

# THE PEOPLE

This section summarises how the Project might affect people and communities. Community wellness is an important part of community life and depends on the well-being of all community members. The Project could bring major economic benefits, such as jobs, income and increases in government revenues at all levels. These benefits also carry with them certain risks that could affect community wellness. Our commitment is to carry out the Project in a way that enhances the positive effects and reduces the negative effects.

## People and Communities

The Project could primarily affect up to 32 communities in the NWT and in northwestern Alberta. In 2003, the 26 territorial communities were home to about 35,000 residents, and the six Alberta communities had 7,000 people in total.

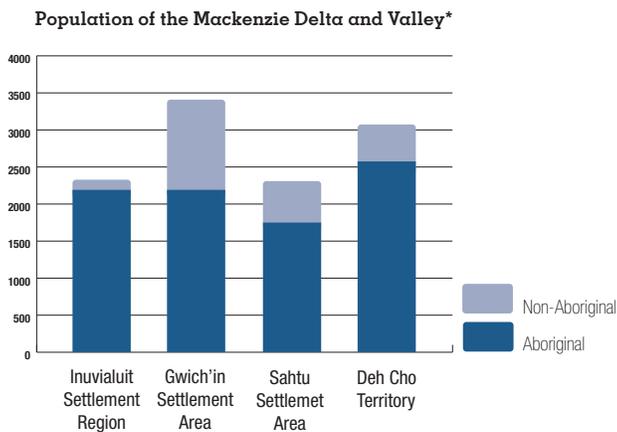
## Population of the Mackenzie Delta and Valley

The population in the four NWT regions where the Project will be built is about 12,000 and more than 75% of those people are Aboriginal. Most live in communities smaller than 1,000 people. About half of the NWT population and about 40% of the northwestern Alberta population is Aboriginal.

## Potential Effects and Project Actions

Development of the Project could encourage people to move to centres of Project activity looking for jobs. These people could place pressure on community services and infrastructure, such as housing. We are committed to implementing measures that will help reduce possible migration to these towns. For example, northern residents will be hired primarily in their home communities and southern residents primarily in southern locations.

Population migration in most regions is expected to be short term and not significant. Inuvik, Norman Wells and Fort Simpson will see the greatest influx of workers that could boost the economy and at the same time present some challenges. Demands on housing, roads and services might increase in those communities as well. Overall, these pressures will occur mainly during the construction period.



\*excludes cities of Yellowknife & Hay River

## Economic Activity

Over the past century, the North has experienced a series of economic highs and lows. In most communities, government-related employment is the largest and most stable economic influence. Each year the Government of the Northwest Territories (GNWT) makes considerable commitments to capital projects and these, with other projects, result in construction jobs.

In many communities, most people can find only unskilled or semi-skilled jobs because there are few opportunities for skilled paid work.

Since the 1970s, oil and gas has been a major contributor to the economy. By summer 2002, expansion of oil and gas exploration and diamond mining in the NWT had significantly increased employment.

Recently, many groups have taken important economic development steps. Organisations and individuals in each of the regions have made business investments and set up joint ventures with outside firms.

In northwestern Alberta, government, services, and the oil and gas industry are important sources of employment for the local residents.

## Potential Effects and Project Actions

The Project will significantly increase the economic activity in the NWT during both construction and operations. The Canadian economy will also receive a noticeable boost during the construction phase.

The Project will cost about \$7 billion to construct. About \$900 million will be spent in the NWT. Almost half of the total amount will be spent in Alberta. The rest will go to other parts of Canada and international locations.

## Government Revenues

The Project will generate tax revenues for the federal government and the GNWT during construction and operation. The current funding agreement between the GNWT and the federal government would result in the GNWT receiving 7% of this revenue.

The GNWT and the Aboriginal Summit are working with the federal government to change this funding agreement, so more revenues from diamond, mineral, and oil and gas production remain in the NWT.

Aboriginal groups that have signed land claim agreements have increased political control in their regions. Under self-government, the regional and community governments will have the responsibility and authority to deal with some of the effects of development.

### Available Labour Force

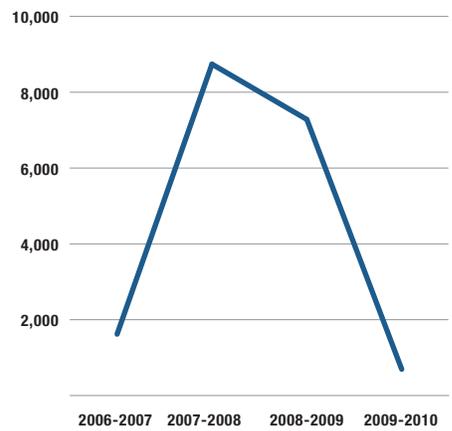
Over the past three years, NWT unemployment has ranged between 5.8% and 9%. Many small Aboriginal communities still have a potential labour force. Here, fewer people participate in the paid workforce and the unemployment rate is much higher compared to the NWT total and Canada as a whole. The reasons might be linked to fewer jobs available in small communities, lower education and skill levels and greater interest in traditional harvesting.

To improve education and training levels, the territorial government currently offers programs that promote training and apprenticeships. Also, Aurora College delivers a broad range of upgrading, specialty preparation and technical training programs.

### Potential Effects and Project Actions

The number of workers needed for construction of the pipelines, natural gas fields and facilities will peak at about 8,700. The graph and chart below show the estimated number of workers needed during the four years of Project construction.

**Total Estimated Project Workforce**



**Estimated Mackenzie Gas Project Workforce**

Activity	Year (July-June)			
	2006-2007	2007-2008	2008-2009	2009-2010
Anchor Field Drilling and Related Employment	97	591	551	220
Anchor Field Construction Employment	142	117	357	33
Pipeline Construction Employment	1380	7863	5025	394
Facility Construction Employment	0	169	1349	47
<b>Total Employment</b>	<b>1619</b>	<b>8740</b>	<b>7282</b>	<b>694</b>

## Contracting and Hiring Practices

Contractors must be able to meet corporate and regulatory standards and be competitive where goods and services are needed.

The first choice of Project proponents is to hire qualified northern Aboriginal workers and then other local northern workers. However, the number of available workers from the NWT will not be enough to fill all the construction-related jobs. Workers will have to be brought from other places in North America.

Over the life of the Project, people in the North will have many business opportunities related to the Project. We will give preference to qualified competitive NWT businesses for goods and services. This preferred status will be offered to both Aboriginal and non-Aboriginal businesses. We will also help prepare northern businesses to meet our long-term needs.

During operations and our drilling activities, we will spend about \$145 million a year in the NWT, creating about 400 direct and indirect jobs each year. Indirect jobs are created when Project proponents or their contractors purchase goods or services; people hired by the suppliers are said to have indirect jobs in the Project. Many other spin-off jobs could also be created each year.

## Education and Training

To qualify for many Project-related jobs, people will need to get the right training. Recognising this fact, we are part of initiatives to prepare Aboriginal people and other northerners for professional and technical employment over the long term. For example, we are part of the Aboriginal Skills and Employment Partnership and the Pipeline Operations Training Committee. Both involve the Project proponents, communities and educational institutions in delivering industry training. Many of the skills learned in Project-related programs can also be used in other industries once Project construction is complete.

High school students might have a mixed response to the construction phase of the Project. Some might leave school before completing grade 12, hoping to get Project jobs. On the other hand, some former dropouts might return to qualify for more training. Our Project personnel, schools and community members will work together to encourage students to stay in school. Project hiring procedures that discourage moves to regional centres will also help keep these schools from being overloaded with new students.

Overall, the Project's involvement in training and providing work opportunities will tend to improve the level of education and education services in the Mackenzie Delta and Valley.



### **Income Sources and Cost of Living**

Despite the fact that NWT families have the highest average income in Canada, many people do not share this advantage. A larger proportion of Aboriginal people has incomes below \$15,000 a year compared to non-Aboriginal residents.

The average annual income of Aboriginal people living in the Mackenzie Delta and Valley was \$26,000 in 2000. This figure is well below the average of \$44,000 for non-Aboriginal earners in the NWT.

The cost of living is generally highest in the most northern communities because they are furthest from supply sources. According to the 2000 survey, the cost of living was 25% to 115% higher in the Mackenzie Delta and Valley than in Edmonton, depending on the remoteness of the community.

Caribou, moose and other country food are a large part of the diet for many Aboriginal people. Traditional gathering and harvesting are important additions to earned income and help offset the high cost of living.

We estimate labour income for NWT residents will be \$300 million due to Project construction activities. During operations, the Project will create labour income of \$28 million per year.

### **Family and Community Wellness**

The Environmental Impact Statement discusses community wellness based on available information. It also looks at the relationships and influences acting on community wellness. This information helps to show us what effects the Project might have on present conditions.

Community wellness depends on having healthy, happy individuals and families. Some signs of reduced community wellness are children at risk, family violence, alcohol abuse, poor health, unhealthy behaviour and criminal activity.

### **Health and Public Safety**

Alcohol abuse is the source of many problems in the NWT. In several communities, the RCMP report that up to 90% of their policing problems are related to alcohol abuse. RCMP detachments in a number of communities report heavy workloads.

Many health concerns are linked to the things people choose to do. People's health is often threatened by: alcoholism, sexually transmitted infections, smoking, increased rates of diabetes, and babies born with fetal alcohol syndrome or fetal alcohol effect. Suicide is also a major and growing concern in the NWT.

The North is struggling with several social issues and health problems. Many people told us they thought the present social and health care services were overloaded.

## Potential Effects and Project Actions

We are committed to helping preserve community wellness. Social and health issues are complex.

To deal with these issues effectively, co-operative efforts between the Project proponents, communities and government are needed.

The Project might contribute to the good health of individuals and families through employment opportunities and Project spending. Increased income could be spent on better food, clothing and housing. Those employed on the Project might also get to know other people who could have a positive effect on behaviours related to health or safety.

On the other hand, stresses could increase for some families. The long work hours and separation from family could increase conflict in some families and add to the need for health and social services. Some could use their larger incomes for gambling, illegal drugs and alcohol. The Project, communities and governments must work together on ways to encourage people to make better use of their earnings. The Project will:

- Participate in community and camp-based training programs in money management. Employees will be encouraged to place their earnings in a savings account so less cash will be available for alcohol or other unhealthy uses.
- Enforce alcohol-free and drug-free camps and workplaces.

Our hiring strategies would encourage northerners to maintain strong community ties and limit the possibility of overloading health care facilities.

Construction workers will live in camps while on the job. Large construction camps (housing 1,000 to 1,300 people) will be located close to Fort Good Hope, Norman Wells and Inuvik. Other places will also have camps housing from less than 100 to several hundred workers. The camps will be self contained, with their own medical services and catering. They will also have their own water and sewage treatment facilities. In some cases we will work with communities to determine if they can supply these services to the Project. The Project will not create a health risk related to sewage or water during construction or operations.

During construction, most communities near the Project will experience both negative and positive effects. The communities most affected by construction activities will be Inuvik, Norman Wells and Fort Simpson. Fort Good Hope, Tuktoyaktuk, Tulita and Wrigley could also experience more effects than the other NWT communities. Hay River will be busy with increased barging activity. Demands on the RCMP are expected to grow in a number of communities, particularly in Inuvik and Fort Simpson.

Pressures on local and regional health services and social services are expected to increase during construction. We will work with the territorial and community providers of these services to prepare for the expected increases and mitigate the negative effects. After construction, demand for these services should return to current levels.

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### **Basic Community Needs**

Communities need the basics of good housing, utilities, energy supply, communications and some recreation facilities. All communities in the Mackenzie Delta and Valley have water and sewage utilities, electric energy supply and mail service. They also have telephone, Internet, radio and television connections.

Housing is difficult to find in Inuvik, Tuktoyaktuk and Fort Good Hope and affordable housing is scarce in Yellowknife. On average, about 15% of housing in the Mackenzie Valley needs major repairs. This is about the same as for the NWT as a whole, but some Aboriginal communities have much higher percentages.

Most communities have recreational facilities similar to those in southern communities of the same size.

### **Potential Effects and Project Actions**

Most Project workers will live in camps during construction. However, housing demand could increase due to indirect jobs and people traveling to look for Project-related jobs. Hiring procedures that discourage this type of job hunting will help reduce accommodation pressures. Government and house builders might also develop more housing in response to the Project.

In communities with an existing housing shortage, the Project could further reduce housing availability. As operations start, the permanent Project employment in Inuvik, Norman Wells and Fort Simpson will likely lead to more housing construction to deal with this shortage.

Project self-contained camps should not have any negative effect on utilities, energy sources or communications for communities during construction or operations.

Camp facilities will meet the recreation needs of most Project employees. Some employees will be based in the regional centres, most for relatively short periods. Inuvik, Norman Wells and Hay River already have large recreational complexes. However, Fort Simpson might face challenges if there is an increase in short-term residents. During operations, recreational capacity should not be affected.

When the construction is complete, we will abandon and reclaim sites not needed for operation. We will consult with communities and consider alternate uses for the sites and facilities.

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### **Transportation**

Transportation facilities and services are important in the NWT because of its large area and small population. Except for Yellowknife, Hay River and Inuvik, most communities are small and widely scattered. Existing transportation networks, river (barge and boat), ocean, highway and air, have enough facilities to serve the communities in the NWT.

Three communities have rail access: Hay River, Enterprise and High Level. The railway has excess capacity but the rail could require upgrading. We plan to use rail transportation for some of our requirements, and will support upgrades to the system where required.

### **Potential Effects and Project Actions**

Many communities will notice increased demands on all types of transportation during Project construction. Moving equipment and people will add to road, river and air traffic.

Hay River will be a major distribution centre for material to be transferred from the North American rail system to Mackenzie River barges.

The Project proponents, government agencies and transportation companies need to work together to ensure that roads, ferries, barge landings, airstrips and airports are adequate. We plan to upgrade existing infrastructure and install new infrastructure where required. This co-operative effort will ensure essential community transportation needs are met.

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## Traditional Culture

Communities have told us that survival on the land is at the core of Aboriginal traditional culture.

Traditional culture involves:

- The knowledge, skills and disciplines needed for traditional harvesting and living on the land.
- Spiritual and cultural values and survival knowledge that are best communicated through Aboriginal languages.

Although traditional cultures have already been affected by southern Canadian culture, northern Aboriginal people are still involved in traditional harvesting and related practices.

In addition to its high cultural value, country food supplies good nutrition and helps to lower the grocery bill. Most Aboriginal people now earn cash in addition to going out on the land for harvesting and trapping.

If people speak an Aboriginal language, it is easier to uphold their cultural values, spirituality and Traditional Knowledge. However, the ability to speak an Aboriginal language is declining. In 2001, only 38% of Aboriginal people in the NWT could speak an Aboriginal language.

## Potential Effects and Project Actions

Many people use seasonal jobs to pay for equipment, like snowmobiles, now needed for efficient harvesting. The Project will provide employment that will help pay for this equipment.

Aboriginal workers could be distracted from traditional pursuits by Project employment.

Traditional language and cultural values are transferred from one generation to the next. The Project's influences could either strengthen or weaken language and culture. Our commitment is to encourage culture and tradition.

To protect fish and wildlife, Project employees will not be allowed to hunt or fish while on the job site. With less time for traditional harvesting, some might lose interest in this activity and their communities will not have as large a supply of country food. To offset this effect, we will support traditional harvesting and culture by providing flexible work schedules outside the peak winter construction seasons. Flexible schedules will also help workers attend to other cultural, family and community needs.

We will encourage cultural activities and events as well as traditional lifestyles and positive relationships with communities. For example, country foods and Aboriginal reading material will be available in construction camps. We will encourage community celebrations and events featuring knowledge of Aboriginal languages and culture. Also, Aboriginal artisans could display and sell original handicrafts in the camps if local communities approve.

Overall, we expect the Project will have a small negative effect on traditional harvesting, language and culture in communities with a larger percentage of Aboriginal population. Norman Wells and Yellowknife will not be affected, mainly because the percentage of Aboriginal people is much smaller in these two centres.

### **Heritage Sites**

Heritage resources might include archeological or historic sites, burial sites, cairns and artifacts such as tools. Our recent surveys have identified about 130 heritage resource sites that were not recorded before. All Project sites that show potential for heritage resources will be closely examined before construction. If these resources are found, we will implement plans to protect them.

### **Non-Traditional Land Use and Protected Areas**

Non-traditional land use includes activities such as mining, timber cutting and tourism. We assessed the potential effect of the Project on a large number of non-traditional land uses and resources. None of the potential effects is considered significant.

Our studies looked at:

- Land ownership.
- Hunting, fishing and trapping by non-Aboriginal people.
- Tourism and recreation.
- Environmentally protected areas.
- Scenic or protected resources.
- Sand and gravel pits mining.
- Oil and gas activities.
- Timber harvesting.
- Other commercial activities, such as agriculture and reindeer herding.



The Project will contribute to non-traditional land use through excavation of gravel and sand for construction material. The amount of material we use will not affect the communities because the Project will require a small percentage of the available sand and gravel.

Project construction will increase the disturbed area in some locations where land is set aside for limited development, such as the Kendall Island Bird Sanctuary, the Edézhíe Candidate Protected Area and the Pehdzeh Ki Deh area of interest. However, all aspects of the Project will be developed to meet land-use regulations.