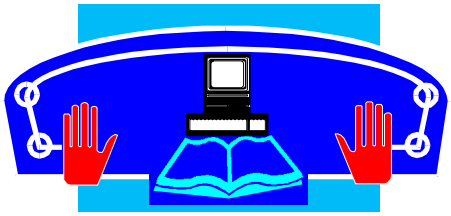

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Nwt Diamonds Project - Environmental Impact Statement
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iamonds Project

ntal Impact Statement

Summary

BHP DIA ME

Summary of the Environmental Impact Statement

NWT Diamonds Project
Summary of Environmental Impact Study

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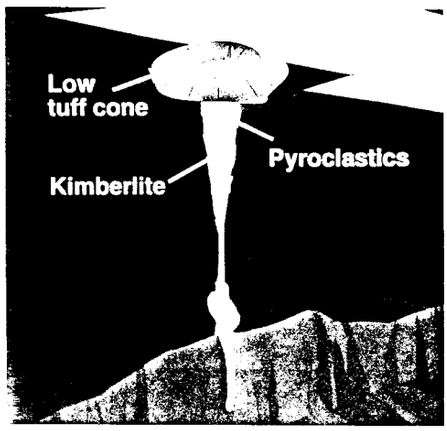
Preface

This is a Summary of the Environmental Impact Statement (EIS) for the NWT Diamonds Project, a joint venture between BHP Diamonds Inc. and its Canadian partners the Blackwater Group. The joint venture partners believe that this project, the culmination of more than ten years of prospecting in the North, will become Canada's first diamond mine.

The Proponent of the NWT Diamonds Project is a joint venture of BHP Diamonds Inc. (51%) and the Blackwater Group (49%). The Blackwater Group is composed of Dia Met Minerals Limited, Charles Fipke, the Canadian geologist who originally discovered diamonds and his prospecting partner, geologist Dr. Stewart Blusson. BHP Diamonds Inc. is part of BHP Minerals. BHP Minerals employs 15,000 people in 30 countries. BHP Minerals is a business group of The Broken Hill Proprietary Company Limited (BHP). BHP is Australia's largest industrial and natural resources company. BHP Diamonds Inc. is the Operator of the project on behalf of the project Proponent.

This EIS Summary and its four supporting volumes are being submitted to the Federal Environmental Assessment Review Panel in compliance with project specific guidelines issued by the Panel on May 23, 1995. This report represents three and one half years of intensive sampling and exploration, more than two years of environmental baseline work, more than three years of extensive community consultation and more than two years of detailed engineering design. Detailed information and analysis is provided in the four accompanying volumes of the EIS plus a number of appendices. These volumes are titled *Project Description, Environmental Setting, Environmental Management* and *Environmental Impacts and Mitigation*. These volumes outline the details of the project, the nature of the potential impacts of the project and methodsthat the Proponent will use to address and mitigate these impacts.

Diamonds arc crystallized carbon formed at depths of 150 kilometres or more below the earth's surface under conditions of great heat and pressure. Erupting kimberlite passes through a diamond forming layer and carries the diamonds to the surface. The erupting kimberlite forms a carrot-shaped volcanic cone. which is often referred to as a "pipe". In the Canadian North. the crater surfaces of the kimberlite pipes have been eroded by glaciers to become small lakes.

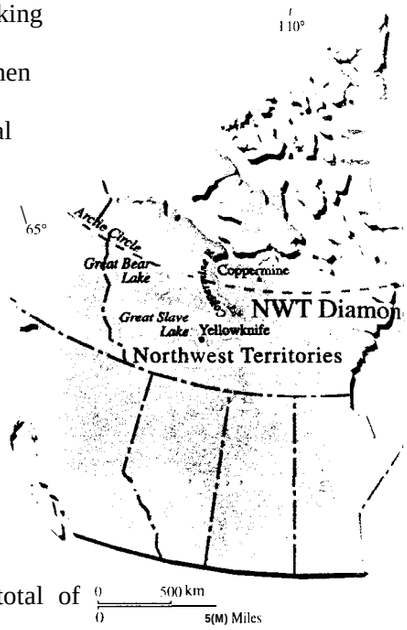


Gem-bearing diamond pipes arc so rare that only 15 major mines have been developed in the world, all of them in Africa, Siberia or Australia...none in North America. Despite these odds. Canadian geologist Chuck Fipke and his prospecting partner Dr. Stewart Blusson spent over ten years systematically prospecting in the North for diamonds. Fipke and his associates criss-crossed the North searching for the source of indicator minerals.

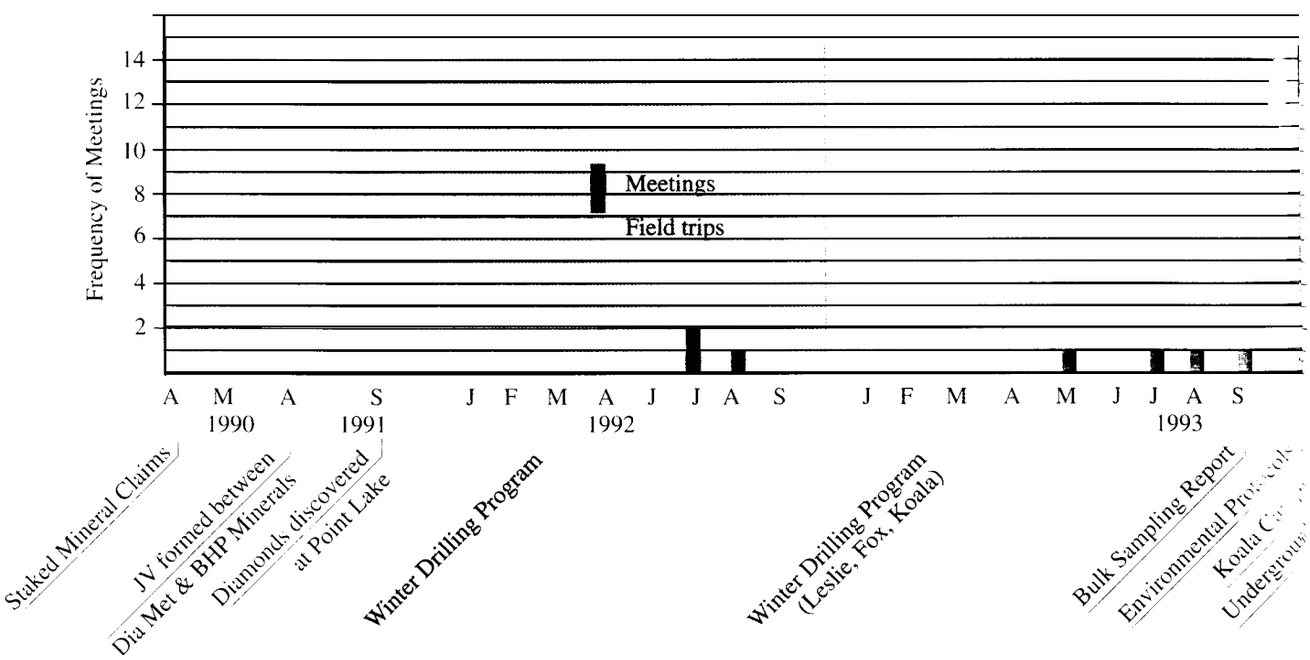
brightly colored chrome diopsides and garnets. which are associated with kimberlite pipes. On foot or in a light aircraft. Fipke tracked the trail of indicator minerals across the barrenlands along the

westward migration path of ancient glaciers. In 1983, to finance his continuing quest for diamonds in the North, Fipke formed Dia Met Minerals Ltd., headquartered in Kelowna, British Columbia.

In 1989, Fipke found indicator minerals in the Lac de Gras area and started staking minerals claims. Fipke and Dia Met then sought out BHP, a premier international mining company, to be the Operator of the project. The joint venture agreement was signed in August 1990. With BHP as the Operator, the first diamonds were discovered by drilling near Point Lake in the fall of 1991. Since the initial discovery, a total of 44 kimberlite pipes have been identified on the Proponent's claim block. Five of these pipes are considered

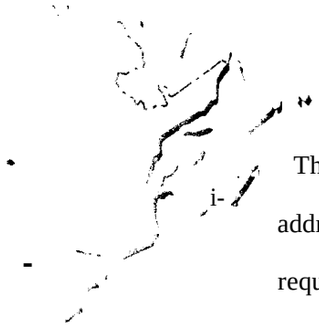


Timeline - Project Events and



to be economically viable under existing fiscal and regulatory regimes. With approval by the Government and joint venture partners, the dream of creating a diamond mine in the NWT is on the verge of reality,

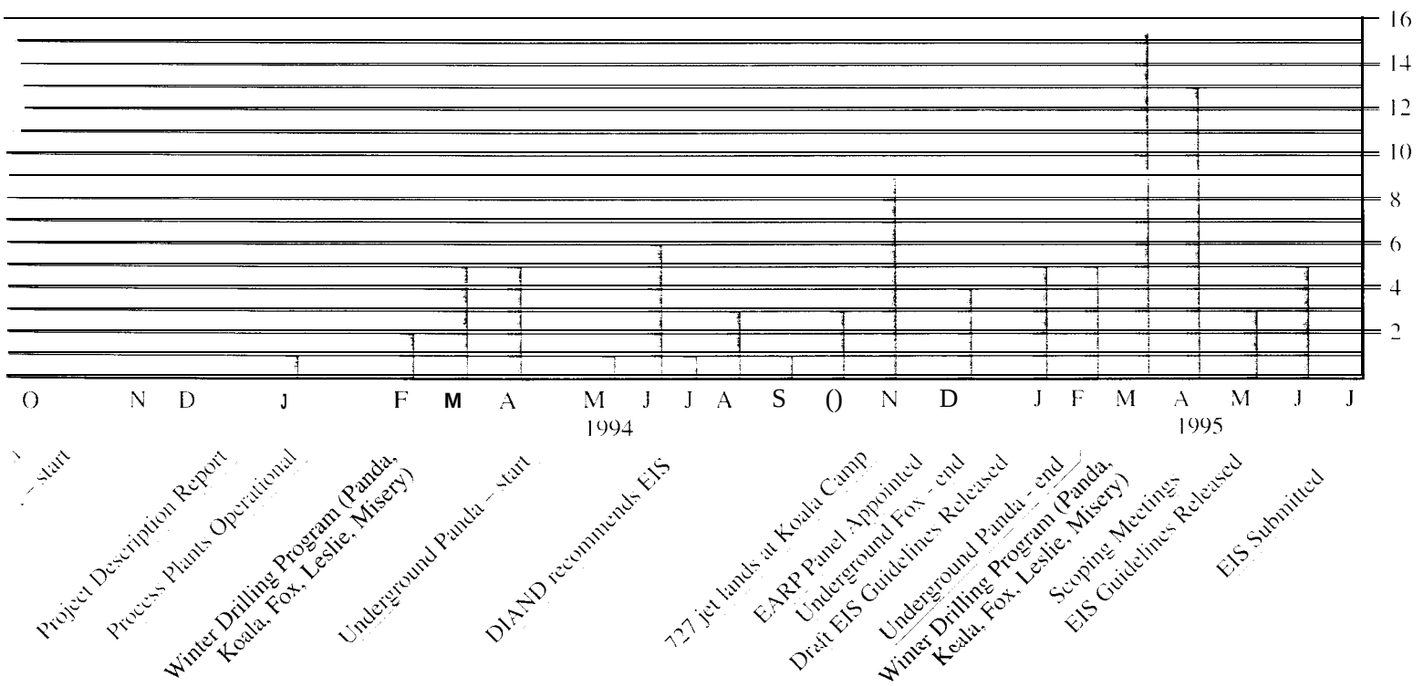
Project



The Proponent has been actively addressing northern environmental requirements for the past several years. Commencing in 1992 the Proponent initiated a series of public meetings at communities throughout the North to inform residents of its activities and to invite local input on the project development.

The value that Aboriginal peoples place on their traditional ties to the land was emphasized at meetings attended by the Proponent in Aboriginal communities and

Communications Program



elsewhere. Speakers emphasized the importance of maintaining water quality, safeguarding the Bathurst caribou herd and ensuring that the project avoids causing permanent damage to the land.

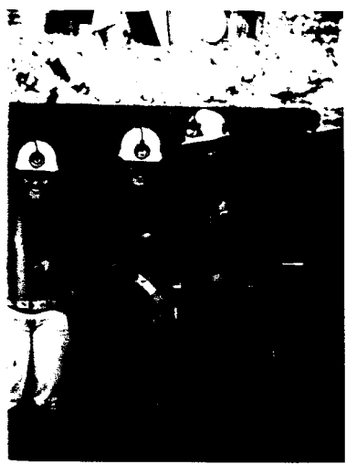
The Proponent has strived to identify and understand the applications of traditional knowledge and its various uses in project planning. This has involved many visits to Aboriginal communities by the Proponent, invitations to the Aboriginal people to tour the Lac de Gras project site and visits by the Aboriginal people to mines operated by BHP on Navajo Nation land in the United States.

The Proponent has encouraged the involvement of elders in the identification of wildlife habitat, migration patterns and archaeological sites. Discussions have been held with residents of northern settlements to identify and minimize social disruptions that might be caused by a greater shift towards a wage economy in these small communities. The Proponent accepts that trusting relationships with traditional Northern communities may take many years to establish and that several different approaches may be required before parties become confident in discussing sensitive community concerns and aspirations. The Proponent is committed to pursuing these long range relationships with Northern communities.

The arctic climate is a major consideration in the planning of the project. The summer months provide the only cost-effective and reasonable period for major concrete construction and lake dewatering. Similarly, the winter period is the only reasonable time to transport equipment, fuel and materials to the project site and to construct frozen core dams. Approval, permitting and climate are interwoven factors that can have significant effects on the project plan and schedule. A one or two month delay in obtaining project approvals can effectively delay the entire project by up to one year.

The project has been designed on the principle of partnership with the local communities and respect for the land. An Environmental Management Plan based on the principle of pollution prevention has been developed which addresses all known environmental concerns in a comprehensive and integrated manner.

The project development plan centers around the safe and permanent storage of process plant tailings, the control and proper disposal of domestic and other wastes and construction and operation which minimize surface disturbance. An appropriate site reclamation and abandonment plan is also included.



Operator Responsibilities

As the Operator, BHP undertakes to meet current environmental and regulatory obligations and to be ready to apply improvisional practices to achieve future standards and requirements. The principles of continuous improvements and flexibility have been incorporated into the project design and management philosophy.

As confirmation of the Company's commitment to the principles of environmental responsibility, BHP Minerals has won a number of environmental awards for responsible stewardship of the land it mines in Canada. BHP received a Citation for Most Outstanding Program of Environmental Protection and Reclamation for a Metal Mining Company in British Columbia (1979), an Award for Environmental Reclamation (1980 and 1983) and a Citation for Metal Mining (1986).

The Proponent is committed to sustainable development and will undertake its operations with concern for long-term influences on the northern environment, including communities. Pollution prevention has been designed into every functional aspect of this project. Such a design approach minimizes any need for subsequent mitigation measures.

The Proponent has incorporated traditional knowledge from the Aboriginal groups in the project planning and the preparation of this Environmental Impact Statement (EIS). To date this knowledge has been acquired through community meetings, personal interviews, site visits, discussions with employees, funding for research and land use maps. The inclusion of traditional knowledge in ongoing project operations will help to ensure that the project benefits from both scientific and engineering disciplines as well as the accumulated learning of generations of inhabitants of the region.

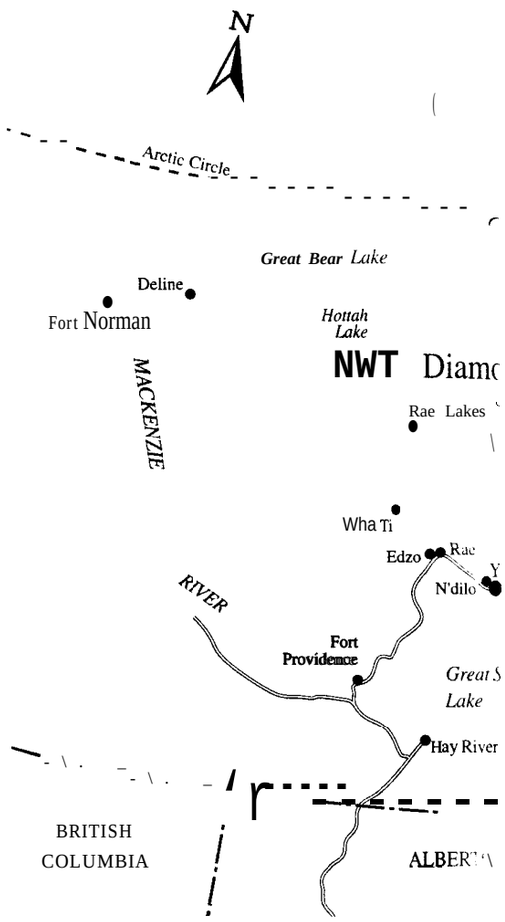
Throughout the development of the EIS the Proponents approach has been to understand and to integrate the links between the project, ecosystem integrity, social health and economic stability. Special attention has been paid to tundra biodiversity, valued ecosystem components and the project's cumulative effects.

A major regional study of issues related to mineral development in the Great Slave Geological Province (GSGP) is being undertaken by the Governments of Canada and the NWT as well as industry

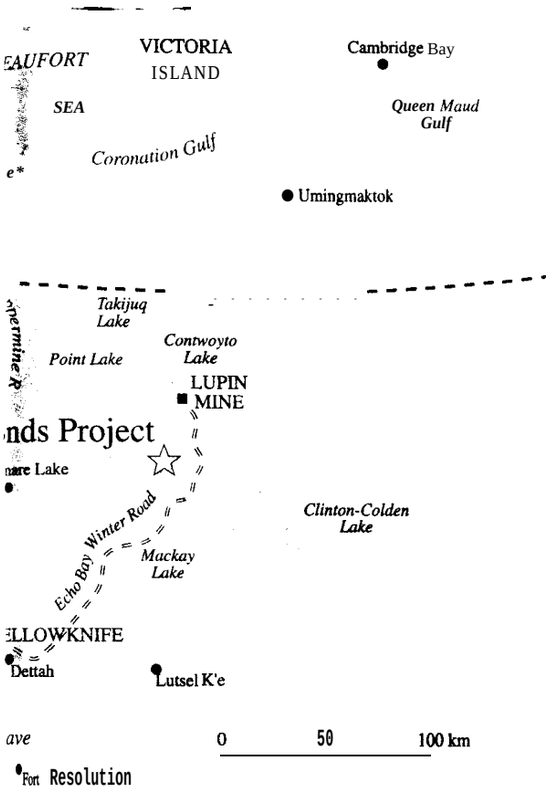
and Aboriginal groups. This study, spanning five years, will develop a baseline of environmental data and examine the links between the various environmental. social and economic settings. It will provide a better understanding of the possible effects of regional development and identify methods to monitor these impacts. The Proponent welcomes the work being undertaken by this program and has pledged financial and logistical support for the study.

The Proponent is also initiating and funding a program with most of the region's Aboriginal groups to develop a baseline of traditional knowledge. This will facilitate future assessment of regional development and assist with monitoring of impacts. In addition, the project has co-sponsored the first year of a multi-year regional research program f'or the barren land grizzly bear, a vulnerable species of the North.

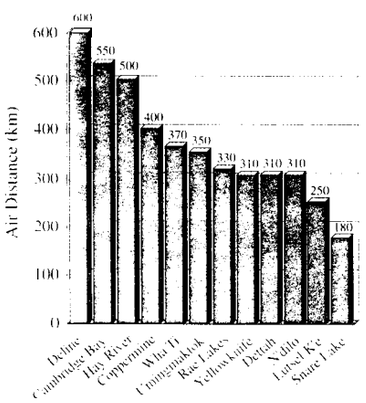
While not dependent upon the completion of the GSGP regional study, it would appear that the review of the NWT Diamonds Project is in fact a catalyst for many aspects of the regional study.



It is important to note that historical land claim conflicts exist between the Treaty 8 and Treaty 11 bands. Both groups are at various stages of negotiations with the federal government in an overlapping area that includes the NWT Diamonds Project. The realities of this conflict often create questions that make the communication and consultation process more complex for the Proponent.



Distance from Project Site



Three communities, Dettah, N'dilo and Lutsel K'e, are part of Treaty 8, which was signed in 1899. Dettah and N 'dilo are Yellowknives Dene communities while Lutsel K'e is Chipewyan Dene. Wha Ti , Snare Lake, Rae Lakes and Rae-Edzo comprise the Dogrib Treaty 11 Dene, whose treaty was signed in 1921. Currently the Treaty 8 band is negotiating treaty lands entitlement while the Treaty 11 band is in the process of negotiating a comprehensive land claim.

Two other Aboriginal communities are concerned with the project area. The Inuit of Coppermine and Umingmaktok have settled their land claims in the Nunavut Land Claim Agreement. Coppermine, which is 400 kilometres downstream from the project, is the only community in the same drainage system as the proposed mine.

The Metis (those of mixed European and Dene ancestry) live in the Dene communities in Yellowknife, and also claim an interest in the Lac de Gras area.

All the communities were informed that the Proponent can only address issues arising from settled land claims. Discussion of royalties, lease payments and land access fees must necessarily come from the federal government and the results of its negotiations with the various groups. Therefore, the Proponent has instituted a policy of inclusion with its consultation program for all the Aboriginal communities that might be affected by its operations.

General references to "Aboriginal" interests are made throughout the EIS. For the EIS, the term Aboriginal peoples is meant to include First Nations (Treaty 11 Dogrib Dene, Treaty 8 Yellowknives Dene, Treaty 8 Lutsel K'e (Chipewyan Dene)), Inuit and Metis. Where warranted, specific Aboriginal groups are identified.

The Human Resources Program will reflect the best practices from BHP's experience as a global employer. The Program is designed to address the unique personnel issues inherent to operating a mine in the Northwest Territories.

One of the key components of the Human Resources Program is a recruitment policy designed to give employment preference to Aboriginal people of the Northwest Territories, then to non-Aboriginal residents of the Northwest Territories, then to other Canadians. To ensure the success of this policy, an innovative selection process, based on personal aptitude rather than standard employment criteria, such as education, experience and qualifications, will be implemented. This will address concerns such as the one expressed by Chief Charlie JeremicK'a at the Dogrib Treaty 11 Scoping Meeting in ‹haTiOnMarch 29, 199'" Chief JeremicK'a noted:

Hiring will reflect the philosophy that "the best prediction of future performance is past performance in similar circumstances." Potential applicants' understanding and acceptance of this concept will be actively sought by initiating discussions within the local communities to explain the interview process and to adapt or modify it as required based on input from Aboriginal people. In addition, throughout the life of the project, from pre-employment to mine closure. employees will be provided with extensive training. The benefits to employees are opportunities for continuous learning and the acquisition of transferable skills and knowledge through a formal certification program. The concurrent benefit to the project is the retention of a high-quality, motivated work force.

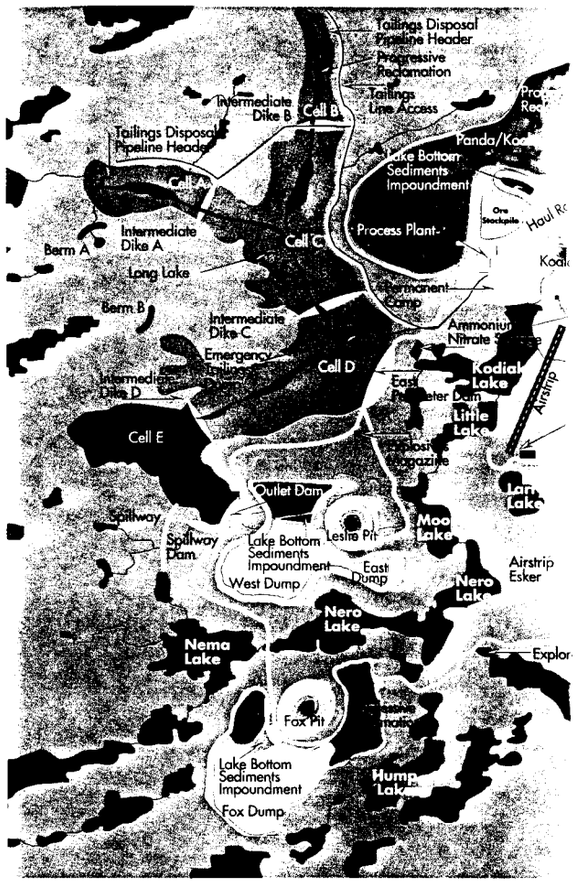
Yellowknife has been designated as the point of hire. Employees will be flown between Yellowknife and the mine at the completion of their shift rotation, at Company expense. As some employees will come from smaller communities. transportation to the mine site will be provided at no cost to these communities, utilizing existing commercial services. These communities include Snare Lake, Rae Lakes, Wha Ti, Lutsel K'e and Coppermine. The regular shift schedule will be a two weeks on/two weeks off rotation, working 12 hour shifts per day. This rotational work schedule will permit Aboriginal employees to maintain traditional lifestyles concurrent with participation in a wage economy.

The success of the project is dependent on the people of the North. The Proponent is therefore committed to maintaining a flexible, reasonable and responsible approach to its Human Resource policies.

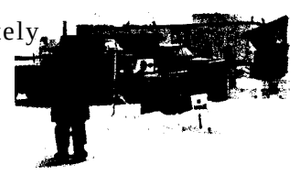
The Proponent views occupational health and safety as its highest human resource priority. The Operator has an Occupational Health and Safety policy that demands of its managers and employees the highest standards of occupational health and safety.

The NWT Diamonds Project has a comprehensive safety program under development that will take into account the special needs of the proposed project such as location, arctic climate and cultural values of the employees.

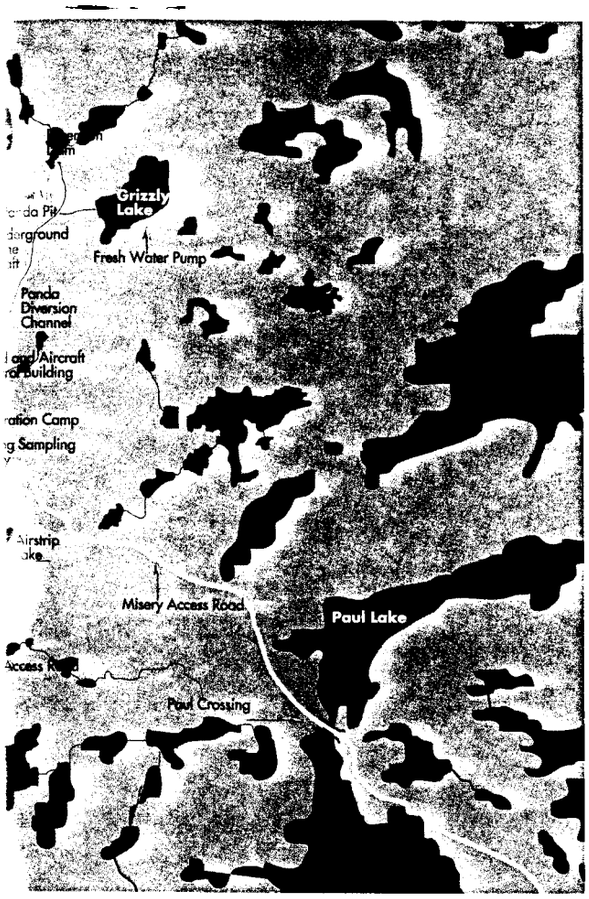
Ground transportation to the project site is possible only when the Echo Bay winter ice road is in operation. The total road distance from Yellowknife to the site is 476 kilometres.



During construction, an estimated 2,250 truckloads of equipment, materials, tools and consumables will be shipped to the site over the winter road. Transportation requirements during operations will be approximately 2,000 truckloads per year of primarily fuel and ammonium nitrate prill.



Air transport will be an essential feature of project logistics. Chartered aircraft



will be used to transport all personnel to and from the site, to bring foodstuffs and other perishable or critical supplies into the site and to ship diamonds out from the site. The existing airstrip can accommodate Hercules C 130 and Boeing 727 and 737 sized jets.

Project construction will commence immediately upon receipt of approvals and permits. The major objective for the summer of 1996 is to prepare enough concrete foundations and piling work to support the erection of building shells before the onset of winter. Once building shells have been erected. interior finishings can proceed throughout the winter of 1996/1997. By the close of 1997, the process plant could be processing ore.

The planned work schedule is based on a three weeks in/one week out. 70 h/wk rotational construction schedule. The construction work force will be housed in a temporary 500 person prefabricated trailer-style camp.

Besides the mine and process plant. other buildings and services will be provided on site to support the operation. These facilities include a permanent camp to house a 400-person rotational work force. a diesel power plant, an integrated truckshop/ offices/warehouse complex and a security building. Other services and utility systems such as fuel storage and distribution, both potable and process water supply, sewage treatment and waste disposal will be established to supply these main buildings.

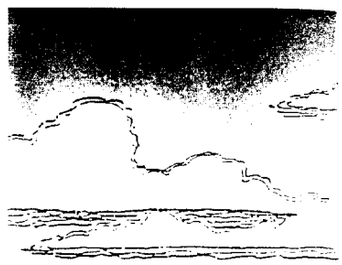
All facilities are designed in a compact arrangement that takes advantage of the natural site contours. This arrangement also allows for waste heat recovered from the diesel generators to be used for space heating requirements.

Limited infrastructure fo, the satellite Misery pipe which is located 29 kilometres to the east of the plant site will consist of diesel fuels storage, a truckshop/office complex and a smal self-sufficient camp,

The mine development plan involves five kimberlite pipes. four of which are located within a few kilometers of each other within the Koala watershed north of Lac de Gras. The fifth pipe is 29 kilometres to the southeast of the plant site. adjacent to Lac de Gras. The pipes, known as Panda. Misery, Koala, Fox and Leslie, lie under lakes of the same names. After each of the overlying lakes is dewatered, a conventional truck-shovel open pit mining operation will commence. followed by underground development of at least two of the pipes.

Over the life of the project, approximately133 million tonnes of ore and 826 million tonnes of waste will be mined. Between 35 and 40 million tonnes of waste rock will be excavated each year from the open pits and smaller volumes from the underground operations. This rock will be transported by large haul trucks to waste rock dumps in the vicinity of each pit. The waste rock dumps will not encroach within 100 metres of major water bodies.

An underground mine at Panda, lasting five years, will be constructed using sublevel caving methods followed by 10 years of similar underground mining at Koala after the respective open pits have been exhausted.



An added feature of the mining plan is the construction of a diversion channel to direct water flows around Panda and Koala lakes into Kodiak Lake. This channel also serves as new fish habitat.

Processing

Recovery of diamonds from the ore will take place in a centralized processing plant located southwest of the Koala pit, The plant is initially designed to handle 9,000 tonnes per day on a 24 hours per day, 365 days per year schedule and an expansion to 18,000 tonnes per day is planned in year 2006.

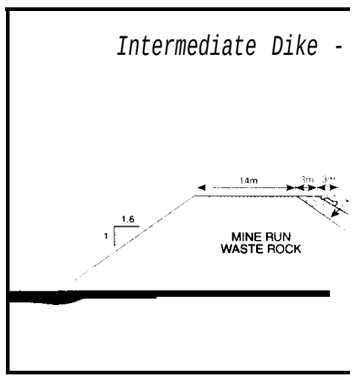
Diamonds have distinctive physical characteristics that enable separation from the host rock through physical rather than chemical processes. Several stages of crushing and scrubbing which will liberate the diamonds and remove the soft clay minerals from the ore, are followed by heavy media separation which segregates diamonds based on their relatively high density. A final stage of X-ray sorting will then be used to separate the diamonds from any remaining heavy minerals. The diamonds will be shipped off site for final cleaning and hand sorting.

Through its sampling and evaluation process, the Proponent has become acquainted with many of the major market participants in the industry, with existing industry practices and with various marketing alternatives. As a result, the Proponent believes that any diamond processing and manufacture beyond the sale of the rough diamonds is unattractive economically and has no plan to enter into this part of the business. No cutting, polishing or other such downstream processing will be established as part of the project.

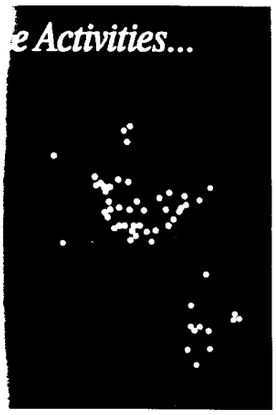
The Proponent plans to sell rough diamonds on the world market at world prices. Sale may be directly to dealers or manufacturers; through joint venture marketing entities with established industry vendors or agency arrangements; or by auction or tender. In any case, a test marketing phase will be required for proper introduction of goods, the development of a reliable customer base and to establish prices for Canadian goods based on tender, auction and direct sale methods. All transactions will be subject to the same valuation and auditing procedures as any other exported goods in international trade.

Implicit in this plan is the intent to do cleaning and final sorting of rough diamonds at a site readily accessible to potential customers. While such a site remains to be selected, it is most likely to be Antwerp in Belgium which is the world's major diamond center.

Not only is it important for the marketing effort to be near its customers, it is vitally important to have the needed skills in evaluation, sorting and preparation of saleable parcels to maximize the revenues from the project's product. Such skills take many years to acquire and are not



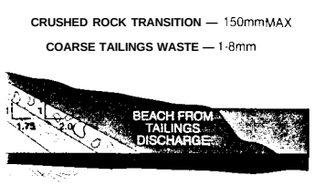
presently available in Canada.



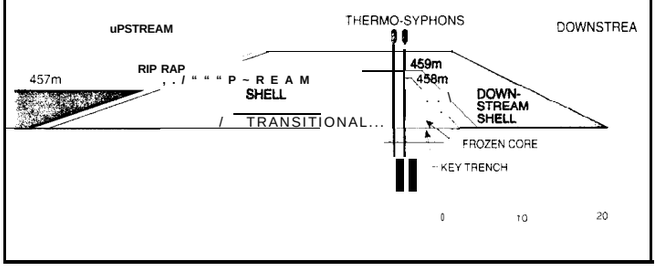
4s a means of assuring that the NWT Diamonds Project does obtain the best prices, the final marketing and sales plan adopted will include a continuous system of reference to current market conditions through competitive tender or auction procedures of a representative sample of rough diamonds being sold. Each step in the process will be open to observation and audit by relevant Canadian authorities.

The process plant tailings will be separated into a coarse sand/gravel sized fraction and a fine fraction. The coarse fraction will be trucked to the Koala waste dump and dumped dry while the fine fraction will be placed into a medium-sized lake on the property, immediately west of the processing plant. This lake, named Long Lake, was chosen because of its size and because it has a small watershed area. The selected lake has the added advantage that it is within the same watershed as the project development and is close to the headwaters of the drainage basin. The storage capacity of Long Lake will be increased by the construction of frozen core dams at the outlet and several perimeter dikes to contain the first 20 years of plant tailings. The lake will be subdivided into five cells by intermediate waste rock dikes. The cells will be filled sequentially thus allowing time for the finest tailings to settle. This tailings facility will also be the source of raw water for the process plant. Clean water discharge from the impoundment will be controlled to ensure that receiving water quality

ypical Cross Section



Perimeter Dam - Typical Cross Section



criteria are met. After Long Lake is full, tailings will be discharged into either the Koala and/or the Panda exhausted open pits.

As the tailings cells in Long Lake become consolidated, they will be reclaimed by the installation of waste rock cover and till growth medium. The final revegetation will convert the tailings basin into a wetland environment over a base of frozen tailings.

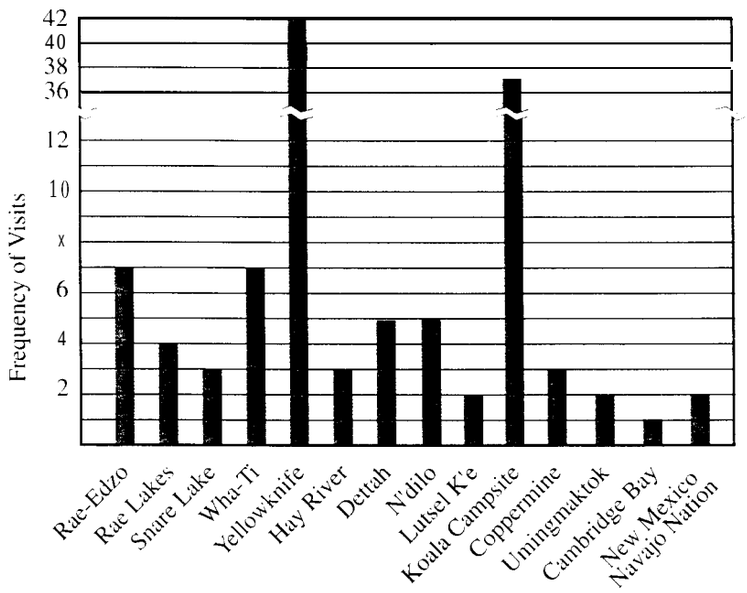
Reclamation, Decommissioning and Closure

Reclamation will provide the major means of mitigating impacts associated with the project. Reclamation research at the project site was initiated in 1994. Reclamation activities will be implemented early in the project life and will proceed continuously as sites become available. This will minimize the extent of the area under active disturbance at any one time. Early reclamation will also enable modifications to the process as additional research data become available. Reclamation will use the appropriate plant species in succession and be self-sustaining according to the area's natural vegetation. As well, maintenance programs will be developed to treat sites that fail to meet the established standards.

Decommissioning and closure will start after all economically viable ore has been mined and processed. This will entail removing all structures, burying foundations and removing culverts to restore water flow patterns. Reclamation operations will, by that time, be limited to those sites active at the end of operations. All other sites will already have been reclaimed.

Commencing in 1992, the Proponent embarked on a comprehensive communications program to address the needs for different types of information and the changing needs of the different stakeholders. The Proponent continually adapts and modifies its communication program to meet these needs.

Visits to Local and Regional Communities



The Proponent identified the following interest groups and tailored the initial phase of the communication program specifically for each:

- local and regional residents, particularly the Aboriginal peoples;
- organizations;
- resource users;
- governmental entities.

The objective of the communications plan is to consult with each interest group and to inform them of the proposed diamond mine. This important process affords each group an opportunity to express its unique concerns and allows the Proponent to listen and learn throughout the discussions. Given the diversity of

audio and video tapes were also employed.

To increase interaction and promote Aboriginal participation, the communication program has evolved since its inception to include direct community involvement through initiatives such as Community Mobilization, School Partnerships and Educational Scholarships.

the identified groups and their specific issues, this interactive communication process was critical to the creation of an effective dialogue between the parties involved and ultimately to achieve the Proponent's goal of establishing a "good neighbour" policy for the mining operation.

Community meetings, open houses, public presentations and environmental workshops were considered the most effective means of disseminating the information as well as reaching the greatest number of residents. Field trips, cultural exchanges, joint workshops and

Methods of addressing future concerns of the interest groups will continue to be interactive and geared to implementing

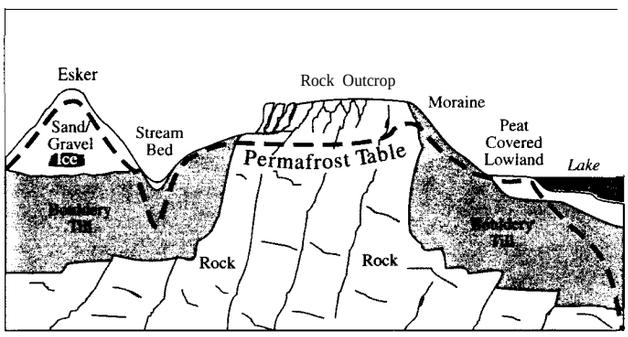
solutions where possible by using all of the above methods. However, not all issues and concerns can be anticipated, thus the Proponent will address the unique concerns of the Aboriginal communities by commencing discussions of Benefits Agreements. The interest of Aboriginal communities in playing a larger role in the NWT Diamonds Project was expressed by Violet Camsell-Blondin of the Dogrib Renewable Resource Committee in her speaking notes to the EARP Panel on April 4, 1995:

The Benefits Agreements create long-term mechanisms for ongoing working relationship and provide a good framework for addressing future opportunities and concerns. Benefits will also accrue to the Proponent by allowing the incorporation of traditional knowledge into its operations and the creation of important operational relationships.

Project Setting

The project lies within the Low Arctic Ecoclimatic region. Summers are short and cool and winters are long and extremely cold. Daily temperatures are often below minus 30”C during winter, while summer temperatures can reach 25°C. The average annual temperature is minus 11.8°C. Precipitation is sparse averaging 300 millimeters annually with the majority being in the form of snow.

The terrain in the project area is characteristic of the tundra with boulder fields and many lakes interconnected by streams. There are more than 8,000 lakes representing one third of the land mass of the Proponent’s minerals claim block. The land has continuous permafrost, a 250 metre deep layer of permanently frozen subsoil and rock overlain by a one metre active layer that thaws during summer. The most distinctive physical features of the land are the eskers, sinuous ridges of granular material deposited by glaciers. Eskers are important to wildlife for denning and as travel corridors for both wildlife and Aboriginal people.



Biological Setting

The Lac de Gras area is host to numerous species of resident and migratory mammals and birds. Among these are two key species of particular concern to the people of the north: the Bathurst caribou herd and the barren land grizzly bears. The two species represent concerns from two perspectives, social and environmental. From a social perspective, potential project effects on caribou elicited more concern during public meetings than any other species. Grizzly bears are an environmental concern because they are designated as vulnerable by The Committee of the Status of Endangered Wildlife in Canada (COSEWIC).

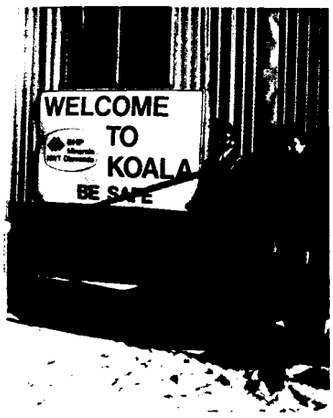
Arctic fish populations are characterized by limited species diversity, slow growth rates and often late reproductive maturity The main species are lake trout, arctic grayling, round whitefish, burbot and longnose suckers. Some lakes may have only one dominant species, often lake trout or arctic grayling.

The project area is 100 kilometres above the tree line. Vegetation is dominated in exposed uplands by stunted shrubs and grass tussocks. Tall shrubs such as willows and scrub birch occupy depressions. Wetland areas have a complex of water sedges and sedge-willow communities.

Socio-economic Setting

The Northwest Territories is unique in Canada because of its majority Aboriginal population, its nine official languages and its short political history. The territorial economy is split into a traditional economy based on hunting, fishing and gathering and a wage

economy based on resource extraction, government and the service industry.



According to the Federal Minister of Indian Affairs and Northern Development, Ron Irwin, in an address to the House of Commons Standing Committee on Aboriginal Affairs and Northern Development on June 15, 1995:

[illegible]

Residents of the NWT represent 0.2% of the Canadian population. The population is Inuit and Inuvialuit 37%, Dene 17%, Metis 7% and non-Aboriginals 39%. The population of the NWT is growing at an extremely high

rate of 25 per 1,000 people which is almost twice the national average. It is also a young population, with approximately 410/0 under age 20 and only 30/. over 65.

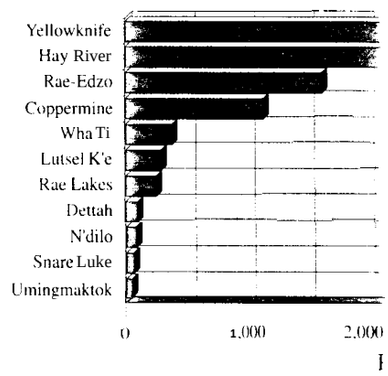
In 1994, overall NWT unemployment was 170/., among the highest in Canada. However in small, largely Aboriginal communities, unemployment rates are 27% or higher. Unemployment rates are 7% in Yellowknife, significantly below the national average. The population is growing at a much faster rate than the economy and unemployment rates are predicted to further increase.

Government is the largest employer in the NWT, and the largest purchaser of northern goods and services. Public sector employment was 46% of the work force in 1993. With the governments of Canada practicing fiscal restraint, the level of private investment in the NWT is of increasing importance.

In the private sector. mining is the NWT'S largest revenue generator, contributing approximately 200/0 of the private sector GDP. Mines and exploration companies collectively purchase about $50 million in goods and services annually in the NWT. Spending by exploration companies peaked at $157 million in 1994.

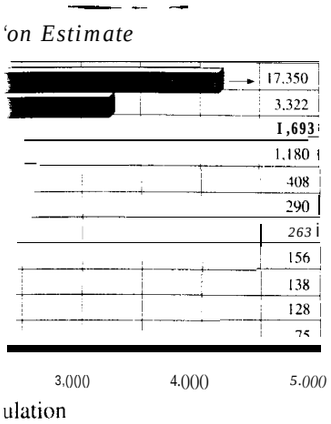
The cost of living in the NWT is expensive when compared to the rest of Canada. For example, weekly food costs are 97% higher in Coppermine and 25% higher in Yellowknife than in Edmonton. When food costs are calibrated against incomes. it is again apparent that Northerners not employed in above average paying jobs must rely on country foods to augment their household budgets.

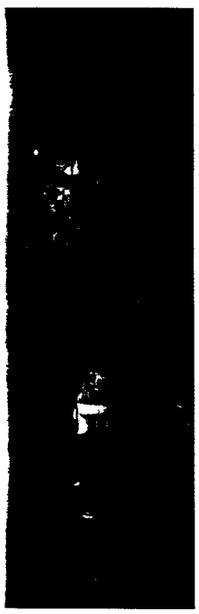
1995 Popu



The NWT Diamonds Project is of interest to people in many NWT communities. The four communities of Wha Ti, Snare Lake, Rae Lakes and Rae-Edzo. comprise the Dogrib Treaty 11 Nation. Considered the capital of the Dogrib Nation, Rae-Edzo has a population of almost 1,700. The other Dogrib communities range in population from 130 to 400. The small traditional community of Snare Lake, located 180 kilometres west of the NWT Diamonds Project is the closest community to the project site,

Three communities, Dettah, N'dilo and Lutsel K'e are part of Treaty 8. Lutsel K'e, with a population of 300, is the most northerly Chipewyan settlement. Dettah and N'dilo are the communities of the Yellowknives Dene Band, which





has a membership of about 1,050. Dettah, with a population of about 150, lies on the east side of Yellowknife Bay about 27 kilometres by road from Yellowknife. N'dilo, which has about 150 residents, is a small community within the City of Yellowknife at the tip of Latham Island. Most other band members live in greater Yellowknife.

The North Slave Metis people who live in the Dene communities as well as the City of Yellowknife have an interest in the land on which the project is located. Two Inuit communities, Coppermine and Umingmaktok, although located outside the NWT Diamonds Project area, have an interest in the project based on employment opportunities and environmental concerns. Coppermine is the only community in the same water drainage system as the NWT Diamonds Project. The population of Coppermine is approximately 1,200.

Yellowknife, the capital of the NWT, is the largest municipality in the NWT with a population of 17,000. People of Aboriginal ancestry account for 17% of the population. Government is the largest sector of the economy, employing 43°A of the local labour force. Yellowknife's economic growth declined in the early 1990's due to a combination of factors including government cutbacks in spending and the absence of a major development project. Over the past few years, mineral exploration, particularly diamond exploration, has been the engine of growth for the economy of the city.

Hay River is the fourth largest community in the NWT with a population of 3,400. Considered a transportation hub of the Western Arctic, Hay River is the terminus of the only rail line in the NWT. The economy of the community has historically been dependent on major non-renewable resource projects. As a result, Hay River has developed an aggressive private sector providing services and mining supplies.

Northern Concerns and Project Impacts

(Darrell Beaulieu, Chief, Yellowknives Dene band).

The issues of linkages between and among components, as opposed to the components themselves, is essential to addressing the concerns of the Aboriginal peoples. Separating humans from nature diminishes each and their complex interrelationship.

Caribou play a central role in the lives of the Aboriginal people. A conservative estimate is that the six Dene communities harvest an average of three caribou per household annually. Many families harvest up to six animals per year. The importance of caribou to the Aboriginal people historically and at present cannot be overestimated. As stated by Dogrib Treaty 11 Grand Chief Joe Rabesca on March 8, 1994 during a meeting in Yellowknife:

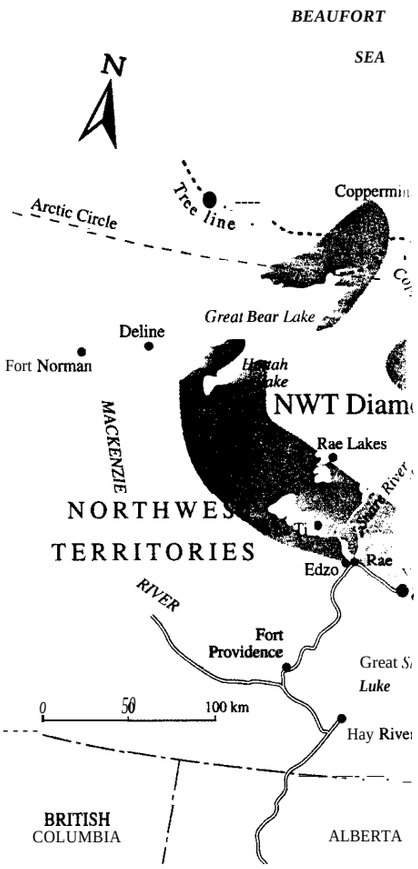
The project site lies within the migratory front of the Bathurst caribou herd and is located between their traditional spring calving ground east of Bathurst Inlet and their winter range below the treeline. Migration occurs during the spring and fall, and occasionally during the summer. It is important to note that the project site is less than 0.03°/0 (3/10,000) of the 250,000 square kilometres range used by the herd. Furthermore, baseline studies to date have shown that one percent of the estimated 450,000 Bathurst herd migrates

through the project site. Additionally, studies have also identified the presence of one traditional travel corridor of the herd (Point de Misere) in the Proponent's main claims block.

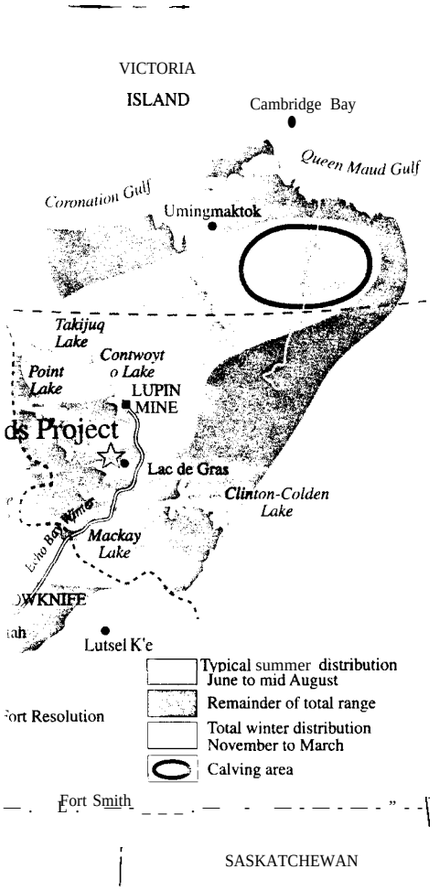
Research suggests that caribou are resilient to disturbances associated with development, but it remains important to monitor, manage and minimize the effects of development on the caribou. It is the Proponent's intention to ensure the effectiveness of all mitigation measures required to maintain the migration process. Education and awareness are key components of these measures.

sensitive species within the Lac de Gras area. Preliminary results indicate that they are present in low numbers, based on the few actual sightings and signs of their presence (tracks and dens) in the project area.

Education and awareness of bear safety and avoidance will continue to be important aspects of the Proponent's mitigation plan to minimize any potential impacts or negative interactions with people. Additionally, knowledge of the bear's ecology (habitat, diet, distribution) will continue to be an important aspect of the ongoing monitoring program. The Proponent has committed funds and is participating in a grizzly bear



As a result of decreased populations and habitat loss throughout the world, grizzly bears are considered as a species of national and international concern. As such, the grizzly bears are considered to be the most



study as part of the Great Slave Geological regional studies. Such studies will add to a better understanding of the status of the grizzly bears locally and regionally.

The project area lies within the headwaters of the Coppermine River and covers 73 square kilometres, or approximately one thousandth (1/1000) of the entire Coppermine River drainage basin. Maximum flows are during the spring freshet, when over 50°/0 of the annual runoff occurs from melted snow.

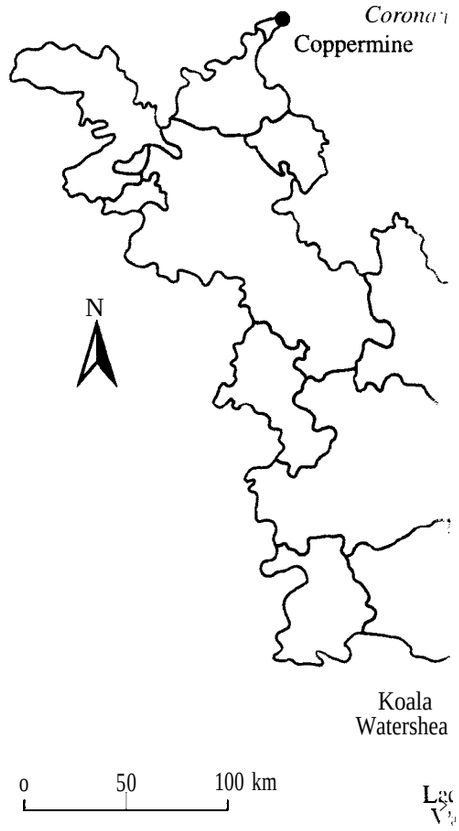
These watersheds provide fish habitat and are the project's source of fresh water. Local water quality determines much of the ecological integrity of nearby ecosystems as well as those downstream. Natural water composition is typical of headwaters of high latitude watersheds, being soft, of low ionic strength and slightly acidic. Most baseline water parameters were below detection limits. The sediments of the lakes in the Koala watershed do not differ substantially from the adjacent watersheds.

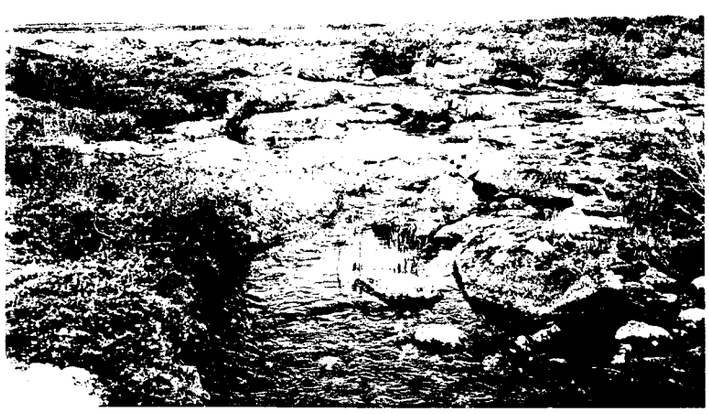
Fish are important water quality indicators as they are at the top of the food chain. The nutrient limiting lakes contain small populations of edible fish. Detailed fish population estimates were conducted on six lakes designated for mining and

tailings disposal and a further 19 lakes and numerous streams were studied for the presence and quality of aquatic life. Lake trout population estimates for the five lakes directly impacted by mining varied from approximately 90 mature fish in Misery Lake to a high of 260 mature fish in Koala Lake. In Long Lake, the proposed tailings disposal site, lake trout population was estimated at approximately 2,000 mature fish. Prior to dewatering the designated lakes, the resident edible fish will be harvested with the assistance of the Aboriginal peoples and distributed to the local Aboriginal communities. Compensation for the loss of habitat in the lakes directly impacted by mine development is being negotiated with the Department of Fisheries and Oceans.

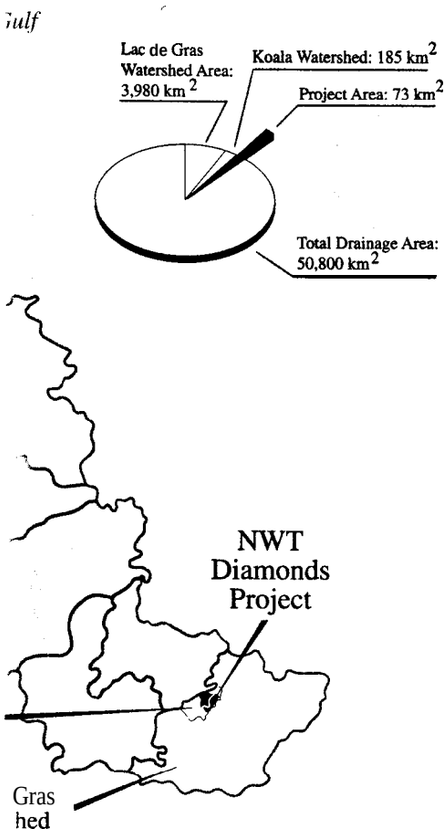
Fish populations are best preserved through habitat protection, and this will be achieved largely through the water management plan. Water quality management will ensure that effluents from operations meet all water quality discharge standards.

Central to the water management is the handling of tailings water in Long Lake. This involves the containment and recycling of turbid water and the discharge of water that meets all established criteria. Regular monitoring of key parameters will alert operators



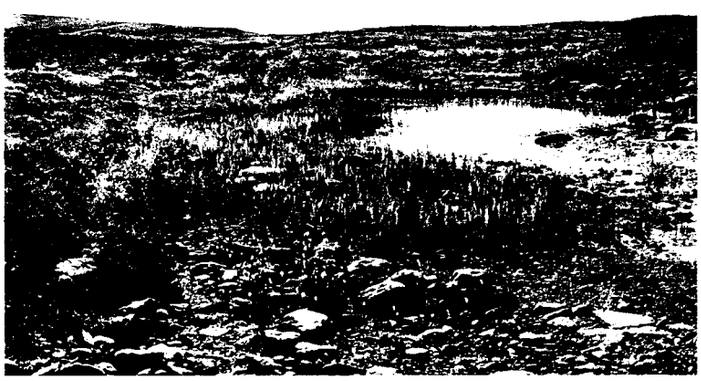


)rainage Basin



to possible problems for which mitigation will be implemented at the source. Impounded tailings must provide a stable, reclaimed landscape over which natural precipitation must eventually flow freely and enter unpolluted into nearby waters.

Five lakes will be dewatered for mining, one will be used for tailings disposal and one very small lake will be drained and used as an aggregate source. The total lake area lost will be approximately 890 hectares, or less than six one thousandths (6/1000) of the lake area in the Coppermine River watershed. Mitigation of lake habitat loss will be partially offset by measures currently under discussion with government regulators. A diversion channel will be constructed between Panda and Kodiak lakes, which will mitigate the loss of stream habitat and migration routes resulting from lake dewatering. The residual effects of the five open pits will be the creation of deep, steep-sided, nutrient limiting lakes, which will re-establish over a long period of time. Some of the stream habitat between the pits will be restored when the lakes eventually refill and drainage occurs.



Throughout each phase of mine development, from construction through mine closure. sound engineering design will minimize the area of surface disturbance. In addition. those areas disturbed will be reclaimed using innovative methods and site specific research. As such, the land will ultimately retain its current land use in spite of these land disturbances.

Vegetation is a key component of local biodiversity in the sparsely populated tundra. Vegetation may be affected on a local scale by activities that remove soil. impede soil drainage and compact soils. Even with localized impacts, the effects will persist for a long time due to the slow growth and recovery rates of tundra plants. Impacts will be **incurred at all project stages, and can be divided into complete vegetation loss and** degraded vegetation. A combination of good mining practices and a comprehensive and successful reclamation program will minimize and mitigate any losses to the vegetation.

Traditional knowledge has been defined by the Dene Cultural Institute as:

This knowledge is, by its very nature, broad. pervasive and permeates all aspects of Aboriginal life. Most traditional knowledge is passed from generation to generation orally, thus recorded information is limited. Through the consultation program. the Proponent tried to gain some insight into the difficult and complex issues surrounding [traditional knowledge.

As the community consultation program progressed. the Proponent perceived that the Aboriginal people want to **continue to live in their home communities and** to pursue hunting and fishing for both sustenance and traditional purposes. From the Aboriginal perspective, management and use of the land cannot be separated from responsibilities to cherish, protect and nurture the land. The Dene of Lutsel K'e have expressed this relationship by stating that they consider themselves to be [8]"gllurdians" of the land rather than merely *"landlords"*. Reliance on the land is a traditional way of life for Aboriginal people and the continuation of that relationship is a vital element in their identity and values.

In spite of these traditional concepts, the communities also recognize the value of a wage-based economy to purchase trucks, snowmobiles, rifles, boats, food and clothing to supplement their traditional lifestyle. Many of the elders spoke of this issue and their concern for their young people to acquire better education, obtain employment. modern job skills and job training, while still maintaining their traditional culture.

The Proponent is committed to respecting the Aboriginal traditional lifestyle while providing modem training and employment. Based on what it has learned, the Proponent has already incorporated several traditional concepts, which touch **the** core of the cultural identity of the Aboriginal people, into the plan of development for the NWT Diamonds Project. For example:

- *A two weeks on/two weeks off work schedule has been implemented to accommodate traditional lifestyles and subsistence. Aboriginal employees surveved a t the campsite overwhelmingly confirmed their approval of' this type of schedule.*

- *The residents of' designated communities will continue to live in their own villages and travel directly to the mine site, ma in tain ing their ties to family and community.*

- *Caribou and other wildlife will be protected as a source of sustenance and tradition.*

- *Protection of' the environment by monitoring of water, air and the [and, minimizing impacts on the surrounding subs is tence ecosvstems.*

- *The decision to maintain a fly-in camp, with no permanent road access, will prevent a major influx of new settlements in the Lac de Gras region preserving the traditional relationship with the land and also reducing impacts [o outfitter groups who employ A boriginals as guides.*

- *Elders were invited to participate in arch aeological surveys to locate, protect and avoid burial and other significant sites.*

To address modern concerns such as employment, education and job training, drug and alcohol abuse, the Proponent has initiated programs to help provide future economic security while reducing potential negative impacts:

- *a commitment of preferential hiring for Aboriginal, ond site job training and relaxation of strict minim um educational employment standards*

- *preferential hiring requirements to be applied to contractors and sub-contractors*

- *preference to Aboriginal businesses*

- *scholarship programs for Aboriginal students*

- *cross-cultural training workshops as learning tools to share cultural concerns in a unique work environment*

- *community Mobilization Partnerships, which bring elders, young people and organizations into the same forum to share traditional skills and customs to create solutions to community problems*

- *a policy of a drug and alcohol-free workplace which was supported by many community members who view such problems as a major threat to traditional lifes tyles.*

J.C. Catholic of Lutsel K'e said;

The Proponent believes that these methods of incorporating traditional knowledge and culture into the development phase of the mine are only the beginning of a relationship of cooperation and mutual respect.

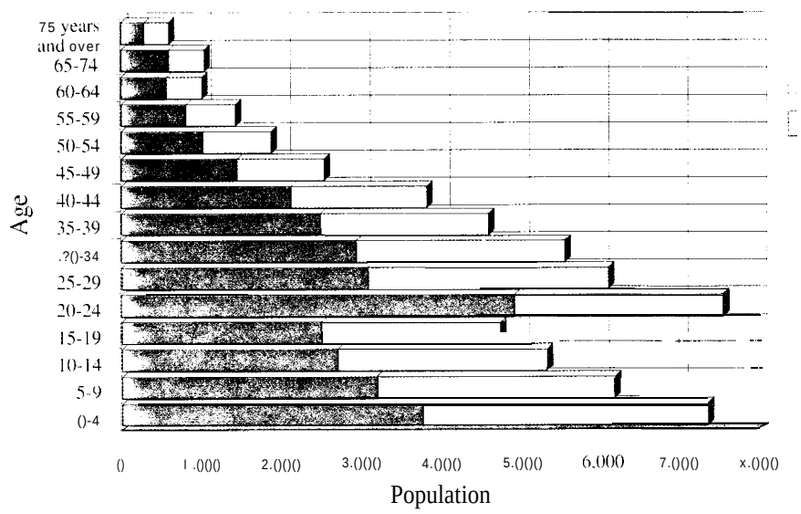
In its efforts to give full and equal consideration to traditional knowledge in more specific ways, the Proponent has offered to provide funding for a two phase study of traditional knowledge. inherent in the proposal is a recognition of the proprietary nature of the knowledge and a desire by the Aboriginal peoples to have control over the way in which the information is collected. It is hoped that such a study will lead to more sensitivity and awareness of indigenous culture by documenting their concerns, promoting a partnership between the parties and preparing a baseline of traditional knowledge for use in future monitoring of environmental and socioeconomic impacts.

The archaeological survey conducted for the NWT Diamonds Project was the first detailed archaeological investigation conducted in this area. Treaty 11 and Treaty 8 communities have been kept informed of the archaeological studies.

Community meetings and visits to the site with elders have provided useful information regarding the identification and the cultural significance of certain land sites.

Six survey areas in the main exploration and development areas were assessed for archaeological significance. As there are no NWT guidelines regarding the determination of the archaeological sites, archaeological significance was defined according to British Columbia guidelines, with ratings of low, moderate or high significance. Archaeological field research in the survey area identified 50 sites with varying degrees of significance.

Demographics in NWT



Three sites were judged to be of high archaeological significance, representing repeatedly visited camping locations. Two sites of moderate archaeological significance represented moderately high yields of artifacts with one being a possible quarry/lithic workshop, and the other was a site with significant buried deposits. Most sites were assigned low-moderate or low significance. No archaeological sites were identified in the vicinity of Koala Camp, which is the main area to be affected by development.

Sites discovered during the inventory were recorded in detail using the Archaeological Survey of Canada site entry forms. Detailed maps of the sites were drawn and photographs were taken for future visual reference. The data collected have made a contribution to the understanding of archaeological resources in this region of the Northwest Territories.

Females Total 27,590

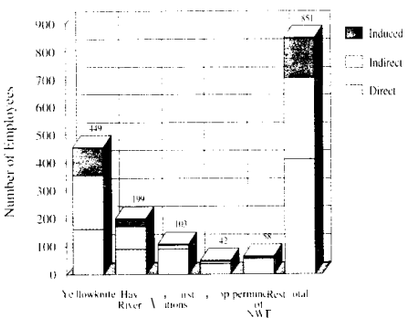
Males Total 30,055

Socioeconomic Assessment

(Mayor Dan Marion of Rae-Edzo).

The NWT Diamonds Project will be one of the largest, if not the largest, industrial operations in the NWT for the next decade. Based on 1994 unemployment rates, the project is expected to reduce overall unemployment in the NWT by 1.4% during the construction phase and by 3% during the operations phase.

Employment Due to NWT Diamonds Project Year 2000



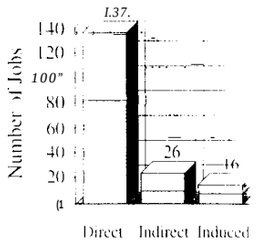
An average of 830 people will be directly employed over the 25-year life of the project. Two out of every three employees are likely to be residents of the North, and more than half of the Northern employees are expected to be Aboriginal. The Proponent has designed its hiring, training and skill development programs to promote Aboriginal and Northern employment, but the success of these programs will also depend in part on the participation and commitment of the affected Northern communities.

The City of Yellowknife, with the largest population in the region and the most diverse business community, will receive the greatest economic benefits from the NWT Diamonds Project. These benefits will be in the form of direct employment of its residents and the purchase of goods and services for the project. During operations, approximately 70°/0 of every purchase dollar for the project is likely to be spent in the North, with more than 60°/0 of the northern purchases expected to be made in Yellowknife. Because of the size and economic strength of Yellowknife. the net effect on unemployment in the city will be about 2%, which will not significantly affect the way of life of the residents.

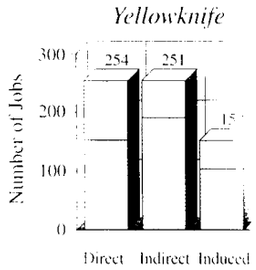
In contrast, the NWT Diamonds Project has the potential to have a major effect on the way of life in the local

Summary of

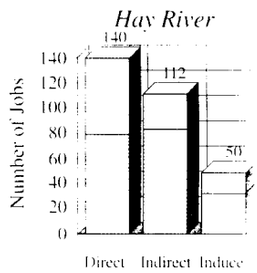
First Nations



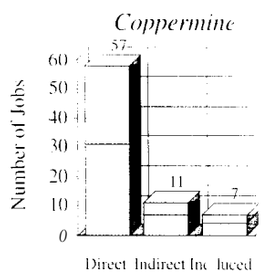
Yellowknife



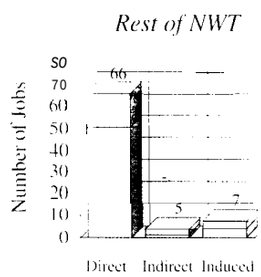
Hay River



Coppermine



Rest of NWT



ıployment; Year 2007

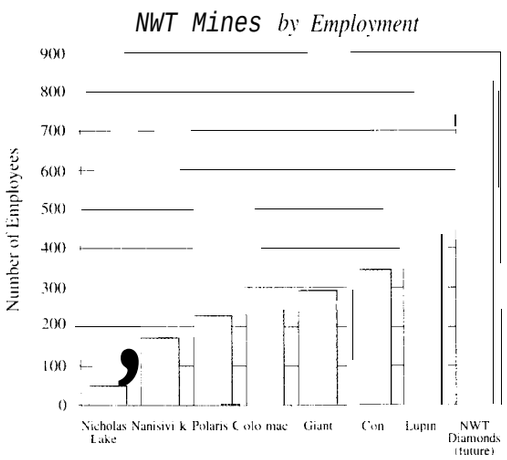
ıaitional Requirement at
5,000 tonnes per day
Year 2007)

At 9,000 tonnes per day
(Year 2000)

Aboriginal communities. Hiring by the project is expected to reduce current unemployment levels in local Aboriginal communities from almost 40°A to 300A. Residents of Aboriginal communities have expressed the need for increased participation in the wage economy.

said Elder Joe Migwi at the Scoping Meeting in Rae Lakes on March 28, 1995.

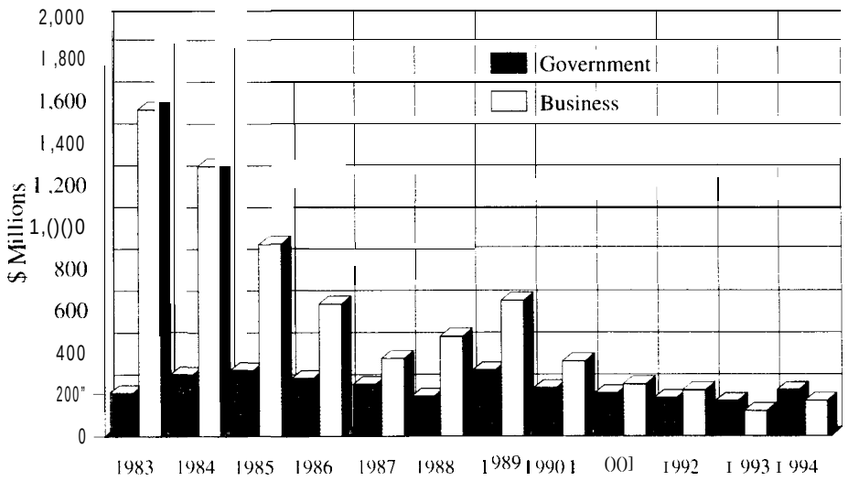
Increased wages in the community have the potential to compound existing social problems such as alcohol and drugs. This is of particular concern in the Aboriginal communities where the average earned income could increase by as much as 40%. Recognizing that the solutions to social problems can only be effective if they are initiated by the communities themselves, the Proponent has offered to assist and participate in Community Mobilization programs. These partnership programs help communities to build on existing strengths to solve social problems. At the request of Chief Charlie Jeremick'a, initial mobilization meetings started in Wha Ti in May 1995, with meetings in other communities scheduled to follow during the summer.



Economic Assessment

The NWT Diamonds Project will provide substantial economic benefits to the NWT and to Canada as a whole. These benefits include jobs and associated wages and benefits; the purchase of capital and consumable goods and services by the mines; and through the revenues paid directly to the Territorial and Federal governments as taxes and royalties.

Total Public and Private Investment in the NWT



Source: NWT Bureau of Statistics. 1994

Total capital expenditures over the life of the mine is estimated to be $1.2 billion. The project does not require any subsidies from the government.

The project is expected to generate revenues of between $400 million and $500 million per year (in 1994$) through most of its 25-year operating life.

Contrary to popular perception, this level of revenue is not due to the high intrinsic worth of diamonds, as the estimated value per tonne of ore mined is roughly the same as for other NWT mines. The higher level of revenue is due to the larger scale of the proposed mine versus other existing operations in the NWT.

For the NWT, the benefits of the project (direct, indirect and induced) will be a contribution of $2.5 billion to the GDP over the life of the project.

Approximately 60% of this contribution is comprised of wages and associated benefits.

The rest of Canada is also a major beneficiary of the project. From the Canadian national perspective, the total benefits provided are similarly substantial with a contribution of $6.2 billion to the GDP. Revenues to the governments of Canada comprise approximately $2.5 billion.

The income from the project is estimated to be many times greater than government expenditures related to any expanding physical and social infrastructure to accommodate the project. For every $1 of economic benefit accrued by Canada from the project, the federal and territorial governments will together have net costs of less than $0.05.

Environmental Management

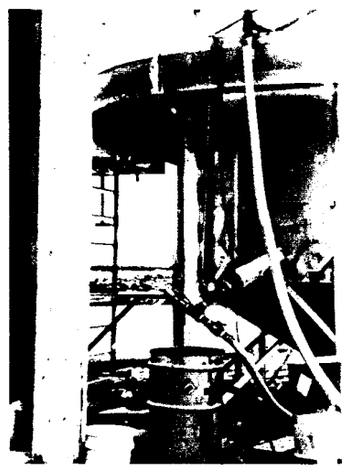
The environmental plan describes the programs and policies ensuring that project activities operate to anticipate, avoid and control environmental impacts. The plan focuses on the safe and permanent storage of process plant tailings, the control and proper disposal of domestic and other wastes; construction and operations that minimize surface disturbance; and the development of a site reclamation and decommissioning plan. Monitoring operating performance is a central element of the management plan.

BHP Environmental Policies

BHP has a corporation-wide Environmental Policy stipulating a commitment to high standards of environmental care as it conducts its business around the world. BHP's approach to environmental management seeks continuous improvement in performance by taking account of evolving scientific knowledge and community expectations. BHP managers at all levels are responsible for ensuring

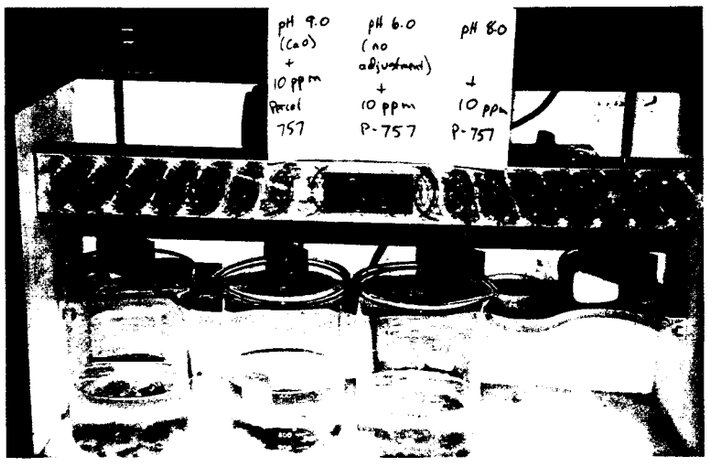
that organization structures and management systems support the Environmental Policy.

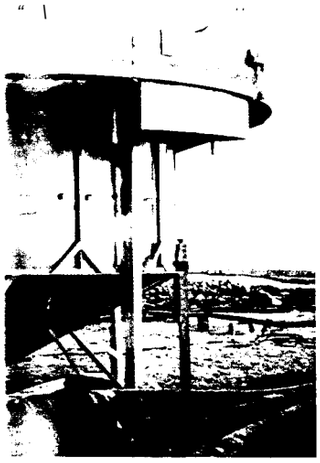
The environmental monitoring program is an integral component of the environmental management plan. The purpose of environmental monitoring is to determine compliance with permit requirements. measure effectiveness of reclamation efforts, document effects of the project on the social and economic well-being of the community and very importantly. to measure natural changes in the environment. Monitoring requires measurements that are statistically valid with adequate reference control to distinguish between project-related impacts and natural changes in the environment (such as cyclic changes in lemming abundance).



The social and economic monitoring will be largely accomplished through the Proponent's human resources and community relations activities. These

measurements will provide important feedback concerning the appropriateness

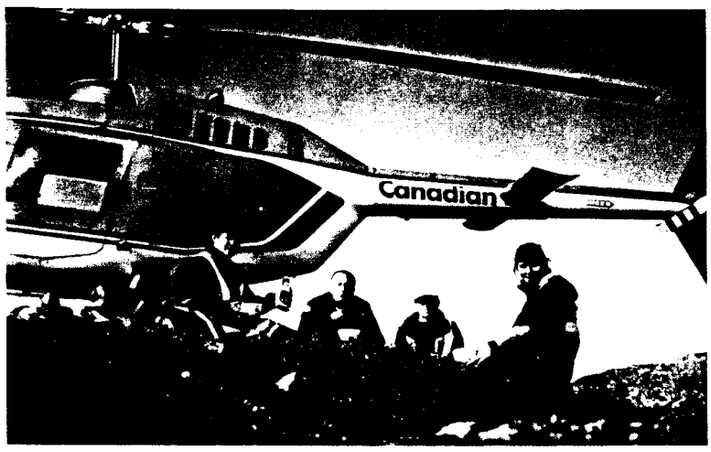




and effectiveness of the environmental management plan, so that it can be adaptively modified if necessary to achieve the desired result of holistic environmental protection.

The environmental program is intended to be flexible and adaptive in design, so that it can be re-defined and improved in response to changes in the program development plan, the regulatory environment and natural environmental changes.

Cumulative effects arise from multiple activities happening concurrently or sequentially that in combination can have greater impacts than those that result from the individual activities. As the main environmental impacts for the project result from the drainage of five lakes, mining and the use of a lake for tailings disposal, the key ecosystem pathways are surface water, surface terrain, and air. Because of the remote location and the fact that there is no other development in existence or permitted within the Coppermine River basin, no significant



cumulative environmental effects are anticipated.

The main impacts that could affect socioeconomic components consist of employment and the purchasing of goods and services. On balance. these impacts are anticipated to be positive.

With regard to the possible expansion of mining activities on the Proponent's claim block. a total of 44 kimberlite pipes have been identified, but as yet only the five pipes scheduled for development are economically viable. Should one or more additional pipes be discovered that can be developed. the existing infrastructure and tailings disposal systems will likely be used and any cumulative environmental impacts would pertain to the development of additional open pits, rock dumps and access. The extension in the mine life that would result would enhance the socioeconomic benefits of the project.

The project is of strategic economic importance to the NWT. It is a major business and, once operational, will generate more employment and a higher wage bill than any other NWT business. Employment benefits will be particularly significant for local Aboriginal communities.

Existing large mine reserves in the NWT are becoming depleted and no major new mines have been announced. The renewed confidence in Canada shown by international investors such as BHP has provided optimism to the entire Canadian mining industry. Canada's Minister of Natural Resources, Anne McLellan, shared this optimism in a speech delivered on March 29, 1995, in Miami to the investing in the Americas Conference, when she said:

This project will be the first major diamond mine in North America and a new industry for Canada. New NWT businesses will likely be established, and existing NWT companies will expand, hiring more workers to service the project.

The project can serve as a model of sustainable development for other northern resource-based projects.

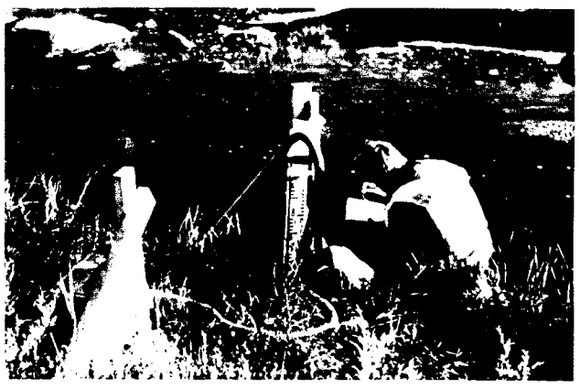
The Proponent has adopted an environmental management plan for this undertaking that effectively deals with all identified issues within the immediate project area, as well as the larger, potentially affected, regional ecosystem. The environmental management plan identifies comprehensive actions to avoid or mitigate significant conflicts. and to preserve linkages among components of the ecosystem, in order to effectively preserve the whole. These linkages include natural ecological values and the sustainable use of natural resources by Aboriginal peoples living in the region, in concert with the longer-term, economic benefits of the project.

The proposed undertaking has substantial and beneficial implications for the economics of the Northwest Territories and Canada, and in particular for the local Aboriginal communities in the region. Moreover, the Proponent is committed to a preferential program of employment of Northerners. In particular, Aboriginal peoples are expected to benefit greatly from this project. through hiring policies that are sensitive to their cultural attributes and needs, coupled with vigorous protection of the ecological systems that have traditionally sustained these same peoples.

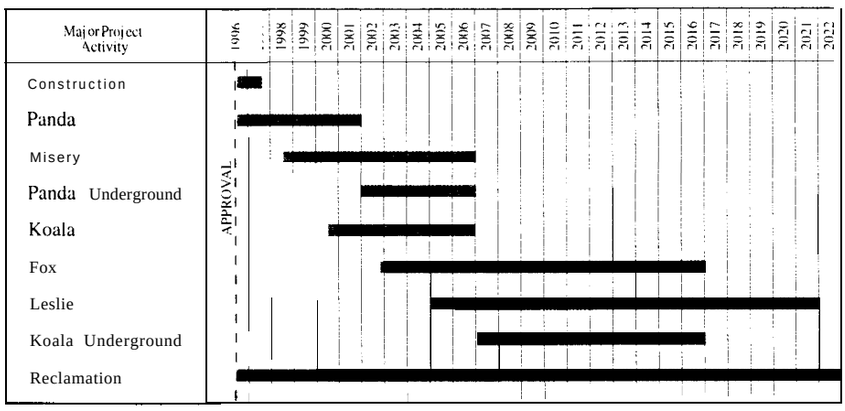
Water quality and aquatic habitat will be protected by careful control and monitoring of contaminants potentially associated with water from tailings-disposal areas, waste dumps, roads, and other physical infrastructure. These control measures will ensure minimal effects on the aquatic food chain. and on human use of aquatic resources.

The habitat and migratory pathways of caribou and other key species have been identified through a combined application of local and traditional knowledge and wildlife science. These critical habitats will be maintained. particularly by avoiding and. if necessary, mitigating any direct, project-related contacts. By these means, the wildlife itself will be kept intact, as will its critical links with the Aboriginal community.

Air quality, vegetation, hydrology, and noise are also important environmental components and linkages, and none of these will be degraded beyond impacts occurring immediately on working sites. The Proponent is also committed to reclaiming any area of terrain that is directly affected by this project, and to re-establishing the initial land uses.



Schedule of Major Project Activities



This overall scenario of minimal environmental impacts is more than offset by the substantial socioeconomic benefits that will be realized from this undertaking by Northern peoples and their economy.

The environmental concerns are believed to be known and mitigable with existing technology.

This summary is available in Inuinnagtun as well as English. In addition, audio cassettes have been prepared from the Summary in North Slavey, Dogrib and Chipewyan languages. They are available from the Canadian Environmental Assessment Agency offices of Environment Canada in Yellowknife and Vancouver.

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