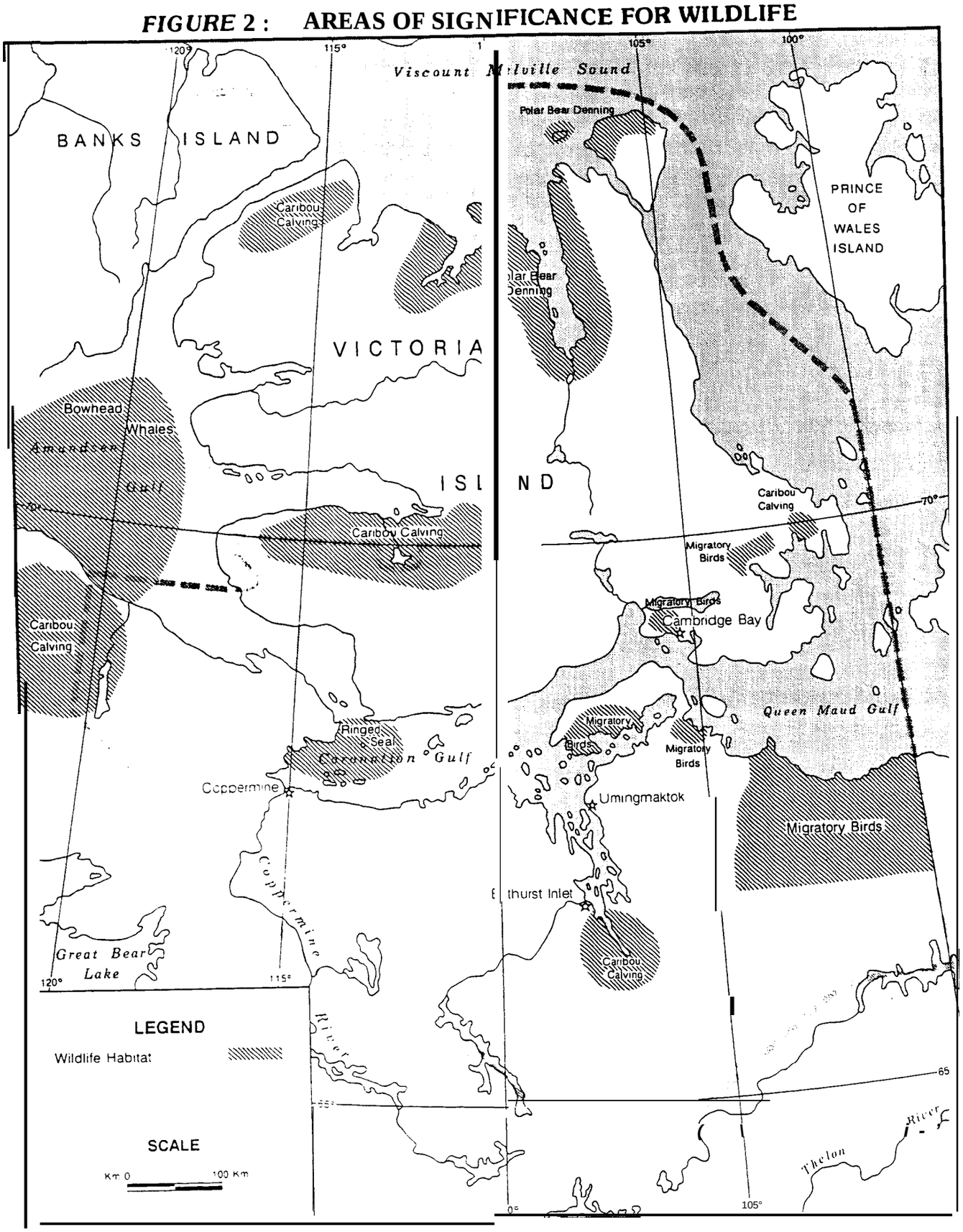
There is an abundance of wildlife in the Region. Some of the most significant areas for wildlife are shown on Figure 2. There are important permanent populations of marine mammals such as seals, and terrestrial wildlife including Caribou, Muskoxen and Polar Bear. The region also provides very important habitats for migratory waterfowl, raptors 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 caribou on Victoria Island calve on the southwest part of that 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.

FIGURE 2 : AREAS OF SIGNIFICANCE FOR WILDLIFE



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.

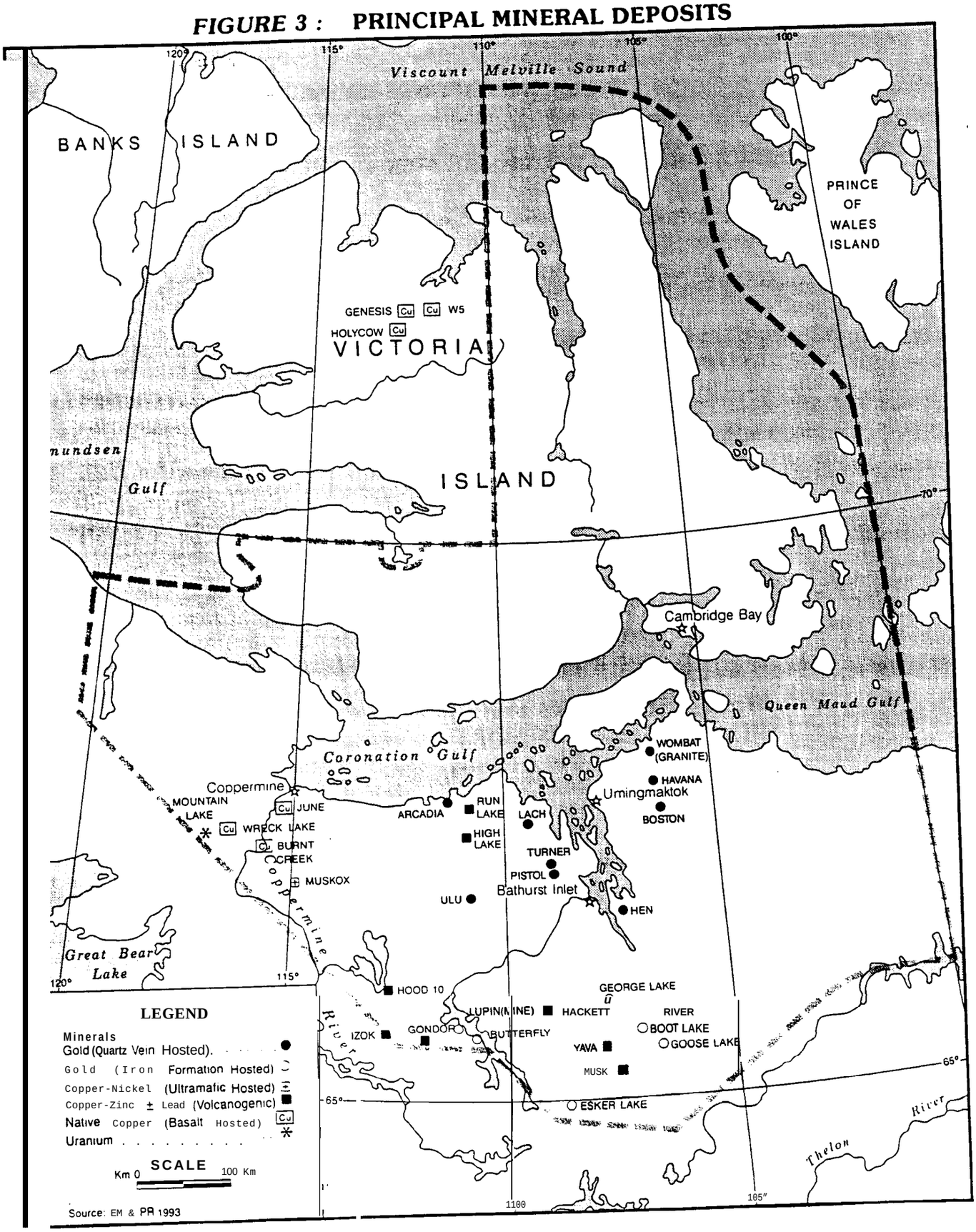
Inuit around Coppermine have used native copper for centuries. From Samuel Hearne's expedition in search of copper, to the present, a significant amount of mineral exploration has occurred in the region. In the past, a mine has been in operation at Hope Bay and, at present, on the southern edge of the 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 considered for development. 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.

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 or winter roads at present. 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.

FIGURE 3 : PRINCIPAL MINERAL DEPOSITS



The Environment, Renewable Resources, and Conservation

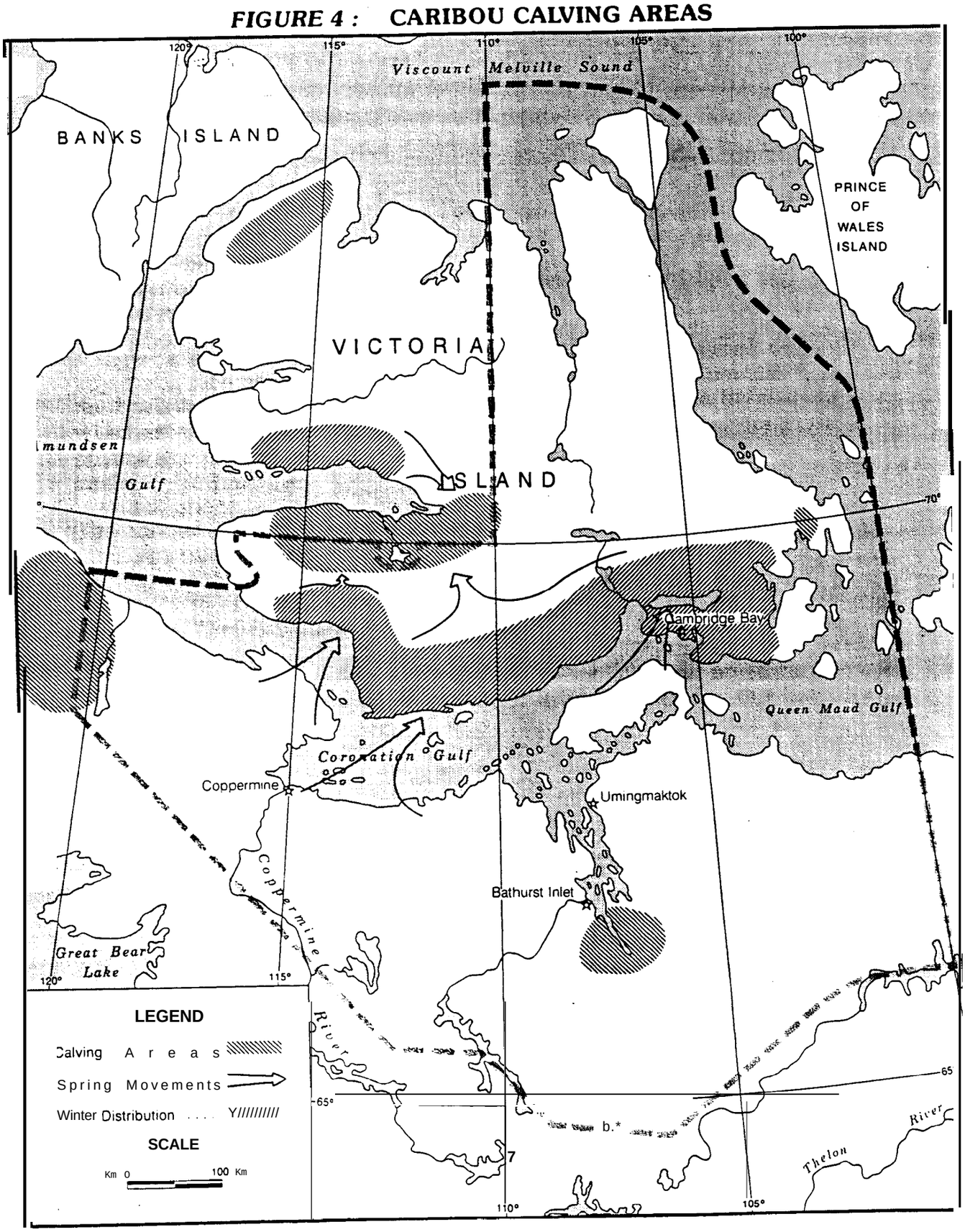
The region's renewable resources, through such activities as the commercial harvesting of fish and wildlife, provide significant benefits at present and should be protected and enhanced in the future. Tourist lodges also rely on a clean environment and healthy wildlife populations.

All agencies with responsibilities in this area are being 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. This information will be included in a later draft of this report, and reviewed at workshops in the region. The following information on Victoria Island caribou is being included now because community representatives have already expressed their concerns about the 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 Umingmaktok and Coppermine.

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 S-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.

FIGURE 4 : CARIBOU CALVING AREAS



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.

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, is necessary or desirable at this time.**

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. The Canadian Parks Service 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.

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.** The most significant of these is the proposal to establish a new national park in the Bluenose Lake area. The size and boundaries of the Queen Maud Gulf Bird Sanctuary remains an issue.

Environmental degradation has occurred in the region and corrective measures should be taken to remedy the situation. In particular, 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. **It is** recommended **that the Nunavut Planning Commission Transition Team prepare a detailed catalogue of all known centaminated sites as a first step in cleaning-up these sites.** Reference is made to Section 11.3.2 of the Nunavut Final Agreement (Appendix 11). 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 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 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 and take steps to promote, design develop and implement a cumulative environmental effects assessment.**

Mineral Development

West Kitikmeot has an exceptionally 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 1979. 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 world class zinc, lead, copper and silver deposit), Hackett River, High Lake, Yava, Hood River and Musk. Gold discoveries include the Crown deposit, George Lake, and the Arcadia or Canuc deposit. There are also mineral deposits outside of the Slave Province, such as the copper and uranium deposits to the south and west of Copperrnine, 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 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 negotiation on 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 whether fly in/ fly out operations would seem to be preferable to establishing new communities or mining camps.

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 development projects such as mines, to reduce the local impact on wildlife.**

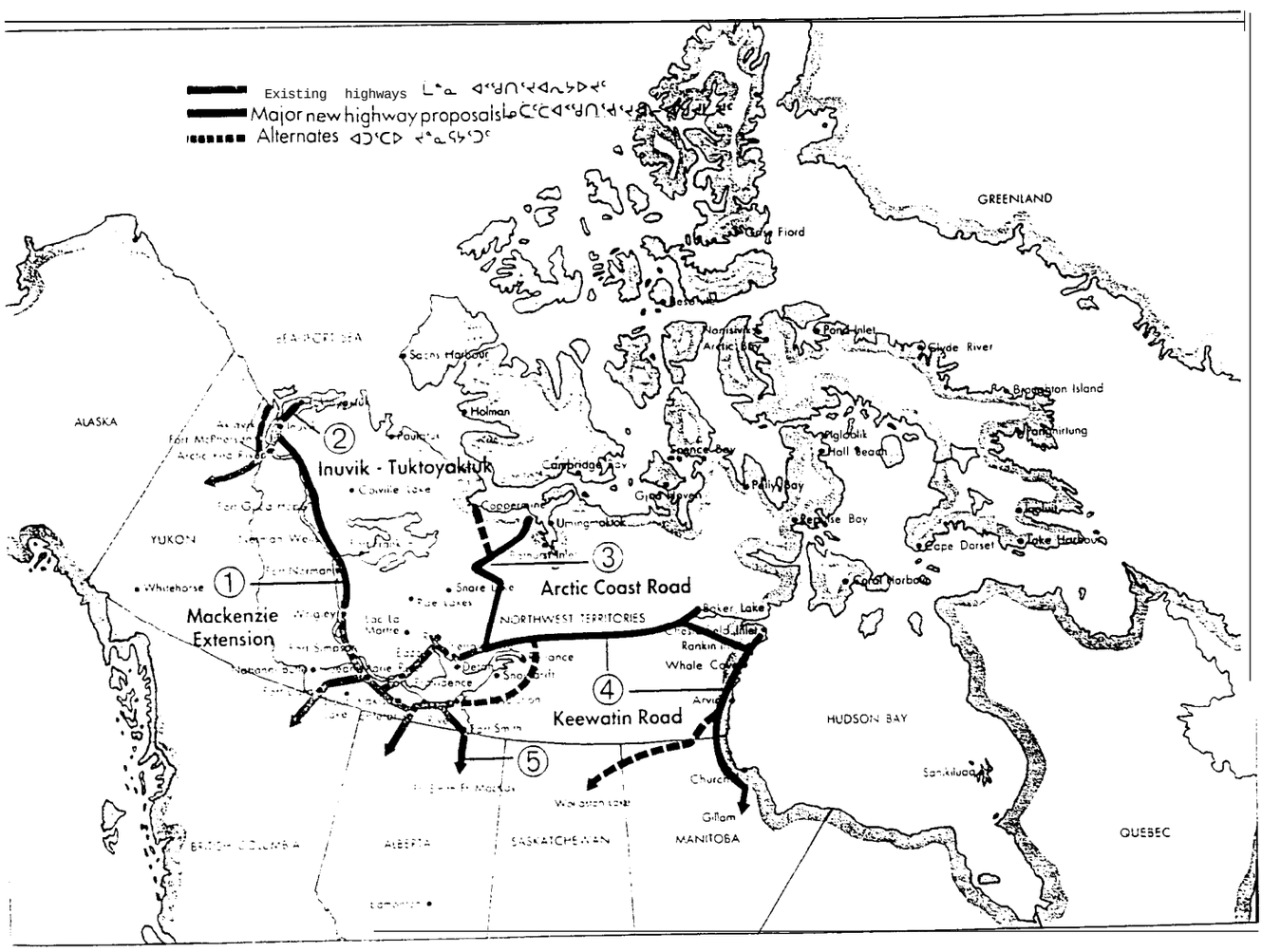
Transportation and Regional Infrastructure

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

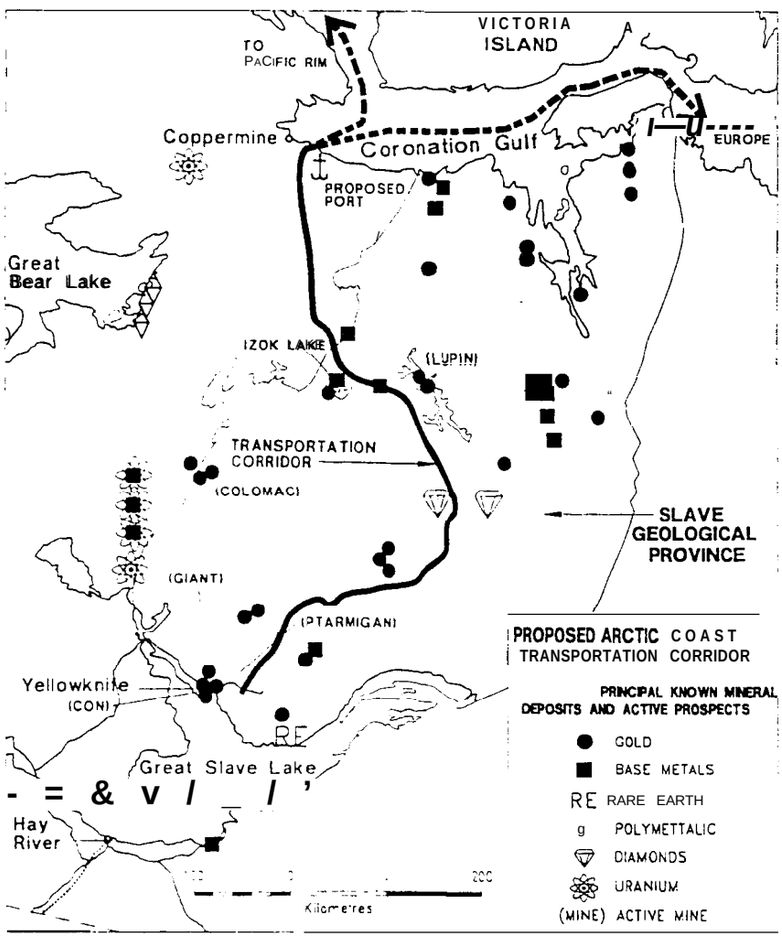
In 1990, the Government of the Northwest Territories proposed the construction of an all-weather road from Yellowknife to the Arctic Coast near Bathurst Inlet or, alternately, to Coppermine (Figure 5a; GNWT 1990b).

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, 1990



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). More recently the Chamber has suggested an all-weather road along a routing similar to that of the most recent GNWT proposal (NWT Chamber of Mines 1993).

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 (Appendix III).

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.

There seems to be two points of general agreement, that, to the south, the corridor should connect with the existing terminus of the winter road from Yellowknife to Lupin mine at Contwoyto Lake. Secondly, 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 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 and who is to take the leadership role in determining the location and feasibility of such a transportation corridor. GNWT is currently coordinating the relatively large number of diverse interests supporting this development, but even if GNWT is successful in gaining political approvals and

securing financing, consensus might break down over the actual location of the corridor.

It would appear that the Nunavut Planning Commission will have the ultimate responsibility for recommending the location of any transportation corridor north of the Lupin Mine. Reference is made to Article 11 of the Nunavut Final Agreement (attached as Appendix 2) and more particularly to Sections 11.2.3 and 11.3.1.

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

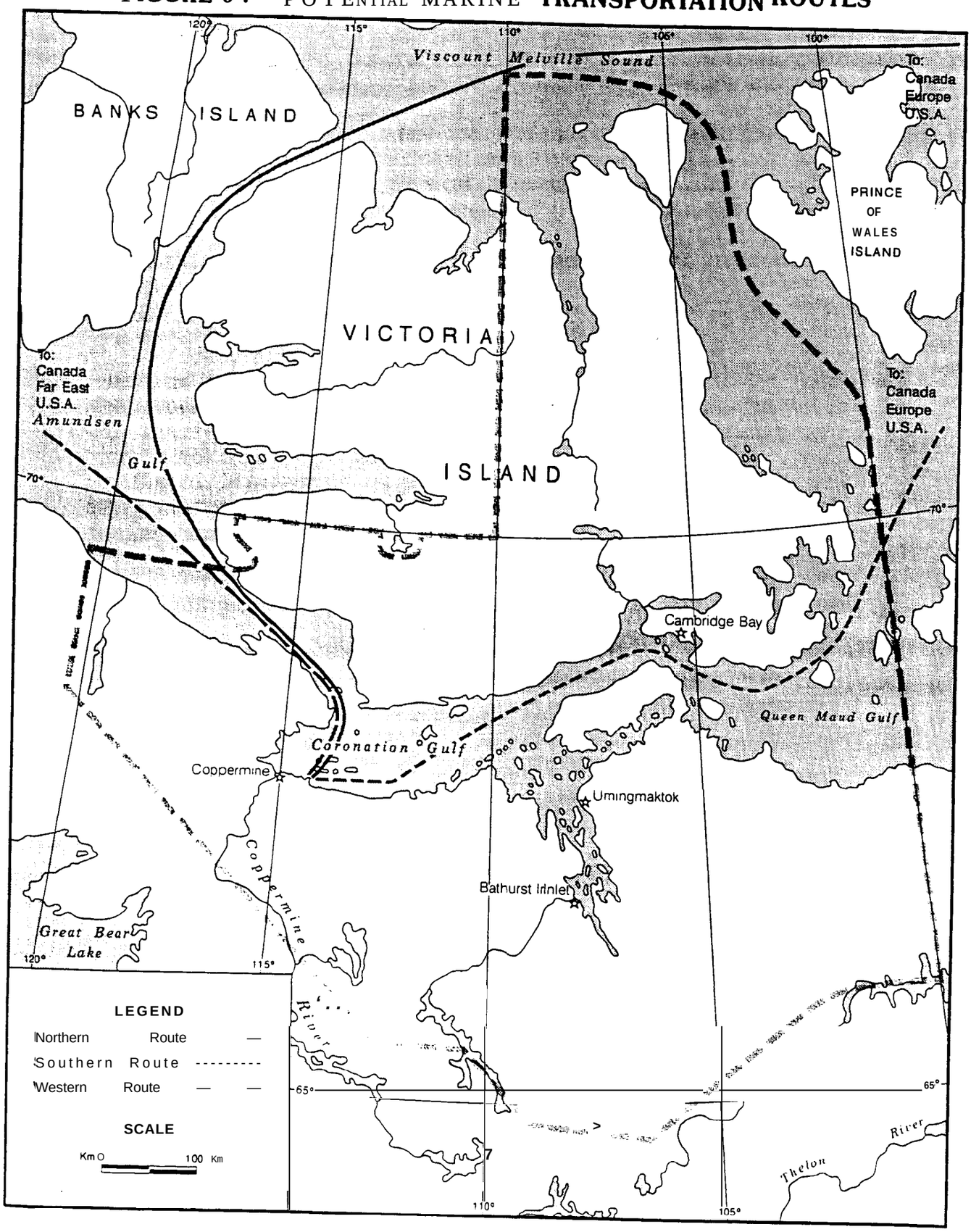
Marine Transportation

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 will 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.

FIGURE 6 : POTENTIAL MARINE **TRANSPORTATION ROUTES**



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.

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 behavioral 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 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 neighboring 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 Umingmaktok 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.

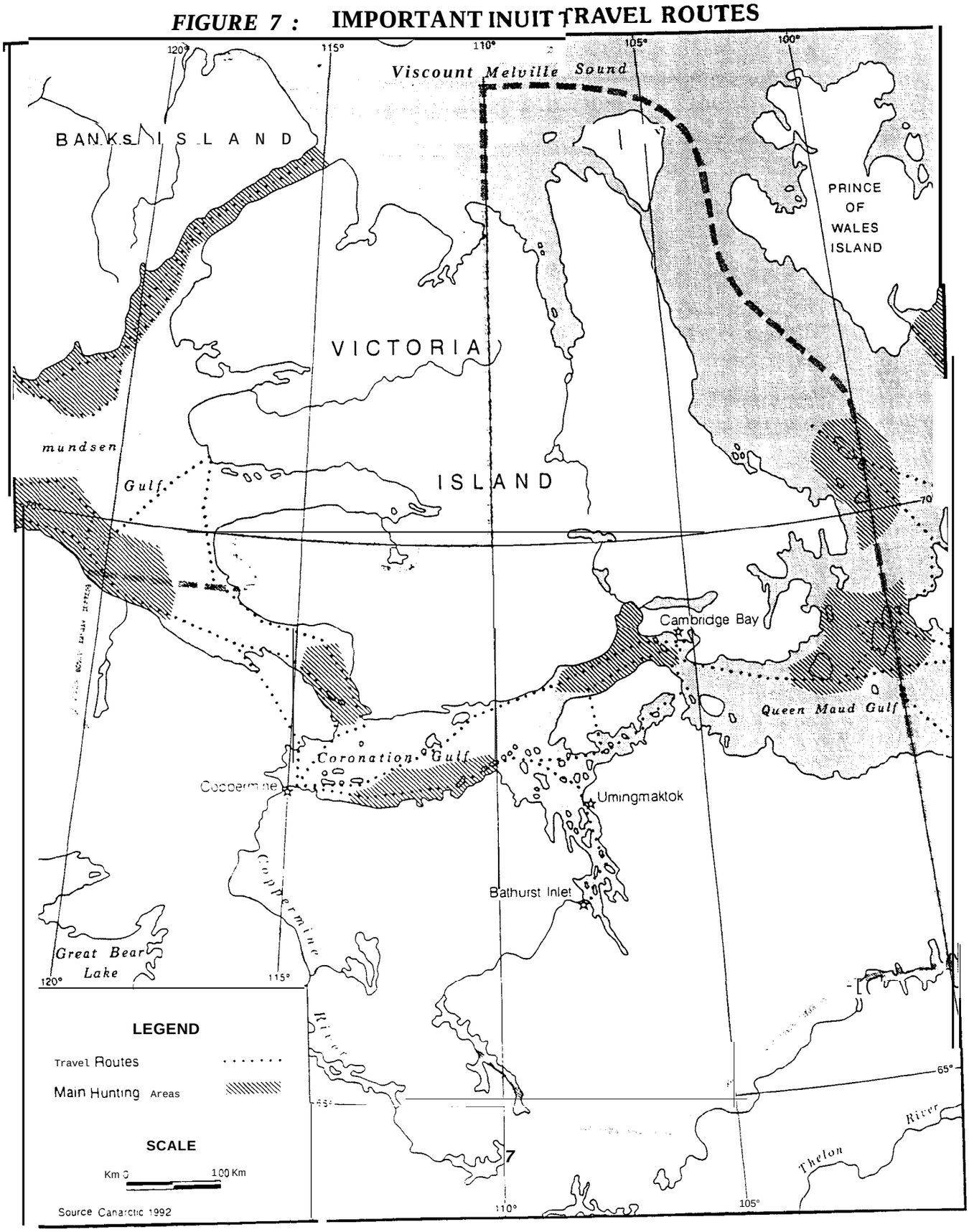
In recent years there have been three comprehensive reviews of potential problems related to shipping in Arctic waters, tanker traffic, marine spills, and vessel traffic management. The Beaufort Sea Environmental Assessment and Review Process (BEARP) Panel Report was issued in 1984, the final report 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.

FIGURE 7 : IMPORTANT INUIT TRAVEL ROUTES



There are at least two relevant recommendations for Kitikmeot West, from the above reviews, which have not been acted upon:

a) that the Canada Shipping Act be amended to allow for routing of tanker and tank barge traffic around sensitive areas at crucial times; and

b) that the present Vessel Traffic Management system be made mandatory for all vessels which enter Canadian Arctic Waters.

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.

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;**

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**

l) **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 **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.

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

The Nunavut Planning Commission Transition Team investigate its relationship with the **Inuit** Heritage Trust.

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 Keewatin rely on local services and local employment where possible.**

c) **all scientific researchers communicate with the communities in clear, non-technical language in Inuktitut 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.

Local Authority

Within Municipal Boundaries

AU 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 Canadian Parks Service (CPS) is responsible for national historic sites and monuments, and for national parks; 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 off-shore 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 plarming 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.

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 Communications. 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.

CPS is responsible for establishing and managing national historic sites and monuments. DEDT has the mandate to establish territorial historic parks. DEDT is also the lead agency in the NWT for the Canadian Heritage Rivers program, a joint program in Northern Canada between CPS and DIAND.

Transportation and Regional Infrastructure

The responsibility for Arctic shipping, marine spills, and the quality of the marine environment is shined 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.

GNWTDOT is responsible for re-constructing, improving and maintaining highways and docks. The responsibility for community airports has been transferred to GNWT. GNWTDOT has prepared a transportation strategy for the NWT.

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.

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 ma-mmals 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 Five: Suggestions for a Future Planning Process

The Working Group has reviewed the state of resource management plarming in West Kitikmeot, particularly in light of the Izok Lake proposal. A workshop was held in February in Copperrnine to discuss a broad range of issues with representatives from the communities, regional organizations, the mining industry and the two governments.

The main recommendation of this report is that comprehensive land use planning is required with some urgency in the West Kitikmeot region and that the Nunavut Planning Commission Transition Team take over the work started by the Working Group.

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 fail of this year.

1. This document has been sent to all participants in the Coppermine workshop and other interested parties. The report will be translated into reman orthography. We would request that all parties review the document and make comments and suggestions by 1 May 1994.

2. We specifically request that government agencies 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 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 by 1 May 1994.

3. 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. We suggest that the Transition Team visit Copper*e, Cambridge Bay and Umingmaktok in late April to review the report and the maps with the communities.

4. In May, the Transition Team should analyze the data received from the community tour and from the responses provided by the government agencies and other interested parties and prepare a new

report based on the new information. This report should translated and circulated as before.

5. In late June, the Transition Team should hold a workshop in Cambridge Bay to review the second report. Representation should 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.

Selected References

Alexander, S.A., R.S. Ferguson and K.J. McCormick. 1991. Key migratory bird terrestrial habitat sites in the Northwest Territories. Environment Canada, Canadian Wildlife Service: Ottawa.

Beaufort Sea Environment Assessment and Review Panel. 1984. **Beaufort Sea Hydro Production and Transportation. Federal** Environmental and Assessment Review Office: Ottawa.

Bromley, R.G. and G.B. Stenhouse. 1994. "Cooperative Central Arctic Waterfowl Surveys, 1989-1991." Draft Report. GNWT and Ducks Unlimited Canada: Yellowknife.

Canadian Environmental Protection Act. Statutes of Canada, 1988.

Canadian Park Service. 1989. "A proposed National Park for the Bluenose Lake Area: Technical Overview - A Brief to the Wildlife Management Advisory Council (NWT), Inuvik," Ottawa.

Canadian Wildlife Service. ***1993.*** "Habitat Conservation Strategy and Plan for the Northwest Territories: 1993-2003. Yellowknife.

Canarctic Shipping Company Ltd. 1993. "The Development of a Marine Transportation System to Service Coronation Gulf, N.W.T.," Ottawa.

----------. 1992. "A Study of Marine Environmental Issues associated with a Marine Transportation System Servicing Coronation Gulf, N.W.T. Final Report." Ottawa.

Conservation Advisory Committee on the Northern Mineral Policy. 1989a. **A review of the boundaries of bird sanctuaries in the Northwest Territories.** Ottawa: Department of Indian Affairs and Northern Development.

----------. 1989b. Report on IBP **Sites.** Ottawa: Department of Indian Affairs and Northern Development.

Department of Indian Aff airs and Northern Development. 1994. "Cumulative Effects of Development in the Slave Geological Province." Workshop Report. Essa Technologies Ltd. Yellowknife.

----------.1993. A Contract Relating to the Implementation of the Nunavut Final Agreement. Ottawa.

---------- 1993. "Exploration Overview, Mining, Exploration and Geological Investigations," NWT Geology Division: Yellowknife.

----------.1981. A Guide to Territorial Land Use Regulations. Ottawa:

----------.*1976.* Inuit Land Use and Occupancy Project, Vol. One. Land Use and Occupancy. Ottawa: DIAND.

Energy, Mines and Petroleum Resources. 1993. "Principal Mineral Deposits and Active Prospects of the N.W.T." compiled by J. Gebert and and M. Irving. Yellowknife.

Environment Canada. 1988. "An Overview Study of the Coppermine River Basin," Ottawa: Conservation and Protection (Inland Waters Directorate).

---------- 1982. "Land Use Issues in the Viscount Melville Sound Region, NWT, Background Report No.1," Ottawa.

---------- 1982. "An Aquatic Resource Survey of Islands Bordering the Viscount Melville Sound, Background Report No. 2," Ottawa.

Government of the Northwest Territories. 1994. "Tradition and Change: A Strategy for Renewable Resource Development in the Northwest Territories." Yellowknife.

----------.1993. "Transportation Agenda." Yellowknife.

---------- 1990a. **Northwest Territories 1990: By the Numbers.** Yellowknife: Bureau of Statistics.

---------- 1990b. Northwest **Territories Transportation Strategy.** Yellowknife: Department of Transportation.

---------- 1990c. **1989 NWT Labour Force Survey, Labour Force Activity, Education and Language, Report No. 2.** Yellowknife: Bureau of Statistics.

----------1990d. 1989 NWT Labour Force Survey, Wage Employment and Traditional Activities, Report No. 3. Yellowknife: Bureau of Statistics.

----------. 1990e. "Sustainable Development Policy." Yellowknife: Department of Renewable Resources.

---------- 1989a. 1989 **NWT Labour Force Survey, Overall Results and Community Detail, Report No. 1.** Yellowknife: **Bureau of Statistics.**

----------. 1989b. "1989 NWT Mining Sector Report," Yellowknife: Economic Development and Tourism.

----------. 1989c. "Arctic Coast Tourist Association Canada's Central Arctic" Yellowknife: Economic Development and Tourism.

--------- 1989d. "People and Caribou in the NWT," Yellowknife: Renewable Resources.

---------- 1987. **Wildlife Areas of Special Interest to the Department of Renewable Resources.** Yellowknife: **Renewable Resources.**

Lamson, Cynthia and David L Vanderzwaag, eds. 1988. Transit **management in the Northwest Passage: Problems and Prospects. Cambridge University Press: Cambridge.**

Lancaster Sound Regional Land Use Planning commission. 1991. The Lancaster Sound Regional Land Use Plain Yellowknife.

Lutra Associates Ltd. and H. J. Ruitenbeek Resource Consulting Ltd. 1985. **Kitikmeot Region Economic Base Study. Yellowknife: Economic Development and Tourism.**

Management Steering Committee, Northern Land Use Planning Program. **January 1990. "Policy on Overlap."**

Mansfield, A. W. 1983. "The Effects of Vessel Traffic in the Arctic on Marine Mammals and Recommendations for Future Research." Canadian Technical Report of Fisheries and Aquatic Sciences, No. 1186. Ste-Anne-de-Bellevue, Quebec.

McCormick, K.J., M.E. **Adams, C.J. Stephenson and A.S. Goodman 1984. Key Migratory Bird Terrestrial Habitat Sites in the Northwest Territories.** Yellowknife: **Canadian Wildlife Service.**

Mills, Hal. 1984. "Arctic Marine Conservation." Canadian Technical Report of Fisheries and Aquatic Sciences, No. 1242. Bedford Institute of Oceanography, Dartmouth

Northwest Territories Power Corporation Northwest Territories Energy, Mines and Petroleum Resources. 1993. "Potential Hydro Developments on Snare, Lockhart, Hood and Coppermine Rivers. Acres International Limited, Calgary.

Nunavut Planning commission. 1991. "Proposal for Regional Land Use Planningin West Kitikmeot. Rankin Inlet.

—— 1991. Keewatin Regional Land Use Plan. Rankin Inlet.

N.W.T. Chamber of Mines. 1993. "Overview The Slave Province, Northwest Territories. Canada's Newest Mining Province?" Yellowknife.

—— 1991. "Proposal: Transportation & Mineral Development for the Kitikmeot Region, Northwest Territories," Yellowknife.

Outcrop Ltd. 1990. Northwest Territories Data Book, 1990/1991. Yellowknife.

Parker, J.H. 13 April 1991. "The Boundary between Comprehensive Claim Settlement Areas of the Inuit and Dene-Metis of the Northwest Territories: A Report to the Honorable Tom Siddon, Minister of Indian Affairs and Northern Development."

Petro-Canada. 1981. Arctic Pilot Project: Integrated Route Analysis. (3 vols.).

Public Affairs North 600. 1990. A Compendium of Legislation and Policies Governing the Management of Land and Resources in the Nunavut Planning Region. Rankin Inlet: Nunavut Planning Commission

Public Review Panel on Tanker Safety and Marine Spills Response Capability. September 1990. Final Report: Protecting our waters. Ottawa.

Statistics Canada. 1987.1986 Census NWT: Part 1: Profiles. Ottawa.

Sterling, Ian and Holly Cleator, eds. Polynyas in the Canadian Arctic. Occasional Paper 45, Canadian Wildlife Service. Ottawa.

Task Force on 'Northern Conservation. 1984. Report of the Task Force on Northern conservation Ottawa: Department of Indian Affairs and Northern Development.

Tungavik Federation of Nunavut. 1988. "Nunavut Atlas." Unpublished map folio. Ottawa.

Tungavik and Department of Indian Affairs and Northern Development. 1993. Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty In right of Canada. Ottawa.

Tungavik Federation of Nunavut and Department of Indian Affairs and Northern Development. 1990. Agreement-in-principle Between the Inuit of the Nunavut Settlement Area and Her Majesty In Right of Canada. Ottawa.

Zigarlick, John. October 31, 1991. "Segments of NWT Mineral Deposits can be World Competitive Today," Presentation at Northern Development Conference, Edmonton.

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:

NTI: _____ Canada: _____ GNWT: _____
Paul Okalik Terry Henderson Mark Warren

NTI: _____
Lois Leslie

ARTICLE il

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 L-and 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 fictional 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 endeavors 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 well-being 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;

(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;

(0 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.

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, D1OS, 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 infection 11.5.4, the NPC shall submit the draft plan as revised along with awritten report of the public hearings to the Ministerof 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.

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 Governrnent 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.

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** Kitikrneot region on a **priority** basis. To the extent possible, this initiative shall be **co-ordinated** with the development of land use plans.

METALL MINING CORPORATION
IZOK PROJECT

SUITE 105 , 208 - 97TH STREET
EDMONTON, AB T6E 5Z9

FAXED

March 3, 1994

Mr. Joe Allen Evyagotailak
President
Kitikmeot Inuit Association
BOX 18
Cambridge Bay, NWT
X0E 0C0

Dear Mr. Evyagotailak:

This is to clarify our recent communications with you and officials in your organization and the subsequent media reports concerning the delay in the construction and production decision for the Izok Project.

As you know, Izok is one of the largest high grade undeveloped zinc-copper deposits known in North America and although the Feasibility Study is not yet complete, Metall has determined that the mine itself can be profitable and cost competitive with other zinc producers in the world. However, our recent studies also indicate that high infrastructure costs required for the road and port facilities cannot be borne by the Izok Project alone. Further, we are not aware of any similar projects in other parts of Canada or the world that have had to absorb such high costs for these facilities. Metall is continuing to study ways to alleviate these high infrastructure costs.

Once the results of our studies are available, we will start discussions with the Federal and Territorial governments, the Kitikmeot Inuit Association, and other stakeholders on how to finance and develop the required infrastructure. It should be noted that this infrastructure would open up a large new territory for development in Nunavut and the Northwest Territories in a similar way that many other remote regions of Canada have been developed in the past.

TELEPHONE (403) 437-0965 FAX: (403) 465-1714

Contrary to recent coverage by the media, it should be emphasized that Metall has *not* "pulled the plug", "shelved" or "suspended" the Project. However, the transportation issue has to be resolved and the current poor zinc market conditions must improve prior to making a construction and production decision. Since the infrastructure issue will influence the timing, technical concept and cost of the project, Metall has asked the Regional Environmental Review Committee to delay its screening process. Likewise, we had asked the KIA to delay talks on the IIBA until this issue can be resolved. However, reflecting upon this last request, we would be prepared to continue our discussions on the IIBA except in the area of Equity Participation where we would prefer to wait until we have our studies completed on the infrastructure. As you may know, Metall is continuing its involvement in the training and employment strategy and programs currently being developed by the KIA, the GNWT, and the Federal Government.

If you have any comments or questions, please do not hesitate to contact the undersigned.

Yours truly,

KEN J. HILL
General' Manager, Izok Project

KJH:im
cc: James Eetoolik, Nunavut Tungavik
Kelvin Ng, MLA, Kitikmeot
Charlie Evalik, KIA
Dr. K. Zeitler, Metall Mining, Toronto
Stephan Garber, Metall Mining, Toronto
John Purkis, Metall Mining, Toronto