

# **Socio-Economic Baseline Report for the Wood Buffalo Region**

**May , 1996**

Prepared for:



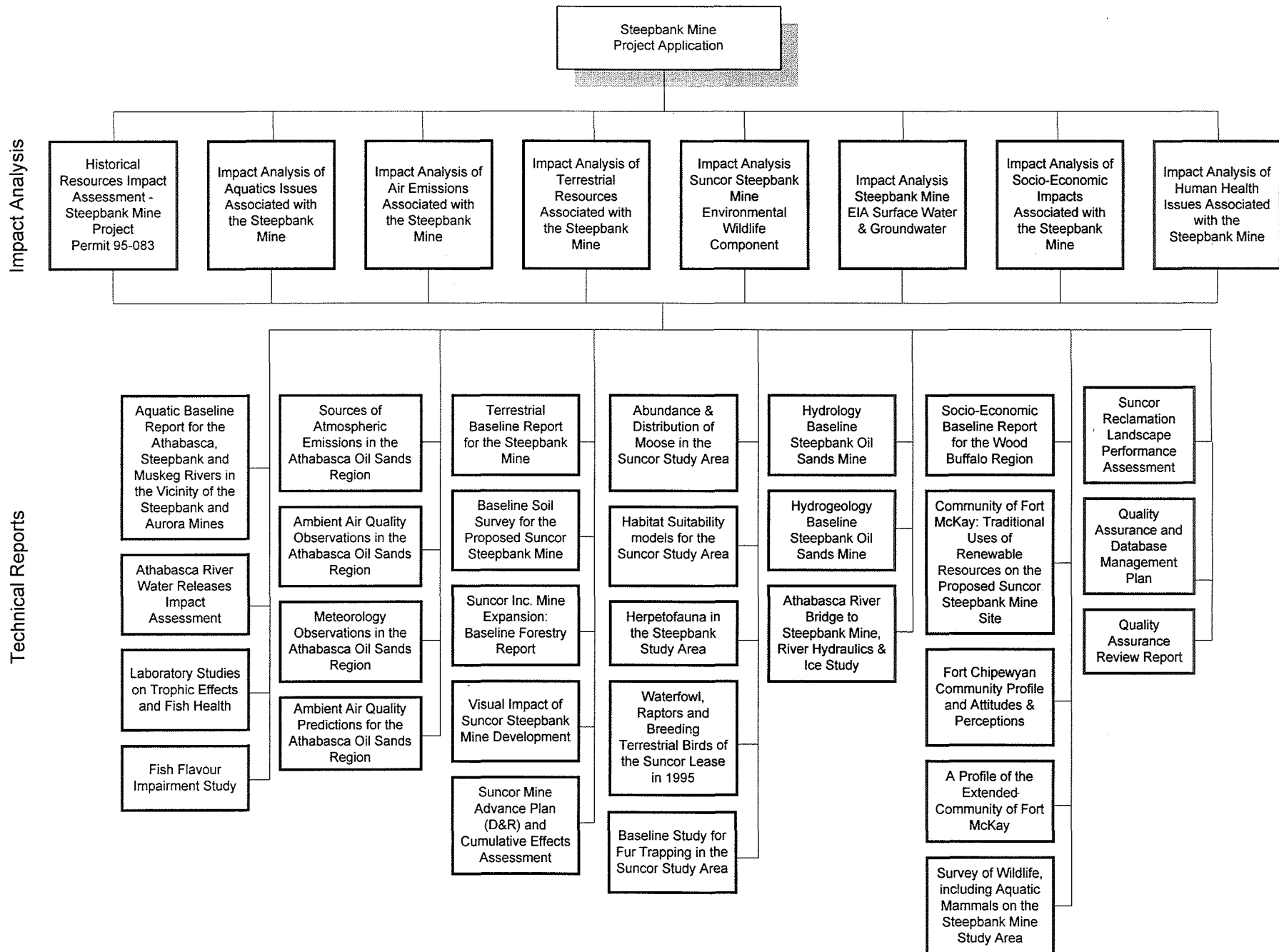
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**This report is one of a series of reports prepared for Suncor Inc. Oil Sands Group for the Environmental Impact Assessment for the development and operation of the Steepbank Mine, north of Fort McMurray, Alberta. These reports provided information and analysis in support of Suncor's application to the Alberta Energy Utilities Board and Alberta Environmental Protection to develop and operate the Steepbank Mine, and associated reclamation of the current mine (Lease 86/17) with Consolidated Tailings technology.**

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## **1.0 INTRODUCTION**

The socio-economic environment of the communities within the Regional Municipality of Wood Buffalo, including Fort McMurray, have been the subject of a number of recent studies. Socio-economic impact assessments completed for oil sands development in the region have included the original Syncrude Impact Assessment (1973) and the Addendum to the 1973 Report (1978), the Application to the ERCB and the Environmental Impact Assessment for Expansion of the Syncrude Canada Mildred Lake Plant (1984, 1987), the Environmental and Socio-Economic Assessment Update (1992), and the Other Six Leases Organization (O.S.L.O.) Socio-Economic Impact Assessment. The Municipality of Fort McMurray has also undertaken a number of studies and research activities directed towards examining the existing state of the community and the future development of the region.

### **1.1 Objectives**

The objective of this document is to provide an assessment of the current socio-economic conditions prevailing in the communities of Fort McMurray, Fort McKay, Fort Chipewyan and the Regional Municipality of Wood Buffalo. To accomplish that objective, this assessment provides an inventory of existing socio-economic conditions within these communities, outlines those aspects of the proposed project which may have socio-economic implications for the communities (expenditures, employment, land use), estimates the anticipated change in employment and population within the region, examines the implications of that growth upon the existing communities and outlines potential mitigation measures to minimize potential negative impacts and enhance positive benefits.

### **1.2 Methodology**

Development of this socio-economic assessment has involved a number of methodologies including the involvement of stakeholders, the collection of data from a variety of sources, determination of impacts for use in focusing the data collection and analysis, and selection of valued social components to assist in focusing the analysis upon key issues.

### **1.2.1 Stakeholder Involvement**

Throughout the development of this assessment, meetings and discussions have been held with stakeholder groups to determine issues, to gather information for use in the analysis, to assist in determining what potential impacts the projects could have upon communities within the Regional Municipality of Wood Buffalo, and to develop mitigative measures to address significant impact areas.

Those discussions have included a stakeholder workshop held in April 1995, individual meetings with community agency and service representatives during the summer of 1995, ongoing discussions with agency representatives over the fall and winter of 1995, and an impact assessment workshop with agency representatives in February 1996.

To collect socio-economic data for two key communities, Fort McKay and Fort Chipewyan, the communities were retained to complete their own community profiles and surveys of community residents to assist in determining community issues, capabilities and perceptions of impacts associated with the oil sands development. This information was used in the development of this document and the subsequent impact assessment.

### **1.2.2 Data Collection and Sources**

In general, information sources for the Suncor socio-economic assessment varied depending upon the issue being examined. The most typical sources of the data were the agencies responsible for providing the services being examined. Other data sources included Statistics Canada, the Municipality of Fort McMurray (particularly the Planning Department), local offices of Provincial Government agencies, local businesses and Suncor. Because socio-economic data varies from year-to-year, interviews with key informants played an important role in providing up-to-date information for this assessment.

Data on the nature and components of the project were obtained from Suncor. Information on project activities, timing, workforce, skill requirements, purchase of goods and services,

development and operating expenditure profiles were provided by the project development team and engineering consultants. Corporate finance staff assisted in processing data on expenditure profiles, government revenues, provincial and federal expenditure splits and tax revenues. Project staff assisted in providing information on employment and training policies, practices and plans. Corporate policies on local procurement were provided by Suncor project team members.

Economic data for this document was gathered from Statistics Canada, Alberta government agencies and the Regional Municipality of Wood Buffalo.

Data on current land use was provided through the terrestrial components of the Environmental Impact Assessment, Alberta Environmental Protection (Public Lands, Forestry, Fish and Wildlife), local trappers and hunters (groups and individuals), and local recreation groups.

Demographic data was obtained from Statistics Canada and the Regional Municipality of Wood Buffalo. Census data from 1991 is available for Alberta and the study area and was used as the basis for the demographic analysis.

Data respecting existing human services was gathered from local service providers. Interviews were held with local representatives from education, medical service, provincial and community social service agencies, police, fire department, and recreation agencies.

Information on regional infrastructure was gathered from the Regional Municipality of Wood Buffalo and from Alberta government agencies.

Data related to current community character and quality of life were collected from human service agencies, representatives from local service club organizations and from Fort McMurray, Fort McKay and Fort Chipewyan representatives.

### **1.2.3 Selection of Impact Areas**

Previous studies of the impacts of oil sands development on the region have focused investigations on the communities located closest to the mine sites: Fort McMurray, Fort McKay and Fort Chipewyan. During the initial stakeholders workshop in April 1995, the topic of study area was discussed and stakeholders provided their view that the socio-economic studies should address the impacts of the project upon the Regional Municipality of Wood Buffalo and its communities (Anzac, Janvier, Conklin, Fort McKay, Chard). The Regional Municipality of Wood Buffalo was therefore adopted as the primary study area for this socio-economic baseline report (Figure 1).

Within the area of the proposed mine site, residents have included two trappers who have resided on a part-time basis in nearby cabins. No permanent full-time residents live within the proposed mine-site. The human uses of the area within the mine area therefore relate primarily to those human land use activities which include trapping, hunting, gathering of food and herbs.

### **1.2.4 Selection of Valued Social Components**

Over the past twenty years, environmental impact assessment practitioners and regulators have sought to develop methods to refine environmental impact assessment processes to increase the efficiency and relevance of the analytical processes given the diversity and complexity of environmental systems. Recognizing that it is neither economically nor scientifically possible to study every component of the environment in order to determine what all of the potential environmental impacts from a proposed project might be, methods have been developed to focus environmental studies upon those components of ecosystems.

Within the biological sciences, the concept of valued ecosystem component has been developed in response to the desire to select representative species or ecosystem components for study and therefore enable environmental studies to focus attention on those species which are most relevant.

The socio-economic counterpart to biophysical VECs are Valued Socio-Economic Components (VSCs). Essentially, these are the key components of communities within the region which are of greatest importance to the members of those communities, and may be affected as a result of a proposed project or change within the community.

By acting as indicators of levels and significance of change, VSCs provide a basis for assessing the potential social and economic impacts of a project upon a community. Such key indicators often include employment, economic benefits, population changes, displacement of current and traditional uses, creation of areas for traditional or current uses, and demands for services and infrastructure. The initial selection of VSCs is typically done as part of the issues scoping process and further refinement is completed during the EIA process.

During the stakeholder workshops held as part of the Suncor Steepbank Mine Studies, issues raised by stakeholders and members of communities affected by Suncor operations included:

- Local employment and training: Employment of local residents typically provides a major benefit, and helps to offset negative impacts which may result from the development of a project.
- Local purchasing: As with local employment, the purchase of goods and services can provide significant local benefits, and assist to offset any negative impacts.
- Displacement of traditional land uses including trapping and hunting: Hunting, trapping, and gathering of food and herbs currently comprises key land uses for the area of the new mine. Local stakeholders, particularly from Fort McKay indicated that they were concerned about the loss of traditional resource use throughout the region.
- Expected population changes resulting from the Suncor project: Fort McMurray has historically provided the residence for almost all of the employees at the oil sands mine projects within the region. The administration and local service providers within the community of Fort McMurray require information on the future employment and population associated with the oil sands plants to adequately plan services for future populations within the region. To determine future demands, these stakeholders indicated they required an examination of the regional population both with and without the Suncor mine expansion.

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- Resulting demands upon local services and infrastructure: Stakeholders were interested in obtaining information on population changes and project activities which could result in changes in demands for local services and infrastructure. Such information from Suncor would assist agencies in planning and delivering services and infrastructure. In addition, stakeholders from Fort McMurray were interested in understanding if the Suncor project might affect the existing high quality of life residents of the community currently enjoyed.
  - Regional and provincial economic benefits: Stakeholders indicated that they were interested in understanding what benefits were expected to accrue to the region and to Alberta by maintaining the Suncor operation and developing the Steepbank Mine (compared to winding the project down). Information of interest included local employee payroll, local purchases of goods and services, and government taxes and royalties.
  - Impact of the project upon Fort McKay and Fort Chipewyan: During initial meetings, representatives from Fort Chipewyan and Fort McKay indicated that their communities were likely to be directly affected by the Suncor project. They also indicated their interest in working with Suncor to determine how they might be affected, and in establishing mechanisms to address environmental effects while sharing in potential economic benefits from the project. Other communities within the Regional Municipality of Wood Buffalo indicated that they also wished to share in the economic benefits through contracting the provision of goods and services and through direct or contracted employment.

These concerns indicate that VSCs for the socio-economic assessment should include the following:

- local and regional economies including contracting and business services;
- employment;
- population;
- community services and infrastructure;
- community stability and quality of life;
- resource use (recreation, harvesting, aesthetics, hunting, fishing); and
- traditional land use (specific to aboriginal communities).



The issues of health and air and water qualities were raised by a number of stakeholders. These three issues are not discussed specifically in the socio-economic assessment but are assessed in the environmental portion of the assessment.

These above VSCs have been used throughout the development of the following socio-economic baseline report to focus the data collection.

## **2.0 EXISTING SOCIO-ECONOMIC SETTING**

The following sections on the socio-economic baseline of the communities within the Regional Municipality of Wood Buffalo discuss the history, economy, population, human services, municipal services and infrastructure, land and resource use and quality of life.

Within the Regional Municipality of Wood Buffalo, Fort McMurray provides a base for many of the services and infrastructure for the region, acting both as an administrative and commercial centre for the region. As previously discussed, the communities of Fort McKay and Fort Chipewyan were contracted to provide community profiles for themselves to be used as part of this report. Summaries of the information provided by these two communities are provided in the following sections. Information on the services and infrastructure of the three southern communities (Janvier, Anzac and Conklin) are also provided in the following sections. Figure 1 indicates the regional context for the different communities of the Regional Municipality of Wood Buffalo which have been discussed in this socio-economic baseline report.

### **2.1 The Regional Municipality of Wood Buffalo**

The Regional Municipality of Wood Buffalo occupies over 67,000 km<sup>2</sup> in north east Alberta, making it the largest municipality in North America. The Regional Municipality was established on April 1, 1995, through the amalgamation of the City of Fort McMurray and Improvement District No. 143 which included the communities of Conklin, Janvier, Anzac, Sapræ Creek, Fort McKay, Fort Chipewyan and Fort Fitzgerald.

## **2.2 Fort McMurray and the Regional Municipality of Wood Buffalo**

### **2.2.1 Historical Setting**

The post-European history of the Fort McMurray area is heavily influenced by the development and use of its surrounding natural resources. Because of its location, the general vicinity of Fort McMurray served as a trading post and off-loading site during the fur trade of 1700's.

Fur trading became the primary economic activity in the 18th century when Europeans began to trade for fur with the local Cree Indians. This activity opened up the MacKenzie Basin fur region. Companies such as the Northwest Company in 1787 and the Hudson's Bay (1815) opened fur trading posts. However, a smallpox epidemic in 1840 forced abandonment of the post. In 1870, the Hudson Bay built a new post on the east bank of the Athabasca River near the Snye which was used by fur traders operating south of Fort Chipewyan. As a result of increased activity in the area, a steamboat terminus was then established in 1883 (Fort McMurray and Area, 1994 Visitor Guide:9).

By 1900, the Town of Fort McMurray with a population of 300 had become an important transportation and trading centre (Fort McMurray and Area, 1994 Visitor Guide:9). In the 1920's with the arrival of the railway, the economy was bolstered by a logging industry, a salt plant and a fish packing plant.

The economic viability of oil sands was tested as early as 1883 by G.C. Hoffman of the Geological Survey of Canada who first attempted to separate the bitumen from oil sand (Fort McMurray and Area, 1994 Visitor Guide:9).

In 1906, the first drilling work for oil sands was undertaken but was unsuccessful although it did encourage a flurry of speculative activities in the Athabasca region and in the Village of Fort McMurray (Fort McMurray and Area, 1994 Visitor Guide:9).

Between 1906 and 1965, a number of attempts were made to exploit the oil sands deposits but most of those ventures failed because of their economic unviability. Of note was the construction of the Abasand Oils Plant in 1936 which intended to produce 250 tons of oil sands a day using a process combining a solvent extraction with hot water extraction. The plant was redesigned to allow for 400 tons per day. Due to technical problems and a fire that destroyed the entire plant in 1945, the project was abandoned (Fort McMurray and Area, 1994 Visitor Guide:9-10).

In 1962 the Great Canadian Oil Sands Group began to construct a large-scale commercial plant in the Mildred-Ruth Lakes deposit north of Fort McMurray, finishing in 1964. It officially opened up in 1967. In 1979, it was renamed Suncor. In 1974, the construction of Syncrude began. It took four years to complete and opened in 1978 (Fort McMurray and Area, 1994 Visitor Guide:10).

Since the mid 1970's, the mining of oil sands and its related activities have dominated the regional economy of the region and have reinforced the role of Fort McMurray as the population and service centre for the region.

Year	Summary of Key Oil Sands Related Events
1883	Economic viability of oil sands tested by G.C. Hoffman of the Geological Survey of Canada
1906	First attempt to exploit oil sands commercially
1936	Construction of the Abasand Oils Plant
1945	Destruction of the Abasand Oils Plant by fire
1962	Suncor begins construction
1967	Suncor becomes operational
1973	Syncrude begins construction
1979	Syncrude becomes operational

In 1966, Highway 63 was completed as an all-weather road link to Edmonton and opened up the north-eastern region to the rest of the province (Fort McMurray and Area, 1994 Visitor Guide:10).

### **2.2.2 Economy**

In 1992, Suncor and Syncrude produced about 18 percent of Canada's crude oil production. The two companies' combined production reached 1 billion barrels the same year. This milestone made the Athabasca Oil Sands deposits the second largest oil field in Canada exceeded only by the Pembina deposit in Alberta (Fort McMurray and Area, 1994 Visitor Guide:64-65).

According to the most recent census information, just under 7,000 individuals were employed in the mining industry in the region which accounted for approximately 30 percent of the total labour force in 1994. The two major oil sands plants, Suncor and Syncrude accounted for almost 5,600 employees while the remaining mining labour force is employed a by smaller oil extraction plants utilizing different processes (Fort McMurray Community Profile, 1995:1).

Although the oil sands industry has and will continue to dominate the economy of the region, other activities in gas and forestry industries and, to a lesser degree, tourism are playing an increasing role in the regional economy.

Gas exploration in the region has increased in the last few years. There are currently 15 gas companies operating in the region. In 1993-994, 150 new wells were developed at an average cost of \$80,000-100,000. The Energy Resources Conservation Board predicted that the 1994-1995 season will exceed this rate of exploration. Between 1990 and 1994, the number of wells in production the Fort McMurray area increased by 59 percent (Regional Municipality of Wood Buffalo, GMP 1995:8).

The forestry sector particularly the pulp industry has become an important economic player in the region although its contribution in terms of employment is still small. Large tracts of forests have been allocated to a number of forestry companies including the Athabasca Pulp and Paper

Mill and are part of a general increase in forestry activities across Alberta (Regional Municipality of Wood Buffalo, GMP 1995:8).

Due to the informal nature of the tourism industry, no data is available on its contribution to the regional economy but informal discussion with community representatives indicated that tourism activities are on the rise. An increasing number of guides and outfitters are offering backcountry adventures (eco-tourism) to national and international customers. Fly-in hunting and fishing are particularly popular activities in the region. There are at least 15 incorporated outfits organizing fly-in expeditions in the region.

### **2.2.3 Population**

The urban service area of Fort McMurray contains the largest proportion of the population within the Regional Municipality of Wood Buffalo. Most population impacts from oil sands development are expected to accrue in this urban area. In the past, a large majority of new workers and their families who have moved into the region to take up project or service sector jobs with the oil sands industry have settled in the urban service area of Fort McMurray rather than into outlying communities. The population of the outlying communities may have benefited from the job opportunities that the projects created, however large amounts of in-migration have not occurred.

The 1991 census -- the latest available data -- reports the population of Fort McMurray at 34,705, a decline of 240 persons from the size recorded by the 1986 census. As part of this study, the natural population growth of Fort McMurray was modelled over the 1986-1991 period and contrasted to the actual population in 1991. This analysis suggests that an average net out-migration of 719 persons per year occurred in that period. That analysis furthermore suggests that the net out-migration was distributed over all age cohorts, with the exception of 25 -34 year old males, the number of which showed a slight increase.

More recent population numbers are not available, but there is evidence to suggest that the modest population decline has been stemmed in the 1991-1995 period, including:

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- reduction in vacancy rates in apartments from an estimated 13% in 1992 to 8.5% in late 1995;
  - housing starts in 1995, compared with less than 10 in the previous years, plus a reduced inventory of houses for sale;
  - small increases in the enrollments of early childhood education programs; and
  - very stable call loads of the fire and ambulance services.

On the basis of this evidence, 1995 population of Fort McMurray has been assumed to be 34,705; the same level as it was in 1991.

The modest population decline between 1986-1991 and the essentially stable level since then coincide with some oil sands industry investment in plant upgrading and changes in mining methods. For example, Suncor changed from bucketwheel excavation systems to truck and shovel mining over this period and introduced modifications to its upgrader in 1993 allowing it to increase its production capability from 60,000 to 68,000 barrels per day. Syncrude as well went through a major capital project in the 1986-1988 period and invested \$680 million in plant modifications. This suggest that:

- changing production methods reduce the need for labour per unit of output; and
- the labour force of the Wood Buffalo region has some capacity to absorb ongoing investment in the oil sands industry.

Those assumptions have been included in modeling the expected population change of the urban service area of Fort McMurray. The base case (normal population changes without new oil sands development) assumes a continuation of the current situation, which is an essentially flat population level. This means that the natural population growth is offset by some out-migration, resulting in a very marginal population decline, reflecting the decreased need for labour as the plants become more and more efficient.

## **2.2.4 Human Services**

### **2.2.4.1 Education**

Fort McMurray offers a wide range of educational opportunities for its residents from standard grade 1-12 education, technical and university level college courses and certificates to long distance learning.

#### ***Grade 1-12 Education***

There are 3 major school systems in the Regional Municipality of Wood Buffalo serving approximately 8,500 children. The Public School Board with 4,400 students and the Separate School Board with 3,750 students respectively are the two largest boards and serve Fort McMurray. The Northland School Division (Grade 1-9) which provides education programs for students in the communities of Anzac, Fort McMurray, Conklin, Janvier and Fort Chipewyan has approximately 500 students.

There are 21 schools in Fort McMurray: 16 elementary schools, 2 junior high schools (one including French immersion to Grade 9) and 3 senior high schools. There are two private schools: one non-denominational school and another providing Christian education (Personal Communication, Les Hansen, Fort McMurray Public Schools).

In response to recent provincial cutbacks, educational reforms and declining student population, the Public School Board has closed down three schools in Fort McMurray in the last year. Student attendance which peaked in 1991 had decreased by 5 percent by 1994.

Despite these changes, the Public School Board with 225 professionals and 150 support staff is the third largest employer in Fort McMurray (Personal Communication, L.J. Hansen, Fort McMurray Public Schools).

The Separate School Board has approximately 3,750 students enrolled in its system for the Fall of 1995 in Fort McMurray. It operates 9 schools: 4 kindergarten to grade 8, 3 kindergarten to



grade 9, 1 kindergarten to grade 6 and 1 high school. The high school in Fort McMurray has approximately 1,100 students (Personal Communication, Chris Farthing, Fort McMurray Catholic Schools).

The Separate School Board has recently closed down one of its schools. The proceeds from the sale could be used to expand existing schools.

### *Post-Secondary Education*

Post-secondary education can be obtained primarily through Keyano College and the Athabasca University (Satellite office). Depending on the demand for special courses, long distance learning is offered by a number of universities including the Universities of Alberta, Calgary, Lethbridge, Gonzaga Washington and Oregon.

Keyano College has 3 campuses including one located in Fort Chipewyan. The College has currently 2,500 full-time and 1,300 part-time credit students. The College offers programmes in continuing education, technical and vocational training, i.e., electric, pneumatics, hydraulics, apprenticeship trades, university transfer courses and a master's program in business management. Starting in the Fall 1995, the College will be offering a four-year bachelor of Science in Nursing degree in conjunction with the University of Alberta. Most of the college students are local students (about 80 percent) who are looking for up-grading programs, technical training, academic and vocational diplomas and university transfer programs. In the past Keyano College has provided a number of minorative education programs to train indigenous and other students for work within the oil sands industry. In developing those programs, the College has worked closely with Suncor, Syncrude and other companies (Fort McMurray 1995 Community Profile and Regional Municipality of Wood Buffalo 1995 GMP:48-49).

#### **2.2.4.2 Health Programs and Facilities**

##### ***Medical Services***

As a result of the recent provincial government restructuring of the health care system, the Fort McMurray Regional Hospital and the Fort McMurray Health Unit have been amalgamated into the Northern Lights Regional Health Centre.

The Northern Lights Regional Health Centre is a 350-bed regional facility including 80 bed acute care and 25 long-term care beds serviced by 31 doctors. The Hospital serves the urban centre of Fort McMurray as well as the region from Conklin and Wandering River in the south to the NWT border in the north, and from the Saskatchewan border to just east of Red Earth (Northern Lights Regional Health Centre, Orientation Manual 1995:25).

The Hospital provides services in all areas of health care including emergency care, ambulatory care, medicine, surgery, maternity care, intensive care therapy, physio and occupational therapy and long term care. These services are provided by some 330 equivalent full-time staff (475 staff and 35 physicians). The Hospital also provides back up services to the oil sands plants first aid staff (Regional Municipality of Wood Buffalo 1995 GMP:46-47).

Emergency services are available 24 hours per day. Five Emergency officers give full-time medical coverage to the Emergency Department. The Emergency ward sees 3,000 patients per month (Northern Lights Regional Health Centre, Orientation Manual 1995:19).

Air medical evacuation services are also available to residents of the region, both in terms of transporting individuals in need of emergency services to the Fort McMurray Regional Hospital, and transferring inpatients requiring services unavailable at the Hospital to medical facilities in Edmonton (Northern Lights Regional Health Centre, Orientation Manual 1995:27).

There are also nine clinics in Fort McMurray providing medical services ranging from general practice to psychiatry. (Fort McMurray 1995 Community Profile).

***Health Services***

The Northern Lights Regional Health Centre that now includes the former Fort McMurray Health Unit focuses on the preventative component of health care. The Centre provides services in the promotion of health and prevention illness and injury, protection of health control of communicable diseases, protection from environmental health hazards, and community care and support. The preventative services component provides both an advisory and regulatory body administering health regulations related to land use issues including emergency situations where evacuation and health problems have to be controlled (Regional Municipality of Wood Buffalo 1995 GMP:47).

**2.2.4.3 Social Service Programs**

A wide variety and depth of social services are provided within the Regional Municipality of Wood Buffalo by a number of local, provincial and federal agencies, individually, and in cooperation with other public and private organizations. Fort McMurray, acts as the administrative centre for social services within the Municipality.

The Fort McMurray Family and Community Support Services (F.C.S.S.) provides a variety of family and individual based support programs. F.C.S.S. programs include:

- Community Development; which includes both funding and organizational development support for community agencies providing community services;
- Family Support Volunteer Program; which coordinates volunteers and volunteer programs aimed at providing support to individuals and families in distress and also provides self-improvement skill development;
- Family Service Agency; which provides confidential counseling for individuals, couples and families in areas of conflict, abuse, violence, communication, separation and blending of families;
- Seniors Outreach Program, which provides assistance for seniors, volunteer companions, and support for senior's caregivers, including Meals on Wheels;

- Family Day Home Program; which provides quality child care services for children to age six;
- Landlord and Tenant Advisory Board; which provides mediation and settlement for landlord and tenant disputes; and
- Specialized Transportation; which provides transportation services for disabled and elderly citizens.

F.C.S.S. operates three offices in the Municipality of Fort McMurray, Anzac, Fort McKay and Fort McMurray (F.C.S.S, Division of Community Services, City of Fort McMurray).

Alberta Family and Social Services (A.F.S.S) provides services in the Regional Municipality of Wood Buffalo related to child welfare and income support. Child welfare services provided by A.F.S.S. include:

- child intake and investigation
- case management
- rural child welfare
- foster care
- adoption
- handicapped children's services

Other support programs provided by A.F.S.S. include:

- client services coordination for persons with disabilities
- family maintenance program for administration of family maintenance agreements
- generic support for independents
- assured income support for handicapped individuals
- jobs corps which provides community employment and educational upgrading

In conjunction with other organizations and agencies, A.F.S.S. provides services including:

- psychological counseling
- in home support
- child welfare
- intervention
- native liaison
- group home support
- support for independent living
- treatment foster care
- women's crisis centre
- pre-school and student care programs.

In addition to the above multi-service agencies, a number of other agencies provide programs and services within the Municipality, including:

- the Alberta Alcohol and Drug Abuse Program
- Alcoholics Anonymous and Alanon
- Canadian Cancer Society
- Canadian Diabetes Association
- Cerebral Palsy Association
- C.H.O.I.C.E.S. (providing employment services for disadvantaged clients)
- the Fort McMurray Food Bank
- the Fort McMurray Physically Handicapped Association
- the Fort McMurray Sexual Assault Centre, and
- the Some Other Solutions Society (S.O.S.) for Crisis Prevention (providing crisis intervention and prevention counseling).

#### **2.2.4.4 Public Safety and Protection**

##### ***Policing***

The Fort McMurray RCMP detachment covers all the municipalities located in the Regional Municipality of Wood Buffalo except for Fort Chipewyan which has its own detachment. Fort Fitzgerald is covered by the North West Territories' RCMP Detachment.

The Fort McMurray detachment has 65 uniformed members. Eight of those members are involved in rural policing. Native communities are policed by native members of the RCMP. There are two highway and two municipal traffic positions (Personal Communication, Tracy Horvath, Fort McMurray RCMP).

The detachment is involved in a number of community activities. The Community Policing and Victim Services program liaises between community groups and the RCMP. The program is primarily a volunteer organization whose aim is to assist victims of violent crime.

There are two part-time people working for the program with an additional 40-50 on-call volunteer advocates. In 1994, this volunteer group spent approximately 26,000 hours for the program (Personal Communication, Tracy Horvath, Fort McMurray RCMP).

The RCMP also has auxiliary constables (civilian volunteers) who assist the RCMP in some of their police work. There are currently 13 volunteers who on an average year spend 160 hours each involved in the program (Personal Communication, Tracy Horvath, Fort McMurray RCMP).

Through a comparison of crime statistics, Fort McMurray does not appear to differ greatly from communities of similar sizes such as Grande Prairie. As the table below indicates, comparisons of reported criminal activities between Grande Prairie and Fort McMurray show a smaller crime rate in Fort McMurray for most types of criminal activities except assault.

**Comparison Of Crime Rates Per 100,000 Population Between  
Fort McMurray And Grande Prairie In 1984,1989 and 1994**

	<b>Grande Prairie</b>			<b>Fort McMurray</b>		
	<b>1984</b>	<b>1989</b>	<b>1994</b>	<b>1984</b>	<b>1989</b>	<b>1994</b>
<u><b>Violent Crimes</b></u>	979	2,018	1,803	1,223	1,881	2,253
Assault	880	1,904	1,697	1,162	1,828	2,195
Homicide	-	3.7	-	2.9	-	-
Abduction	29	33.1	28.2	8.7	8.9	5.7
Robbery	37.3	25.7	59.9	20.3	35.6	40.2
<u><b>Property Crimes</b></u>	8,203	13,566	9,049	6,310	5,961	5,281
Break & Enter	1,232	1,323	1,155	1,229	940.7	819
Theft Motor Vehicle	448	882	704	620.3	457	273
Theft (over \$1,000)	1,626	485.2	496.5	1,052	160	149
Theft (under \$1,000)	3,431	8,706	5,482	2,519	3,439	3,362
Frauds	1,319	1,694	806	777	774	537

(Source: Canadian Centre For Justice Statistics)

The table also indicates an overall decline for most criminal activities in both cities between 1984 and 1994 except for assault and robbery. These statistics challenge the widely held public view that crime rates are ever increasing. The same public perception was found in a 1993 survey undertaken by the Fort McMurray RCMP Detachment that canvassed Fort McMurray residents on their views on crime in their community. Aside from an overall belief that the crime rate was on the increase, they identified vandalism as a specific crime related concern although as the data suggests property crimes has actually been decreasing in Fort McMurray.

### ***Fire Protection***

Fire protection is provided by the Regional Municipality of Wood Buffalo. Fort McMurray has three fire halls; two are open and the third one is closed. The third fire hall is used for storage of equipment and contains the 911 emergency number operations for the municipality communities connected to it. Fire Hall No. 1 is located in the lower townsite. Fire Hall No. 2 is located in Fort McMurray's industrial area on Gregoire Drive; it serves as the main dispatch facility. Fire Hall No. 3 is located in the Thickwood Heights residential area of Fort McMurray.

The department has 65 full time personnel. This includes 52 response personnel and 13 support staff including dispatchers. The staff also includes two safety code officers, a fire prevention/investigative officer and a support training officer. The department is managed by a Chief and a Deputy Chief. The Chief answers directly to the City Manager.

The department has four shifts with 13 personnel on duty at a time. This includes 4 part time and 4 full time individuals and 1 dispatcher all emergency duty qualified. Each fire truck is manned by two people and each first line ambulance is manned by two individuals. One fireman is free to attach himself to whatever emergency is active or can serve as a backup. Additional staff are called up as required.

The staff are trained in the Vermilion Fire School 1001 - 1021 standards. Half to three-quarters of the staff have completed the 3 year program. Fire fighting skills are kept current through the joint training that the fire department does on a regular basis with the fire fighting teams of Syncrude and Suncor. Many of the personnel are medically trained as well. There are 13 qualified firefighter paramedics.

The equipment stationed at the three fire halls includes:

- Fire Hall 1: 1 fire engine, 1 rescue truck, ladder truck, 2 ambulances, 1 zodiac, 1 MCI (multiple casualty incident) trailer
- Fire Hall 2: 2 back up trucks
- Fire Hall 3: 1 fire engine, 1 fire truck, 2 ambulances

In addition to this equipment, the department also has a MCI trailer at the airport and dry chemical foam truck which they recently acquired from the federal government. This latter vehicle is used for airport emergencies and can be operated by one man. Six firefighters have been trained to use the truck.

The department also has access to an air ambulance, a Beech 100 twin turbo dedicated to air medivacs. This plane responds to emergency calls throughout the municipality and can be



supported by helicopters as need be. The plane was outfitted to Alberta Health standards. The paramedics who use the plane have contractual access to an emergency doctor associated with the Northern Lights Regional Health Centre.

In addition to fighting fires in the urban area and at the recent coverage of the airport, the Fort McMurray Department also works closely with the oilsand plants. In addition to coordinating training, the various fire departments have developed a two tiered agreement whereby they can help fight fires in one another's jurisdiction. Emergencies in one's own area takes precedence, however. In addition to assisting with oil sand fire emergencies, the department also assists the Alberta Forestry Service on an as need basis fighting forest fires.

The Chief of the Fort McMurray Department also serves as Chief over the fire departments that exist in the municipality's other communities. This includes responsibility for 6 departments and 90 volunteers from Fort Chipewyan to Conklin.

In 1995, the Fort McMurray Fire Department received 2,230 emergency calls, an average of 186 calls a month. Seventy-percent of the calls were ambulance related while the remaining 30 percent were fire related. According to the Fire District Chief, a slight increase in calls has been noted in the last few years partially attributable to the Department's take over of the air medivacs services 3 years ago. First Quarter data for 1996 attests to this trend as an additional 150 calls were recorded between January and April 1996 as compared to the same period last year (Personal Communication, Ken Zacher, Fire District Chief, Fort McMurray Fire Department).

### *Ambulance*

Ambulance service is provided to all communities in the Municipality through the Fort McMurray Fire Department. The ambulance service area extends to Fort McKay in the north, House River in the south and the Saskatchewan border in the east.

#### 2.2.4.5 Housing

##### *Housing Types and Numbers*

Housing within the Regional Municipality of Wood Buffalo is primarily composed of single detached residences. Within Fort McMurray, single-detached or semi-detached housing represents just over 50% of the total number of dwelling units (see table below). Almost two-thirds of dwellings are owned by the families who reside within the homes. Apartments and mobile homes count for about 37% of all dwellings, with the remainder being row or townhouse dwellings.

**Number and Percent of Types of Residences in Fort McMurray**

Type of Residence	Number	Percent
Total number of occupied private dwellings	11295	100%
Owned	7090	63%
Rented	4210	37%
Band housing (3)	0	0%
Single-detached house	4935	44%
Semi-detached house	840	7%
Row house	1315	12%
Apartment, detached duplex	40	0%
Apartment building, five or more storeys	240	2%
Apartment building, less than five storeys	2370	21%
Other single attached house	5	0%
Movable dwelling (4)	1550	14%

Statistics Canada, 1991 Census

Much of the existing housing stock within Fort McMurray was build during the 1960's and 1970's, and is therefore modern. Of the existing housing stock, almost 90% is 25 years old or less (Regional Municipality of Wood Buffalo, 1995, p44).

Residential development within Fort McMurray is divided among eight areas: Beacon Hill, Gregoire Mobile Home Park, Abasand Heights and Grayling Terrace, Waterways, Lower Townsite, Thickwood Heights, and Timberlea. Timberlea is the newest residential area within Fort McMurray and when fully developed, is expected to hold about 34,000 residents.

### ***Housing Demand***

Demand for purchased housing has increased recently within Fort McMurray, partially as a result of lower mortgage rates and partially as a result of a long-term sense of job security. Housing inventories have decreased in the fall and winter of 1995-6 and expectations are that housing starts will be near 80 to 100 in 1996 (Fort McMurray Today, 1996; Greg Walsh, per.comm.).

Demand for rental apartments remain slow, with vacancy rates over the past three years remaining in the 12 to 15% range (Regional Municipality of Wood Buffalo, 1995, p44).

### **2.2.4.6 Recreation Facilities and Programs**

Recreation facilities within the communities throughout the Regional Municipality of Wood Buffalo include community halls (used for community gatherings, celebrations, and recreational events), skating and hockey arenas, sports fields, and parks and camping facilities. Within Fort McMurray, the Borealis Park is being developed into a comprehensive recreation complex. Over 40 km. of trails have been developed linking the various residential areas with the community core. The park core, when completed, will have concession and bathroom facilities, an outdoor amphitheatre, water playground, basketball/rollerblade court, float plane base, a lake for skating and paddle boats, volleyball court and picnic areas.

Fort McMurray has three arenas (Thickwood Heights, Beacon Hill and MacDonald Island) and four curling sheets. Both school districts make their school facilities available for community recreation use. A number of ball diamonds are located throughout the community, with large facilities located at MacDonald Island Park and Westwood. Soccer fields are located within Fort McMurray and the Centennial Pool and YMCA offer recreation and swimming programs.

Recently, a Fly Dome was constructed in Gregoire to accommodate indoor sports such as baseball, slow pitch and soccer. Two 18 hole golf courses are also available nearby.

### **2.2.5 Physical Infrastructure**

The physical infrastructure for the Regional Municipality and its communities is fully described in a number of published documents. These include the area structure plans prepared for each of the communities within the municipality as well as the Regional Municipality of Wood Buffalo General Municipal Plan, Northern Alberta Development Council's 1990 Inventory of Infrastructure for Northern Alberta Communities, and the 1995 Regional Municipality of Wood Buffalo Community/Economic Profile.

#### **2.2.5.1 Land Use Planning**

Land use planning and development for the Municipality is the responsibility of the Regional Municipality of Wood Buffalo. The Planning Department provides land use planning for Fort McMurray. In particular, it is responsible for the management and implementation of the community's General Municipal Plan, Area Structure and Redevelopment Plans, and the Land Use Bylaw. As well, the Department is responsible for the issuance of development and building permits and their enforcement.

##### ***Existing Land Use Planning***

Since the proclamation and implementation of the new Municipal Government Act and the subsequent increased responsibilities given to municipalities by the province, the Regional Municipality of Wood Buffalo has assumed more planning duties. This assumption has been magnified significantly by the fact that the municipality was only recently formed on April 1, 1995 through the amalgamation of the City of Fort McMurray and Improvement District Number #18. Consequently, the municipality while acclimatizing itself to the new provincial planning legislation is also having to blend regional and local planning and development initiatives. Presently, the municipality's administration is implementing the planning initiatives established by the previous governments.

Staff of the Regional Municipality are now addressing a number of transition issues. For example, the Regional Municipality of Wood Buffalo has to develop a clear understanding of its role in regional development of the oilsands area. This involvement not only has to be clarified relative to the I.D.'s former involvement but also relative to the jurisdictional responsibilities the municipality can and should assume relative to the new provincial legislative regime. As part of this process, the Municipality will need to prioritize its planning items among the rural and urban areas and allocate resources to deal with these issues. One particular planning item which affects oilsands and associated industry, the community of Fort McMurray and the community of Fort McKay is the potential development of an industrial area in proximity to the oilsands. Associated with this is the need to prepare and implement policies regarding the development and maintenance of regional transportation infrastructure in the oilsands area to provide access to the established facilities and the proposed projects such as Solv-Ex.

The Regional Municipality of Wood Buffalo's existing planning initiatives are well documented in its 1995 General Municipal Plan and current area structure and redevelopment plans. The General Municipal Plan, as a long range planning document, highlights how the community envisions itself being at a future point. The goals, objectives, and policies relating to ten community land use items, recommends how that vision can be attained. The ten items include population growth, economic development and tourism, residential development and home based businesses, commercial, and industrial development, recreation, parks and open space, community facilities and services, transportation and utilities, emergency services, municipal finance, and plan implementation.

#### *Expected Future Planning*

The municipality's future planning initiatives as a collective whole are now being formulated. One particular issue that is being given consideration is how the municipality responds to and plans for the development of the oil sand facilities as an integral part of the entire municipality. Similar consideration has to be given to the ALPAC initiatives presently occurring in the southern part of the municipality.

### **2.2.5.2 Transportation**

The Regional Municipality of Wood Buffalo and Fort McMurray are well serviced by road, air and water based traffic. There is also rail service, although much reduced in recent years from it was.

#### ***Rail***

Although freight is now all that is carried on rail and only as far as Lynton, rail has had a significant role in the region's development, for both freight and passenger. In 1921, the Alberta and Great Waterways Railroad reached Draper, six kilometres south of the current Waterways. In 1925, the line was extended to the present Waterways station. During 1929, Canadian National Railways and Canadian Pacific Railways took over the Alberta and Great Waterways Railway and renamed the company the Northern Alberta Railway (NAR). With the establishment of the Mackenzie Highway and Great Slave Lake Railway connection between Edmonton and Hay River NWT., the volume of traffic on the N.A.R, passenger and freight declined significantly. In 1989, the passenger service to Fort McMurray was ended and the freight trip was shortened to Lynton. Lynton is situated in the vicinity of Anzac, 45 kilometres to the southeast of Fort McMurray. The rail track to Waterways, the old section of Fort McMurray and the terminus for the Northern Alberta Railway for many years, was removed in August 1994. Such action solidified the fact that Fort McMurray and its region will continue to be serviced by other forms of transportation. It is interesting to note that in the City of Fort McMurray's 1980 General Municipal Plan, reference was made to the possibility of extending rail capability beyond Fort McMurray to the oilsands operations.

#### ***Air***

The Regional Municipality of Wood Buffalo is well served by air. Fort McMurray and Fort Chipewyan both have all weather strips. However, the Fort McMurray Airport, with its greater array of services acts as an informal, regional hub for Wood Buffalo and serves as the regional, commercial airport for northeastern Alberta. The airport is equipped with all weather, state of the art facilities. The longest runway is 1,828.8 metres and can comfortably accommodate large jet traffic. Canadian Regional and Canadian Airlines as well as Air BC are the main commercial carriers serving the airport. They do so on a daily basis. Other charter carriers utilize the airport

include Northwestern Air Leases Ltd., Contact Airways, Brown's Charter, Alert Airways, Lakeland Helicopters, Highland Helicopters, Midwest Helicopters, and Canadian Helicopters. Contact Air provides daily service between Fort McMurray and Fort Chipewyan.

### ***Water***

Water transportation like rail transportation, used to provide an integral link for Fort McMurray and the communities lining the Athabasca River and Lake Athabasca to the north with Edmonton and other southern centres. The Northern Transportation Company Limited operated active barge service from Athabasca Landing to Waterways/Fort McMurray until 1965. In that year they moved their offices from Fort McMurray to Hay River. The establishment of all weather road connections between Fort McMurray and southern Alberta, combined with continued provision of rail service and increasing commercial air travel to the region, as well as the Company's increasing presence throughout the Northwest Territories decreased the locational importance of Fort McMurray.

Barge services continue to provide an important linkage between Fort McMurray and the communities to the north. A Frame Contracting Ltd. and MacDonald Marine Transport Ltd. provide scheduled and unscheduled freight service to various points along the Athabasca River as well as Lake Athabasca and its tributaries, such as Slave River. These contractors will also organize charter trips for passengers.

### ***Roads***

The Regional Municipality of Wood Buffalo is served by three main roads. Primary Highway 63 connects Fort McMurray with Edmonton and other southern centres. As well, this same road connects Fort McMurray with Fort McKay year round and during the winter months it extends into the winter road which leads to Fort Chipewyan and ultimately Fort Smith, Northwest Territories. It should be noted that the winter road is the responsibility of the regional municipality. In addition, to Highway 63, Alberta Transportation is responsible for the maintenance of Highway 69. This all weather, paved two lane road connects Fort McMurray with Lynton Siding and the airport. Its maintenance and improvement is the responsibility of Alberta Transportation.

Highway 881 is a secondary highway connecting Fort McMurray with the communities of Anzac, Janvier, Conklin, and Lac La Biche. During the forest fires of July 1995 which closed Highway 63, Highway 881 played an important role in maintaining ground transportation with the Regional Municipality. For many years, it has been realized that another road connection was required to supplement the primary highway. The forest fire which induced closure of Highway 63 reinforced this belief.

Plans have been initiated to upgrade Secondary Highway 881. ALPAC, the forestry company active in the southern part of the Regional Municipality, has agreed to front end the funds required to undertake the upgrading. The Regional Municipality will then reimburse the Company for its investment. This improvement will not only increase the accessibility to the Municipality as a whole, it will also address the issue of increased traffic on the road created by the logging trucks.

A winter road, which is open from November to March depending upon weather conditions, connects Fort Chipewyan with Fort McMurray. There is a Regional Municipality committee which is currently studying the possibility of developing this road to all weather standards. Such a development would ensure permanent ground connections between Fort Chipewyan and the rest of the municipality to the south. The idea of all weather road is not new. Alberta Transportation and Utilities which is responsible for the road's management first studied the feasibility of establishing such a road in the 1970's. This study was updated in 1991. According to the material referenced in the Regional Municipality's General Municipal Plan, the cost of constructing such a road ranges from \$52 million to \$266 million depending upon the actual corridor selected. Presently, it costs about \$700,000 a year to operate the winter road.

Fort McMurray has a well established internal network of roads. This network was first developed in the mid 1970's. It is referred to at length in earlier transportation and planning documents such as the 1980 General Municipal Plan. The network consists of local, collector, and arterial roads. Each one is designed to carry larger amounts of traffic than at present. The network, which has been modified several times since its original inception, is closely tied to the Municipality's land use concepts.



The Municipality operates a transit system within Fort McMurray. Its 19 bus fleet operates on 8 regular routes, Monday through Wednesday 7:00 a.m. to 9:00 p.m. and from 7:00 a.m. to 10:00 p.m. Thursday through Saturday. There is no service on Sunday. The Municipality system also provides bus service to Anzac, Janvier, and Conklin twice a week. The bus leaves Fort McMurray in the morning, Friday returning that night and leaving again Sunday morning and returning to Fort McMurray Sunday night. Out of town service is provided by Red Arrow and Greyhound. Both companies provide daily connections with Edmonton. Diversified Transport provides charter service. In addition to municipal bussing services, both Suncor and Syncrude operate bussing services for transportation of employees from the two plants to residential areas within Fort McMurray.

#### **2.2.5.3 Utilities**

##### ***Water***

Potable water is provided by the Regional Municipality in most of the communities. Within Fort McMurray, potable water is provided by the Municipality. Water is drawn from the Athabasca River upstream of the confluence with the Horse River and directed to two raw water storage ponds. It is then transferred to the treatment plant for various treatment processes and subsequently distributed to the storage reservoirs in the municipal water system. The distribution system consists of seven pressure zones which are served by eight pumping stations, five storage reservoirs, and twelve pressure reducing stations. The treatment plant, commissioned in 1988, is currently operating at less than half of its design capacity. The Municipality supplies treated water to the Fort McMurray Airport and Sapræ Creek, a country residential development bordering Fort McMurray to the southeast.

##### ***Sewage***

In Fort McMurray, the municipality provides sewage services. In other communities, the service is provided through private contractors, or on residential sites by septic tank systems or individual privies. Within Fort McMurray, residences are connected to a piped sewage system. The gravity system, augmented by five lift stations, directs sewage to the treatment facility which consists of a series of aerated lagoons. The specific lagoons include two, 2 day detention

mixed aeration cells and one 25 day facultative aeration cell plus a blower house. The system was evaluated in July 1994 and known deficiencies identified. One item that was defined was the need for a regional disposal site for sewage sludge. Such a site would be accessible for municipalities and construction camps and industry operating in the municipality outside of the existing communities.

### ***Telephone***

Alberta Government Telephones (AGT) provides telephone service to all communities within the Regional Municipality of Wood Buffalo. The service is provided primarily by fibre optics to Fort McMurray from Edmonton and then distributed from Fort McMurray to the other communities. The fibre optic connection between Edmonton and Fort McMurray is backed up by digital microwave radio capability. Telephone connections between Fort McMurray and the oil sand facilities is provided by fibre optics. Service to Janvier and Conklin is provided by digital microwave. To Anzac it is provided by a digital carrier which is then transmitted to a digital switch to microwave to serve the cabins in the vicinity. Saprae Creek is serviced by a digital switch from Fort McMurray. Consideration is being given to connecting Fort Chipewyan by cable. Within Fort McMurray, the service is considered a franchised utility by the Municipality and as such is affected directly by the design and installation guidelines included in the Fort McMurray's Engineering Servicing Standards document. The actual installation of telephone lines and supporting infrastructure is developed and phased in conjunction with the development and implementation of building and development plans.

### ***Electricity***

Electrical power is provided by Alberta Power and TransAlta Utilities. Alberta Power is the primary provider through the majority of the Municipality while TransAlta's service is concentrated in the southern part of the Municipality. There are two power feeds to the Regional Municipality. Alberta Power provides electricity to Fort McMurray. As with telephones, electricity is seen to be a franchised utility. As such, it too, is directed by the Fort McMurray Engineering Servicing Standards document guidelines for design and installation.

Fort McMurray's direct tie to the Provincial Grid, which is managed by TransAlta, is by the mainline which runs through Janvier in the south. The same mainline also extends to the oil sands plant sites. The other power connection is from the west. This line runs from Wabasca to Syncrude to Fort McMurray. Fort Chipewyan is isolated from the grid at present. It has its own plant which provides power. Contingency plans are in place for the use and management of power. For example, if Fort McMurray experiences a power shortage, Syncrude will shut down the operation of one or more of its draglines.

### *Natural Gas*

Northwestern Utilities provides natural gas to the communities within the Municipality and owns and operates the gas distribution system in Fort McMurray. The system's design and installation is also guided by Fort McMurray's Engineering Servicing Standards document. Gas service is deemed to be a franchised utility.

### *Waste Management*

The Regional Municipality provides weekly waste management service to most communities. Within Fort McMurray, residential waste is collected by the Municipality. Commercial waste is collected and disposed of by private contractors, Laidlaw Waste and Lo-Cost Waste. The Municipality's existing landfill has an estimated five years of capacity left. It has been in operation since 1975 and is characterized by a high water table on site as well as having proximity to surface water sources. A new landfill facility is currently being considered. Its location will be located approximately 16 kilometres from Fort McMurray and designed to meet the regional needs of the entire Municipality. The existing landfill will be converted to a transfer station feeding the regional facility. It is also proposed that progressive waste management techniques be incorporated on site such as an active composting program. It has been estimated that the new facility with transfer stations and composting plants will cost approximately \$6 million. The Municipality is supporting an oil drop centre, household hazardous waste roundups, and paper, metal, battery and organic recycling.

#### **2.2.5.4 Communication**

##### ***Radio***

The Regional Municipality is well served by radio stations. In addition to the Edmonton broadcast and cable stations, AM and FM radio stations are also available through Shaw Communications. There is the local AM and FM stations in Fort McMurray, CJOK and CKYX, respectively.

##### ***Television***

Shaw Communications provides 35 channels through its cable connections. As a franchised utility within Fort McMurray, the Fort McMurray Engineering Servicing Standards document applies to the design and installation of television infrastructure.

#### **2.2.6 Land and Resource Use**

##### **2.2.6.1 Definition of Direct vs. Regional Impact Areas**

This section describes the current land uses within areas near the Steepbank Mine Project. In this instance, land uses include traditional resource uses such as berry picking, fishing, hunting, and trapping, and non-traditional resource uses such as recreation, forestry, and road traffic. Land use impacts are discussed at two levels: impacts occurring in the direct and regional impact areas. The Direct Impact Area is the area directly affected (or altered) by the proposed mine development (Figure 2). The Regional Impact Area is defined by the boundary of the Fort McMurray-Athabasca Oil Sands Sub-Regional Integrated Resource Plan (IRP) which approximates the planning area of the Regional Municipality of Wood Buffalo and includes most communities found in the Regional Municipality except for Fort Chipewyan and Fort Fitzgerald. (See Figure 3) The regional analysis includes land uses that may be affected by the anticipated population increase in the Municipality as a result of the Project. The assumption is that a gain in population will lead to an increase in certain recreational activities such as hunting, fishing or boating and consequently alter the existing land use patterns found in the Municipality.

#### **2.2.6.2 Existing Land Uses**

Discussions with provincial representatives and local resource users, including the Fort McMurray Fish and Game Association, have identified a relatively small number of non-traditional resource uses (hunting, fishing, All Terrain Vehicles, and snowmobiling) taking place in the Direct Impact Area. Because these activities are said to be occurring in an unorganized and sporadic manner, it is difficult to assess the amount of use taking place in the Direct Impact Area and in the surrounding region. Consequently, land use activities occurring in the Direct Impact Area are discussed in general terms.

According to a recent traditional resource use survey undertaken by the Fort McKay Band, the Steepbank Mine Area is part of the Fort McKay's traditional resource use territory. Results from the survey indicate that a number of resources (trees, plants, berries, fish, wildlife) were and are used for traditional purposes (Fort McKay Environmental Services Ltd., 1995). The traditional resource uses found in the Direct Impact Area are discussed in the following section.

#### **2.2.6.3 Direct Impact Area**

##### ***Traditional Land Uses***

Suncor's lease areas are located within a region used for traditional purposes by members of the Fort McKay Band located 20 km north of the mine site. The Fort McKay Band (Pop: 332) until recently relied heavily for its subsistence on the traditional resources of the land. For example, across the river from the current Steepbank mine site, i.e., Tar Island, was once a major traditional gathering site for summer/fall hunting, fishing and gathering activities (Fort McKay Environmental Services Ltd., 1995:16).

Although the level of activities may have diminished over the years, a recent community profile suggests that trapping, hunting and fishing are still important activities in the community. Eighty individuals were said to be involved in trapping while 100 individuals respectively are said to be involved in fishing and hunting. Fort McKay members have indicated a number of traditional

resource uses exist within the Steepbank Mine area (Figure 4) (Fort McKay Environmental Services Ltd., 1995:12).

#### Hunting and Trapping

Trapping is the only well documented traditional activity occurring in the Direct Impact Area. A study of fur trapping in the Suncor Study Area undertaken in 1995 by Westworth and Associates indicates that four registered Fur Management Areas (RFMAs) were located in the vicinity of the Suncor leases. Two of those traplines are located in the Direct Impact Area: RFMAs #2297 and #2453. The size of RFMAs #2297 and #2453 are 279 km<sup>2</sup> and 243 km<sup>2</sup> respectively. The Steepbank River is a major feature of the two RFMAs, both of which are located east of the Athabasca River. Access to these trapping areas is provided by using oil exploration roads dating back from the 1950's and recently constructed logging roads. A cabin is used for trapping purposes on each of the two RFMAs and are located along the Athabasca River. These structures are also utilized for recreational purposes during the off-season (Westworth & Associates, 1995:6-8).

According to the study, however, trapping activities have been low in both RFMAs since 1991. In 1994, only 14 km of trapline were used on RFMA #2453 while RFMA #2297 has not been active for the past 2 years (Westworth & Associates, 1995:8).

From 1984 to 1994, the red squirrel and beaver were the most harvested fur bearers in RFMA #2297 comprising 81 percent of the total animals caught while the same two species totalled 65 percent of the catch in RFMA #2453. The muskrat and weasel were the two other species of importance to the RFMA #2453 (Westworth & Associates, 1995:14).

In terms of economic returns, the beaver was the most profitable furbearer harvested in the area accounting for 43 percent of the estimated revenue over the 10 year period followed by the fisher (23 percent of total revenue) and the lynx (11 percent). (Westworth & Associates, 1995:18)

Aside from the commercial harvesting of wildlife, trappers in the area also harvest wildlife for personal use including making clothes (hats, gloves, boots) and for subsistence purposes (moose) (Westworth & Associates, 1995:21).

In general, however, traditional big game hunting and trapping was and is limited by a general lack of access in the Direct Impact Area and its surrounding region. A trapper who owns a line on the east side of the Athabasca River must be flown in an out to access his territory (Fort McKay Environmental Services Ltd., 1995:19).

Waterfowl were traditionally hunted on the river, in the area of the Steep Bank Mine but most of this hunting has ceased. Upland game birds such as the grouse are still taken periodically but in general bird hunting has become a marginal activity (Fort McKay Environmental Services Ltd., 1995:20).

#### Fishing

Some fishing takes place in the Steepbank and Athabasca Rivers. A few arctic grayling are caught from the Steepbank River and eaten. Most of the fish caught in the area is released (Fort McKay Environmental Services Ltd., 1995:20). Two traditional fishing grounds were found in the Direct Impact Area, one for jackfish and the other for whitefish.

#### Forest Resources

Trees have and are still used by members of the Fort McKay First Nation for medicinal purposes (balsam fir), smoking and curing fish and game and as building materials (Fort McKay Environmental Services Ltd., 1995:10-13). No traditional harvesting sites were identified within the Direct Impact Area (Fort McKay Environmental Services Ltd., 1996:9).

Coniferous (lodgepole pine, white spruce, jack pine, tamarack, balsam fir, black spruce) and deciduous (balsam poplar, aspen poplar, paper birch, willow and alder) trees are all used according to the survey. Willow bark, for example, is used as a tea to cure headaches, colds and stomach problems while willow and alder are used to smoke and dry fish and meat. Large coniferous trees are used to build shelters, and specifically trappers' cabins.

### Plants

Berries and shrubs are picked by First Nation's members for a variety of purposes ranging from food, tobacco to medicine. Rot root, mint, red willow (dog wood) and a variety of berries are reported to be in use in the study area. At least 19 different types of berries and shrubs were identified by the survey. All of these plants are currently found in various amount throughout the study area (Fort McKay Environmental Services Ltd., 1995:11). Traditional gathering sites for mint, blueberry, strawberry and rosehips were found in the Direct Impact Area. These sites are currently used by members of Fort McKay but are not the only areas of the traditional resource territory where these plants can be found (Fort McKay Environmental Services Ltd., 1996:9).

### ***Non-Traditional Land Use***

No organized resource use, other than mining, is taking place within the Direct Impact Area. Although not in the vicinity of the mine, forestry is the other important industrial activity taking place in the region. Alberta-Pacific and Northland Forests Products are the two companies currently operating in the region. Specific forestry activities such as logging or road building are described in the forestry companies' respective annual operating plans.

Lack of access and better recreational opportunities outside the Direct Impact Area have limited the amount of recreational use in the area. Some random and sporadic hunting, fishing and snowmobiling is taking place but there is a lack of well-documented evidence of use.

### **2.2.6.4 Regional Impact Area**

#### ***Traditional Land Use***

The traditional resource territory of the Fort McKay Band extends well beyond the Steepbank Mine Area. The Traditional Knowledge Survey identified 57 traditional gathering sites in the vicinity of the Steepbank Mine area (see figure 4) including 4 sites for birds, 9 for fish, 13 for mammals and 31 for vegetation (trees, plants, berries) illustrating the importance of traditional resources in the area (Fort McKay Environmental Services Ltd., 1996:9).



### *Non-Traditional Land Use*

The Fort McMurray-Athabasca Oil Sands Sub-Regional IRP provides the geographical framework for the regional land use analysis. The regional analysis is based on the assumption that the anticipated increase in population resulting from the project could alter existing land use patterns because of increased human activity. Outdoor recreation and road traffic activities are the two areas where changes are expected to occur as a result of the project.

While forestry is only going to be affected marginally by the project, its importance as a resource warrants some discussion and is included in the analysis.

The sub-regional IRP is divided into resource management areas (RMA's), these planning units are used to describe land use activities within the subregional plan. An RMA is identified on the basis of a common landscape, its current land use and resource capability. Although the entire subregional plan is used for the regional land use analysis, two resource management areas are key to this assessment: the Mildred-Kearl Lakes Resource Management Area because of its adjacency to the Steepbank Mine area and the Gregoire Lake RMA because it contains the primary recreation destination in the region, i.e. Gregoire Lake Provincial Park and a likely location to be affected by the anticipated increase in human activity (see Figure 3).

### The Mildred-Kearl Lakes RMA

The Mildred-Kearl Lakes represent 43 percent of the IRP while the Gregoire Lake RMA as the main recreational destination area for the region makes up only 1 percent of the total planning area (Alberta Environmental Protection, 1995:32).

The Mildred-Kearl Lakes RMA is essentially characterized by the surface minerable oil sands deposits (which include Suncor and Syncrude lease areas) but other land uses are also recognized to be of some importance including forest resources, traditional resources (trapping, hunting and fishing), access and infrastructure, recreation and tourism, wildlife, ecological resources and historical resources. A portion of the Fort McKay traditional resource use territory is part of the Mildred-Kearl RMA (Alberta Environmental Protection, 1995:53).

The area holds limited recreational potential except for the upland area at Fort Hills (Twp.97, Rges.10-11, W4M) that could become a provincial park and the adjacent McClelland Lake wetlands and the Bitumount Historic Site that could provide heritage interpretation, recreation and tourism opportunities (Alberta Environmental Protection, 1995:56).

### ***Recreation***

Recreational activities in the RMA, as in the Direct Impact Area, are limited due to its difficult access. The Athabasca River is used as an access point by recreational hunters, fishermen and outdoor enthusiasts with all-terrain vehicles. The heaviest use takes place during the fall hunting season when deer and moose hunters are the most active. Some sport fishing takes place near the headwaters of the Steepbank River (Township 91). Arctic grayling and walleye are the most common species caught. Much of the fishing is fly-in (Personal Communication, Ian Parkinson, Fort McMurray Fish and Game Association).

### **The Gregoire Lake RMA**

Gregoire Lake RMA is situated 20 km southeast of Fort McMurray and contains Gregoire Lake, the most significant regional destination area. Gregoire Lake supports a variety of activities including sport fishing for walleye, yellow perch, lake whitefish and northern pike, boating, waterskiing, sailing and windsurfing. The Gregoire Lake Provincial Park is located on the northwestern shoreline of the lake. The area is inhabited by moose, deer, beaver, muskrat, otter, bear, mink, wolf and coyote. The Park provides day and overnight use facilities including hiking trails, a beach and a campground with 140 individual campsites and a group camp. The Gregoire Lake Natural Area located along the south shore of the lake contains 3 creeks, extensive wet meadows, willow shrublands and upland aspen forests also provide recreational opportunities (Alberta Environmental Protection, 1995:49).

A recent household survey undertaken by the Northern River Basins Study (NRBS) indicates a high participation rates in recreational activities (camping, swimming, boating, canoeing, fishing, hunting) by households located in the Lower Athabasca region. The Lower Athabasca Region includes essentially the Regional Municipality of Wood Buffalo. Close to 89 percent of

households indicated participating in outdoor recreation activities while eighty-three percent participated in water-based recreational activities in 1995(Reicher/Thompson, 1995: 63-65).

Furthermore, according to the same study, the most popular recreational lake in the entire Peace/Athabasca/Slave River basins is Gregoire Lake which accounted for 5 percent of all the trips taken to lakes in the NRBS area. The Clearwater River was the only river located in the Fort McMurray-Athabasca Oil Sands Sub-Regional IRP identified for recreational purposes by the NRBS. It accounted for 1.8 percent of all the trips taken by northern households to rivers in the NRBS area (Reicher/Thompson, 1995: 81-82).

***Forest Resources (commercial timber)***

An important land use activity taking place in the vicinity of the Steepbank Mine site is timber harvesting. The Province is subdivided into Forest regions, which are in turn divided into Forest Districts and Sub-districts. The forest districts each administer a number of Forest Management Units (FMU's). These FMU's are the base units for which conifer annual allowable cuts are calculated (Alberta-Pacific Forest Industries Inc. Detailed Forest Management Plan, 1995:56).

The Steepbank Mine site is located within a portion of the Alberta-Pacific Forest Management Agreement (FMA). The area of the Forest Management Agreement that includes the Suncor study area is administered by Alberta Forest's Waterways District. This district contains forest management units that gives Alberta-Pacific exclusive long term deciduous timber rights with the exception of 15,000 cubic meters per year retained by the Minister for miscellaneous timber uses (MTU) while Northland Forest Products under an agreement with Alberta-Pacific has coniferous timber rights in the area. Alberta-Pacific, as part its planned forestry related infrastructure development is planning to build two main haul roads near Suncor's lease areas: the Paramount Road will run east-west connecting Highway 63 and crossing the southwestern corner of the Suncor's lease area while the Dover Road will run north-south and will connect the Paramount Road 10 km west of Suncor's lease area.

***Road Traffic***

The other major activity that may be affected by the Project is the use of the local road network. Currently, Highway 63 is the only paved road connecting Suncor and Syncrude facilities to the north and the south of the Municipality, particularly Fort McMurray. The Highway is used as the only commuting route for Suncor and Syncrude employees. Since the commuting is essentially done by buses thus reducing the number of personal vehicles on the Highway, traffic volume has remained at a reasonable level and is not likely to change substantially in the foreseeable future.

**2.2.7 Quality of Life**

Two primary factors have influenced the cultural and social character of Fort McMurray and its surrounding region: the relative geographical isolation of the region from the rest of Alberta and the economic history of the region. For the purpose of this discussion, the focus will be on the latter.

The growth of Fort McMurray as an urban centre is closely tied to the development of natural resources in the region. From trapping (fur trading) in the early 1800's to major forestry and oil sands developments of the last 30 years, Fort McMurray experienced the typical "boom and bust effect" exemplified by towns that rely predominantly on resource commodities for their economic viability.

A unique aspect of resource towns is found in the demographic profile of their populations. The population tends to be relatively young, transient, male dominated and with higher than average income earnings. All these characteristics could be found in Fort McMurray during the boom years.

Between 1970 and 1980, the population of Fort McMurray increased by 415 percent from 6,684 to 27,784. It peaked in 1985 to 36,810, a 32 percent increase since 1980. Since the boom of the mid 70's and early 80's, Fort McMurray's population has stabilized (Regional Municipality of Wood Buffalo 1995 GMP:12).

As a result of the economic recession of the mid 80's, the population began to decline in 1986 until 1993. During that time, the population decreased by 7.5 percent. The most recent data indicates that the population has remained relatively stable between 1993 and 1994 (Regional Municipality of Wood Buffalo 1995 GMP:12).

During the boom years (1975-1985) Fort McMurray attracted large numbers of young single male workers seeking jobs in the resource industries in particular the oil sands, oil and gas and forestry sectors. The abundance of well-paid jobs in these industries attracted a relatively transient population interested in maximizing its income during a short period of time. Consequently, the type of services offered to residents by the municipality were greatly influenced by that population. In other words, quality of life issues were not in the foreground as they would have been in a community that is older, more stable and with a large number of families.

Another legacy of the boom years is the diverse cultural background of the Fort McMurray residents. Newcomers to the community came from all across Canada. A significant segment originated from Eastern Canada and in particular the Maritimes. Fort McMurray is known as one of the largest community of Newfoundlands outside of Newfoundland. This cultural mix is further diversified by recent arrivals of Canadians of Asian backgrounds in the community attracted by opportunities in the region.

As compared to the rest of Alberta, Fort McMurray remains a young community with a high per capita income. If recent population trends continue, it will become an older, more stable and more family oriented community. Following years of downsizing at the two oil sands plants coupled with the general economic recession in the country, renewed optimism for the future is becoming apparent as new development projects (Syncrude, Suncor and Solv-Ex) are planned for the area.

According to community representatives, Fort McMurray's more mature urban population is creating new demands on municipal and community services and programs (Personal communication, Carolyn Slade, Fort McMurray Urban Park Project).

An increase in the seniors population has placed additional demands on seniors-related services particularly in the area of housing.

The more stable population coupled with high disposable income has led to a greater awareness and concern for quality of life issues particularly in the area of recreation and culture. The success of Fort McMurray Urban Park Project typifies a community that sees a liveable urban environment as a important community asset. The recent designation of Fort McMurray as a "Safe Community", the first North American community to receive such a designation, indicates that community groups and the public at large are concerned about making their community a safe and enjoyable place to live. The "Safe community" designation was based on quality of life indicators that included housing, land use, transportation, natural environment, employment, health, education, recreation, crime and safety and social welfare data. (Modelling Quality of Life Indicators in Canada, City of Fort McMurray, 1995)

Although the demographic profile of the population has changed in the last few years, the local economy continues to be dominated by the two oil sands operations. This, in turn, creates unique social circumstances that deserve some attention.

A large proportion of employees working at the two plants earn high incomes and are involved in shift work. Shift workers work long hours (12-14 hours a day) and this situation can create some stress in the family thus the possible increase in family violence and youth crimes (Personal communication, Alex MacKenzie, Northern Lights Regional Health Authority). According to a RCMP survey conducted in 1993, vandalism was the number one crime concern among residents of the Municipality. RCMP sources attributes the problem of vandalism with bored young people left unsupervised, i.e., "latch key children". Even though, after school programs have been instituted through the YMCA at the Thickwood and downtown locations, the expense of running such programs cannot provide services for all the children.

## **2.3 The Community of Fort McKay**

### **2.3.1 Historical Setting**

Fort McKay is a small first nations community located approximately 55 km north of Fort McMurray on the west bank of the Athabasca River. The community has existed in one form or another for many centuries. Traditionally, the people of Fort McKay relied on a subsistence economy or "bush economy" for their survival. In other words, their traditional economy was based on trading and cooperation using the harvesting of fish, plants and wildlife as the main sources for their subsistence. Typically, members of the community would camp at specific sites during various periods of the year. These sites would be selected because of their proximity to resources such as fish, waterfowl, big game, fur bearers and vegetation. Although the movement of people was frequent, the area which today defines the Community of Fort McKay had become over the year the main camp for the people of Fort McKay. From there, families would move between the main camp and areas such as Namur and Gardiner Lakes or Tar Island. These families would stay in these areas for weeks or months depending upon the supply of fish or moose in the area (Fort McKay, 1995:3-4).

It is only in the last part of the 19th century that a few members of Fort McKay became involved in non-traditional economic activities. During the summer, a few men would haul and load freight for Northern Transportation Company Ltd. Using the cash they earned they would purchase dry goods like flour, sugar and salt (Fort McKay, 1995:6).

The Community of Fort McKay began to take a more permanent form at the turn of the 20th century when federal and provincial regulations required members of the band to hold a permanent address and residence to collect child allowance and for children under the age of 16 to attend school (Fort McKay, 1995:5).

The last 40 years have had the most dramatic effects on the Community of Fort McKay with the introduction of forestry and mining activities in the region. Improvement in road access,

particularly with the upgrading of the highway between Fort McMurray and Fort McKay in 1993, was a major influence on the community (Fort McKay, 1995:3).

Today, Fort McKay has reached a crossroads in its evolution. Its main challenge is to find a balance between the need to preserve certain aspects of its traditional culture with the necessity to adapt to the industrial economy (Fort McKay, 1995).

### **2.3.2 Economy**

While fishing, hunting and trapping remain important traditional activities and provide a source of income (hunting and trapping only) for some members of the community, Fort McKay has embarked on a program to capitalize on the business and employment opportunities generated by the oil sand mining industry. The Fort McKay Group of Companies was established for such a purpose. The Company possesses five operating arms involved in a range of activities including construction, transportation, general store, development and environmental services. The Company provides much needed employment opportunities for members of Fort McKay. Collectively, the Fort McKay Group of Companies permanently employ about 80 people. This number can dramatically increase through seasonal and contractual employment. For example, in July 1995 the number of employees was 125 while in the summer of 1994, 265 people were employed by the Company. In 1995, 52 percent of the Company's employees were residents of Fort McKay (Fort McKay, 1995:7).

Besides the Fort McKay Group of Companies, a number of small businesses also operate in Fort McKay including medical services, electrical services and construction and heavy equipment operators (Fort McKay, 1995:10).

Most recent employment figures indicate that 37 percent of the active population (18 years and over) were employed full or part time leaving 63 percent of the active population unemployed in the community. This figure does not take into account individuals involved in traditional pursuits such fishing, hunting and trapping.



### **2.3.3 Population**

The current population of Fort McKay is approximately 332 people. The ethnic composition of its population includes 79 percent First Nations, 15 percent Metis, 1.5 percent Bill C-31 and 4.5 percent of other ethnic background. Thirty-nine percent of the population is under the age of 18. Eighty percent of the population lives within the actual boundary of Fort McKay while 20 percent lives outside the official community boundary (Fort McKay, 1995:11).

### **2.3.4 Human Services**

#### **2.3.4.1 Education**

The majority of community members, except for the children currently enrolled in the school system, have attained a grade 6 level of reading and writing comprehension. There are currently 5 individuals who are in the process of completing their post-secondary education while 17 others have received their high school diplomas (Fort McKay, 1995:11).

##### ***Grade 1-12 Education***

The Northland School Division operates an elementary school in Fort McKay. The Fort McKay School provides education from kindergarten to grade nine. Students are bussed to Fort McMurray to continue their education (Fort McKay, 1995:3-4).

##### ***Post-Secondary Education***

Post secondary education is available through Keyano College in Fort McMurray and other post-secondary institutions located throughout the province.

#### **2.3.4.2 Medical and Health Services**

Virtually all health services must be accessed in Fort McMurray. The Regional Health Authority provides trained personnel to visit the community (Regional Municipality of Wood Buffalo, 1995:79). Two individuals in the community provide medical transportation services such as the

delivery of patients to doctors, subscriptions to patients and non-emergency ambulance service (Fort McKay, 1995:10).

#### **2.3.4.3 Social Service Programs**

Social services in the community consist of one home care nurse (two days a week), one public health nurse (three days a week), one community health representative, two Drug and Alcohol Abuse workers and one secretary trans clerk (Fort McKay, 1995:17).

#### **2.3.4.4 Public Safety and Protection**

##### ***Policing***

The RCMP Detachment in Fort McMurray provides police services for the area although community leaders and elders also exert a significant amount of influence in the maintenance of order in the area (Fort McKay, 1995:17).

##### ***Fire Protection***

A volunteer fire department is maintained to provide basic fire protection service. The team consists of 12 members, of which 3 are rescue team leaders, and 9 are fire fighters (Fort McKay, 1995:17).

##### ***Ambulance***

The Fort McMurray Fire Department provides ambulance services for the community.

#### **2.3.4.5 Housing**

Housing in Fort McKay is a mix of single family units consisting of small bungalows, mobile homes and multi-family dwellings (Regional Municipality of Wood Buffalo, 1995:78). There are 108 housing units in the community (Fort McKay, 1995:17). One-hundred and one units are currently occupied for a vacancy rate of less than 7 percent (Fort McKay, 1995:17).

#### **2.3.4.6 Recreation**

A large number of Fort McKay residents pursue traditional activities such as hunting, fishing and trapping. Eighty individuals are believed to be involved in trapping while hunting and fishing attract 100 people respectively on a regular basis (Fort McKay, 1995:12). The community operates one sports arena.

### **2.3.5 Physical Infrastructure**

#### **2.3.5.1 Transportation**

Highway #63 is the only road used to access the Community of Fort McKay. Since 1993, the portion of the Highway leading into the community is a paved two-lane all-weather roadway. Roads within Fort McKay include paved, gravel and dirt (Regional Municipality of Wood Buffalo, 1995:78).

No rail service is available in the community (Regional Municipality of Wood Buffalo, 1995:78). An airstrip is located 3 km south of Mildred lake but is restricted for Syncrude's use only (Regional Municipality of Wood Buffalo, 1995:78). Barging service is available 10 km north of the community (Regional Municipality of Wood Buffalo, 1995:78).

#### **2.3.5.2 Utilities**

##### *Water*

Potable water is piped from a water treatment plant within the community to individual homes (Regional Municipality of Wood Buffalo, 1995:78).

##### *Sewage*

Sewage disposal is provided on an individual basis through separate privies, septic tank pumpouts or field systems. The community is partially served by a municipal sewage system. The sewage system is a gravity system with gravity collection lines, a lift station, and a lagoon

treatment system constructed in 1988. Effluent is discharged to the Athabasca River (Fort McKay, 1995:18-19).

***Telephone, Electricity, Natural Gas***

The majority of the residence and community buildings in Fort McKay are provided with electricity (Alberta Power), natural gas (Northwestern Utilities) and phone (AGT) (Regional Municipality of Wood Buffalo, 1995:78).

***Waste Management***

A weekly pick-up is provided by the Regional Municipality of Wood Buffalo. A modified landfill operates adjacent to the community (Regional Municipality of Wood Buffalo, 1995:79).

**2.3.6 Quality of Life Indicators**

Fort McKay experiences the typical challenges that many First Nations communities face today: high unemployment rate, high rates of alcoholism and drug abuse and the gradual erosion of its traditional way of life. A number of initiatives have been implemented to tackle these problems as seen in the creation of the Fort McKay Group of Companies to combat the high unemployment rate, and the establishment of support organizations such as the Fort McKay Alcoholics Anonymous, Fort McKay Youth Justice Committee, and Alcoholics Anonymous and Narcotics Anonymous to assist individuals in difficulties (Fort McKay, 1995:18-19).

An important community initiative is the Ft. McKay Interface Committee (FMIC) which was established in 1985 by bringing together government (e.g. Alberta Environmental Protection, ERCB), industry (e.g. Suncor, Syncrude) and community representatives. The FMIC was struck to deal with resource development impacts on Fort McKay. Over the past ten years, the Committee has assisted in the development of a number initiatives including an Air Quality Task Force, Review of Technical Applications, environmental education programs (e.g. Northern Alberta Environmental Education Project). The FMIC has also being involved in infrastructure development projects such as the building of a fire hall, fire training program, water treatment

and sewer system (The Ft. McKay Interface Committee ...A New Approach To Management Of Resource Development Impacts).

These various initiatives indicate the willingness on the part of the members of Fort McKay to face these complex times and create a positive economic and social environment for its members.

## **2.4 The Community of Fort Chipewyan**

### **2.4.1 Historical Setting**

Fort Chipewyan is the oldest settlement in Alberta located at the extreme northwestern tip of Lake Athabasca, approximately 225 air kilometres from Fort McMurray and 610 km northeast of Edmonton. It is situated on the edge of Canada's largest national park, Wood Buffalo National Park.

The Fort Chipewyan area, prior to European contact, was part of an important fur trading area extending all the way to the Hudson's Bay. By the time of Peter Pond's arrival (circa 1778) both the Crees and the Chipewyans were living in relative co-existence in the Athabasca District (Fort Chipewyan, Community Profile, 1996:a-3).

Commercial fur trading activities intensified between 1778 and 1821. R. MacKenzie established Fort Chipewyan on the south shore of Lake Athabasca at Old Fort Point. Sometime before 1799, Fort Chipewyan was again relocated and moved across Lake Athabasca to the northwestern shore. Now ideally situated, Fort Chipewyan became the depot from which all Northwest Company trade along the Peace, Athabasca, Slave and other rivers of the Mackenzie basin destined to and from Montreal, was conducted.

While commercial fur trading was a decisive factor in distinguishing the settlement with bush living, missionary activities in the area influenced the physical growth of the community. Two geographic centres developed: the trading post area under Anglican influence on the east and the Roman Catholic Mission area to the west (Fort Chipewyan, Community Profile, 1996:a-12). In 1899-99, the Northwest Mounted Police opened its post and became the first government agency in the community (ibid.).

Between 1899 and 1945 a number of crucial events took place including the signing of the 1899 Treaty #8, the formation of the Province of Alberta in 1905 and the depression years of the 1930's. Treaty #8 cut across the social, ethnic and economic organization of the settlement.

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While the missionary activities had begun to formalize the distinctions between different groups, Treaty #8 legalized these distinctions particularly between native and non-native people, Treaty Indians vs. Non-treaty Indians and Indians vs. Metis (Fort Chipewyan, Community Profile, 1996:a20). By the beginning of the 20th century, the socio-economic structure of the Fort Chipewyan area was composed of four distinct groups: the non-natives, the Cree Indian Band (now the Mikisew Cree First Nation), Treaty Indians belonging to the Chipewyan Indian band (now the Athabasca Chipewyan First Nation) and the Metis. The same four groups who form the ethnic mosaic of present-day Fort Chipewyan. (ibid.)

During the 1930's because of the drought, the trapping economy had become unstable due to the fluctuations in number of muskrats and other furbearers. The bush communities and camps eventually died out. Trappers had no other choice than using the settlement as their base camp for hunting and trapping operations. (ibid.) Due to the inability of the traditional resource base to sustain them, wage employment in the commercial fishing and logging operations provided attractive alternatives (Fort Chipewyan, Community Profile, 1996:a-28).

Gradually, commercial fishing, forestry, oil sands mining operations and brushing and road building programs in the Park became an important source of semi-permanent employment for local residents while at the same time transforming Fort Chipewyan from a primarily fur trading centre into a service centre (Fort Chipewyan, Community Profile, 1996:a-32).

By the late 1960's Fort Chipewyan experienced a dramatic increase in its population and a denser concentration of homes in the eastern district where developing service infrastructure was concentrated: electricity in 1959-61, telephone (1962) and airstrip (1966) and first waterline and treatment plant (1968) (Fort Chipewyan, Community Profile, 1996:a-34).

For the past 25 years, Fort Chipewyan has continued to diversify slowly partly due to the lack of a sound alternative economic base, start-up dollars and the high cost of transportation. Although Fort Chipewyan's relative isolation can be seen as a major constraint to economic development. A number of initiatives particularly with the assistance of Syncrude (e.g. fly-in and fly-out employment program) has allowed a number residents of Fort Chipewyan to take advantage of

employment opportunities in the oil sands industry although it has meant relocation for many of these individuals. While commercial fishing continues each year, trapping has become a marginal activity. Today, the greatest assets that the community may possess are the eco-tourism potential of the area and the marketing of its natural resources (Fort Chipewyan, Community Profile, 1996:a-38).

#### **2.4.2 Economy**

Since the turn of the century, Fort Chipewyan's role as a major regional fur trading centre has been in gradual decline. Between the 1920's and 1960's government services were gradually replacing the fur industry as the main source of employment in the community. This trend has continued to the present leading Fort Chipewyan to become a government and service centre for the extreme northeastern part of Alberta.

Today, traditional activities such as fur trading, trapping, hunting and fishing are still pursued but have become marginal economic activities mainly used to supplement the income of individuals holding full-time jobs. Up to 30 individuals are involved in commercial fishing in the Spring while roughly one hundred individuals trap during the winter season. Traditional economic activities contribute close to half million dollars annually to the local economy (Fort Chipewyan, Community Profile, 1996:b-7).

Government services is the major industry in the community with 5 federal (Wood Buffalo National Park, Health and Welfare, RCMP, Indian and Northern Affairs, Coast Guard Canada) and 5 provincial (e.g. Alberta Forestry, Alberta Environmental Protection, Alberta Fish and Wildlife, Alberta Transportation) departments represented in the community. Fifty-eight permanent positions are generated by the government industry (Fort Chipewyan, Community Profile, 1996:b-4-6).

The largest participants and contributors to the local economy are the two First Nations. The Mikisew Cree First Nation has a combined net worth of over \$35 million, increasing at an average annual rate of 7 percent and employing 103 people of which 80 are staffed by locals and



78 are related to the oil industry. This translates into a \$5 million annual contribution to the local economy. The Athabasca Chipewyan First Nation employs approximately 20 people and contributes close to half a million dollars a year to the local economy (Fort Chipewyan, Community Profile, 1996:b-6-7).

Aside from government and First Nations businesses, there are over 30 community-based businesses, most of them are small ventures, seven are retail in nature while the rest are in the service industry. They employ approximately 100 people contributing annually between 3 and 3.5 million dollars annually (Fort Chipewyan, Community Profile, 1996:b-8).

While these various industries provide much needed employment opportunities for local residents, the unemployment rate remains high at 36 percent non-adjusted and 28 percent seasonally adjusted. There are currently 27 residents directly employed by Syncrude (Fort Chipewyan, Community Profile, 1996:c-5).

#### **2.4.3 Population**

The most recent census figure brings the total population of Fort Chipewyan to 1,589, a 6 percent increase from 1989. Sixty-four percent of the population are members of the Mikisew First Nation, 21 percent are Chipewyans, 9 percent are Metis and 6 percent are non-natives. Not included are the remaining 2,266 people who are members of the Miskisew and Chipewyans First Nations and make up 41 and 40 percent respectively of the total First Nations' population (Fort Chipewyan Community Profile, 1995:e2).

#### **2.4.4 Human Services**

##### **2.4.4.1 Education**

There are four educational institutions in the community: the Athabasca Delta Community School which provides K-1 to grade 12 education, the Keyano College (Fort Chipewyan Satellite Campus) with an average annual enrollment of 50 offers adult upgrading and courses leading to

general education diplomas and post secondary preparation, the Sahpohtawahk Training Centre, with a student enrollment of 90, is a provincially accredited centre offerings a wide range of education courses and programs based on the Josten Learning System and the Indian Education Authority Ltd., an agency responsible for administering a tuition agreement between the Miskisew Cree nation, the Athabasca Chipewyan First Nation, the Northland School Division #61 and the federal government. There are currently 145 adults pursuing some form of education, 93 at the Sahpohtawahk Training Centre and 52 at Keyano College (Fort Chipewyan, Community Profile, 1996:f-1-3).

#### **2.4.4.2 Medical and Health Services**

Health services are provided by two primary health facilities: the Isobel and Noel McKay Healing Centre and the Fort Chipewyan Nursing Station.

The Isobel and Noel McKay Healing Centre is a facility providing: public health, alcohol and drug counselling and programs, mental health treatment, health promotion and education, intervention services, dental services, environmental health services, optometric services, medical transportation, physiotherapy and traditional healing while the Fort Chipewyan Nursing Station provides treatment and emergency care, chronic disease and geriatric health and sexually transmitted disease and TB control. The health station is staffed by nurses and Community Health Representatives (CHR's). Starting in April 1996, one full-time physician is scheduled to relocate in the community (Fort Chipewyan, Community Profile, 1996:f-3-5).

#### **2.4.4.3 Social Service Programs**

A variety of programs are provided by the local Family and Community and Support Services (FCSS) office and the two First Nations (Fort Chipewyan, Community Profile, 1996:f-11).

Fort Chipewyan has also a comprehensive program of care and services for the elderly that include among others senior Citizen's home such as the Senior Light Island Housing, an organization that administers and maintains housing units for Metis residents of low income,

crisis counselling, advocacy and liaison services to access government services and benefits and permanent monthly annuity payment to elders to augment their old age pensions (Fort Chipewyan, Community Profile, 1996:f-7-8,11).

#### **2.4.4.4 Public Safety and Protection**

##### ***Policing***

The community is policed by an RCMP detachment of five officers (Fort Chipewyan, Community Profile, 1996:f-6).

##### ***Fire Protection***

The community maintains a well-trained and equipped volunteer fire department of over 20 fire fighters (Fort Chipewyan, Community Profile, 1996:f-1-3).

##### ***Ambulance***

A 24 hour ambulance service and emergency medical assistance is available in the community as well as an emergency medi-vac service providing 24 hour air service for critical medical emergencies (Fort Chipewyan, Community Profile, 1996:f-7).

#### **2.4.4.5 Housing**

Fort Chipewyan has a mix of single family housing consisting of small bungalows and mobile homes. In the last few years, several multi-family buildings have constructed. However, the community does not possess a formal housing entity (Regional Municipality of Wood Buffalo, 1995:69).

Sixty-four percent of residents live in single detached houses, 6.2 percent in duplexes, 4 percent in multi-family units, 0.7 percent in business suites, 24.3 percent in mobile homes and 0.3 percent in collective dwellings (Fort Chipewyan, Community Profile, 1996:e-3).

#### **2.4.4.6 Recreation**

The community has currently one community hall, a curling and skating rinks (Fort Chipewyan, Community Profile, 1996:g-2). Numerous individuals are also involved in hunting, fishing and trapping.

#### **2.4.5 Physical Infrastructure**

##### **2.4.5.1 Transportation**

The main road access is by a seasonal road that operates from approximately mid-December to mid-March. The road linking Fort Chipewyan to Fort McMurray is 285 km in length and takes usually 4 hours to complete. Fort Chipewyan can also be accessed from Fort Smith by a seasonal winter road. This route is approximately 228 km in length (Regional Municipality of Wood Buffalo, 1995:69-70).

There are no regular bus and rail service to the community although Diversified Busing Ltd. ran a bus service in Winter 95. The Regional Municipality of Wood Buffalo maintains an airport facility. Contact Air schedules regular flights from Fort McMurray to Fort Chipewyan (Regional Municipality of Wood Buffalo, 1995:70).

From late May to October, the community may be accessed by river from Fort McMurray as well as Fort Smith. The Athabasca River route between Fort McMurray and Fort Chipewyan is approximately an eight hour boat trip (Regional Municipality of Wood Buffalo, 1995:70).

##### **2.4.5.2 Utilities**

###### ***Water***

All of the community has running water with the exception of the Miskisew Cree First Nation Doghead Reserve. The community is served by a water treatment facility built in 1983 and upgraded in 1992. Water is distributed by several contractors that deliver water to outlying areas which may not have potable water (Regional Municipality of Wood Buffalo, 1995:70).

***Sewage***

The community has a municipal lagoon to which all of the community's waste is pumped (Regional Municipality of Wood Buffalo, 1995:71).

***Telephone, Electricity, Natural Gas***

All the community is served by Alberta Power through a modern power generation facility while AGT provides phone services and Fort Petroleum Corp. A Miskisew Cree First Nation owned company provides heating fuel and propane (Regional Municipality of Wood Buffalo, 1995:70).

***Waste Management***

Refuse removal services are provided twice a week. Contractors haul the garbage to the community newly upgraded landfill (Regional Municipality of Wood Buffalo, 1995:71).

**2.4.6 Quality of Life Indicators**

Present-day Fort Chipewyan is the result of a long and eventful series of historical developments which began over 300 years ago. Its relative isolation, ethnic make-up and until now lack of a viable economic base presents strong challenges to its residents. One of the by-products of becoming a government service centre is the high level of human services found in the community and the large number of social organizations (e.g. brownies, boxing club, youth society, senior men's hockey, Delta Senior Sunrise Society, Anglican Women's League) catering to the residents of the community particularly for the senior's population and individuals wanting to upgrade their formal education.

Although Fort Chipewyan is continuing to provide new economic opportunities for its residents through the various First Nations' initiatives, the community still has a very high unemployment rate (up to 20 percentage point higher than the provincial average). Continuing efforts in skills upgrading, educational achievement and access to capital will be crucial if Fort Chipewyan's First nations and Metis residents are to take advantage of new economic opportunities particularly in the oil sands industry.

The relative isolation of the community, which was perceived as a major barrier to development in the past and to some extent today, has starting to be seen as an opportunity particularly with individuals and organizations interesting in tapping into the growing eco-tourism industry, an industry requiring a pristine environment as a major asset.

## **2.5 The Community of Anzac**

### **2.5.1 Historical Setting**

The community of Anzac is located 45 km southeast of Fort McMurray, about 15 km off Highway #63. Anzac received its unique name in 1916 when the railroad came through the area. The men working on the railroad named all the villages up and down the line, hence the change from Willow Lake to Anzac (i.e., Australia New Zealand Army Corps) (Alberta Native Affairs, 1990:3).

Near Anzac was located the Fort McMurray First Nation. The Fort McMurray First Nation, the main community in the area has four reserves, three of which are in the area of Anzac: reserves 176, 176A and 176B. The Fort McMurray First Nation is made up of descendants of the Cree and Chipewyans Nations who separated from the Fort McKay Band in 1942. Band members reside on Reserves 176 and 176A on the shore of Gregoire Lake (Northern Alberta Development Council, ?:173).

The Crees and Chipewyans lived in the Anzac area long before the community was selected by the Department of National Defense as site for its Distant Early Warning (D.E.W.) system in the early 1950's. In addition to its original native inhabitants, after the abandonment of the D.E.W. radar site in 1962, some of the non-native residents associated with the Defense facility remained in the community and now are an integral part of Anzac's population (Alberta Native Affairs, 1990:3).

### **2.5.2 Economy**

The economic base of Anzac is directly related to its close proximity to Fort McMurray and the oil sands plants. Mining, government, education, health and social professions are the most dominant occupations. The main source of employment opportunities are with First Nation administration and companies (Alberta Native Affairs, 1990:3).

Temporary employment is also found with the forest industry firefighting, reforestation and slashing. Some of the residents are involved in traditional occupations such as hunting, fishing and trapping. Tourism on the lake and beach access to Gregoire Lake can also generate revenue for the community although the (Ibid.).

Seventy-eight percent of the labour force is currently employed full-time or part-time while only 8.5 percent are unemployed, a much lower rate than most small communities located in the Regional Municipality of Wood Buffalo. The remaining of the workforce (13.5%) include homemakers and individuals unable to work (Welcome to Anzac and Willow Lake Area).

### **2.5.3 Population**

The current population of Anzac is approximately 350, an increase of 31 percent since 1990. The under 19 population comprises 19 percent of the total population. (Ibid.)

### **2.5.4 Human Services**

#### **2.5.4.1 Education**

The Northland School Division operates an elementary school in Anzac from grade one to grade six. Students are bussed to Fort McMurray to continue their education (Regional Municipality of Wood Buffalo, 1995:63).

#### **2.5.4.2 Medical and Health Services**

The nearest hospital and medical clinic are in Fort McMurray. Health nurses from Fort McMurray make home visits, newborn visits, immunization, school visits, and senior citizen visits. There is a drop-in health clinic office situated in the community hall and can be accessed when nurses are within in the community. (Ibid.) Health services on reserve are provided by Health and Welfare Canada. (Northern Alberta Development Council, ?;173)



#### **2.5.4.3 Social Service Programs**

The Fort McMurray's Family and Community Support Services provides a variety of social services to the community of Anzac including homemaker services, youth program, "hot soup" program, transportation for seniors, community events planning, Christmas hampers for those who need them, child car seat loans and E.C.S. program. The Mark Amy Centre for healing Addictions provides alcohol/drug treatment on the reserve (City of Fort McMurray F.C.S.S. Brochure).

#### **2.5.4.4 Public Safety and Protection**

The RCMP detachment in Fort McMurray provides police services. A volunteer fire department is maintained to provide constant fire protection services to Anzac and Gregoire Lake Estates. A fire hall and necessary fire protection equipment is in place. The Fort McMurray Fire Department provides ambulance services for the community (Regional Municipality, 1995:62).

#### **2.5.5 Physical Infrastructure**

##### **2.5.5.1 Housing**

Land is mostly privately controlled either through simple ownership through a "lease to own" system. Commercial land is limited. At present there are 16 commercial lots that are privately owned or being leased. There is one large industrial lot that is being used for auto wrecking purposes (Welcome to Anzac and Willow Lake Area).

There are 106 residential structures in Anzac. Just under 59 percent are single detached units, 35 percent are mobiles, 2.8 percent single non-residential and 1.8 percent respectively are seasonal and multi-family units. The current occupancy rate is at 96 percent. Two new dwellings are being constructed. There is also one senior's lodge maintained in the community (Ibid.).

### **2.5.5.2 Recreation**

Due to its adjacency to Gregoire Lake, the community of Anzac offers a wide range of recreational activities. Aside from the water-based recreational activities (fishing, boating, canoeing, swimming) associated with Gregoire lake, Anzac has also established the Anzac Recreation & Social Society, a non-profit volunteer run organization maintaining a skating rink, ball diamonds, playgrounds and community hall. Other recreational facilities include Camp Yogi, a 7 acre recreation area located on the east end of Willow Lake (Ibid.).

### **2.5.5.3 Transportation**

The main access to the community is via Secondary Highway #881, a fully paved road way connected to Highway #63 (Regional Municipality of Wood Buffalo, 1995:2).

Bus service is provided by Diversified Transportation between Anzac and Fort McMurray twice weekly. Anzac is serviced by one local taxi (Ibid.).

### **2.5.5.4 Utilities**

Anzac and Gregoire Lake Estates are serviced by a municipal water treatment plant. The water is hauled by a contractor twice weekly. The community does not have sewer lines at this time, a municipal lagoon is currently used to dump municipal waste (Ibid.).

Electric power (Alberta Power Ltd.), natural gas (Northwestern Utilities Ltd.) and telephone (AGT) are available in the community. Garbage is picked up once a week in Anzac (Ibid.).

### **2.5.6 Quality of Life Indicators**

Anzac is not plagued by the same level of economic and social disruptions that other small Native communities located in the Regional Municipality of Wood Buffalo are faced with. Its relative proximity to Fort McMurray has allowed its residents to take advantage of economic opportunities more difficult to access by remote communities such as Fort Chipewyan or Janvier.

The location of Anzac, near the popular Gregoire lake Provincial Park, also provides the community with a range of recreational amenities difficult to find in other parts of the Municipality. Recent community initiatives indicate a high level of community participation in a variety of social and recreational events. The recently built community hall (1991) is a sign of continuing improvement in the quality of life of Anzac's residents.

## **2.6 The Community of Janvier**

### **2.6.1 Historical Setting**

Janvier is located 100 km. south of Fort McMurray within the Regional Municipality of Wood Buffalo. The community is an Indian and Metis community that is adjacent to the southern boundary of the Janvier Indian Reserve #194.

Pierre Louison and Paul Janvier were members of the Fort Chipewyan Band who travelled and hunted over western Saskatchewan and Eastern Alberta. They eventually established their base camp at Bohn Lake. It took 23 years after the signing of Treaty #8 for this group of indigenous people to have some land surveyed for the purpose of creating a reserve. In 1922, the Janvier Reserve, locally known as Chipewyan Prairie was surveyed in the vicinity of Bohn and Cowpar Lakes (Alberta Native Affairs, 1990:119).

### **2.6.2 Economy**

Traditional occupations of community members have included trapping, fishing and hunting. These activities still contribute to the livelihood of some of the community residents, although the significance of these activities have diminished in recent years. Seasonal work within the oil and gas industry has historically provided additional employment, and some residents have commuted to Fort McMurray and elsewhere for employment. A local sawmill has operated non-continuously in the past and has provided both employment and skill development (management and technical), however the sawmill is not operating currently. The major employers within the community today are the Band Administration and government agencies through social programs. The primary source of income for residents the community remains government assistance and support payments (Johannesson, 1995:1).

A few community-based businesses also exist in the community including one motel/hotel, a Laundromat and two stores (Alberta Native Affairs, ? :120).

### **2.6.3 Population**

The population of the community was approximately 461 people in 1994, primarily treaty and non-status Indians. Since 1986, the population has increased by 46 percent. As of 1991, about 70% of members of the Janvier Band lived off reserve (NADC, ?:179).

### **2.6.4 Human Services**

#### **2.6.4.1 Education**

The Northland School Division operates an elementary school in Janvier for students from grade 1 to 8. Students are bussed to Fort McMurray to continue their education after grade 8 (Regional Municipality of Wood Buffalo, 1995:83).

#### **2.6.4.2 Medical and Health Services**

All health care services must be accessed in Fort McMurray or Lac La Biche except for two resident community health representatives on the reserve of Janvier. The Regional Health Authority provides trained personnel to visit the community including weekly visits by doctors and six visits a year by dentists (Ibid.).

#### **2.6.4.3 Public Safety and Protection**

##### ***Policing***

Policing protection is provided by the rural division of the RCMP Fort McMurray Detachment (Ibid.).

##### ***Fire Protection***

A fire hall is maintained in Chard with one pumper and a volunteer fire fighting force (Ibid.).

***Ambulance***

Air ambulance service is available from the Fort McMurray Fire Department. Air ambulance service is also available from Fort McMurray (Ibid.).

**2.6.5 Physical Infrastructure****2.6.5.1 Housing**

Almost half of the population has resided in the community for ten or more years. Over 73 percent of the available housing were owner-occupied and only 6 percent were vacant at the time of the 1990 municipal census. There are 45 units on the Janvier Reserve (NADC, ? :179).

**2.6.5.2 Recreation**

Recreation facilities include a community hall, two sports fields, a gymnasium off-reserve, three ball diamonds, a pool hall and an outdoor lighted rink (Ibid.).

**2.6.5.3 Transportation**

There is no all-weather road to Janvier. The main access to the community is Secondary Highway 881. Within the community, there is an all-weather road connecting it to Chard and the Canadian Railway site (Regional Municipality of Wood Buffalo, 1995:82).

There is railway connection to Janvier however the Canadian National Railway from Lac La Biche to Fort McMurray stops in Chard, 6 km from the community primarily for freight although passenger services are offered on a limited basis (Alberta Native Affairs, 1990:119).

Janvier has a grass airstrip, there is another airstrip 1.22 km long located 12 km north of the community and used to a much greater extent (Regional Municipality of Wood Buffalo, 1995:82).

Diversified Transportation provides twice weekly bussing service between Fort McMurray and Janvier (Ibid.).

#### **2.6.5.4 Utilities**

##### *Water*

The Regional Municipality of Wood Buffalo provides potable water from a water treatment plant (Regional Municipality of Wood Buffalo, 1995:83).

##### *Sewage*

Sewage disposal is provided on an individual basis through separate privies or septic tanks system. The community is not served by a municipal sewage system (Ibid.).

##### *Telephone, Electricity, Natural Gas*

Electrical Power is provided by TransAlta Utilities. Telephone is provided by AGT. Residents rely on propane for their gas needs (Ibid.).

##### *Waste Management*

Waste management in the community is problematic. The local landfill was closed in the 1980's due to environmental contamination problems and garbage is currently transferred from a central collection point to Fort McMurray by the Regional Municipality of Wood Buffalo. (Ibid.).

#### **2.6.6 Quality of Life Indicators**

The lack of economic development opportunities and social problems have plagued the community of Janvier for many years. As a result, the community is facing today some serious social issues including high unemployment, alcohol and drug abuse and family violence. The absence of quality housing and basic municipal services are also an ongoing issue within the community. Although, this particular concern is beginning to be addressed through the development of a social housing program within the community. The Chipewyan Prairie Community Services Committee is organizing the construction of two units per year, beginning

in 1996 (Johannesson, 1995:2). Bill C31 has also caused some internal strain, since a number of people within the community have regained Indian Status but have had some difficulty in integrating into the community at large (ibid).



## **2.7 The Community of Conklin**

### **2.7.1 Historical Setting**

The community of Conklin is located 140 km southeast of Fort McMurray and 128 km north of Lac La Biche. It is located at the confluence of the Jackfish River and Christina Lake. The community was named after John Conklin who was a time keeper for J.P. MacArthur, a railway contractor. It was a formerly a village on the Alberta and Grand Trunk Waterways Railway line (Alberta Native Affairs, 1990:17).

### **2.7.2 Economy**

Most employment in the community are with the village's administration and through government-sponsored job-creation projects. Temporary employment in the forest, oil and gas industries and fire fighting are made available to community residents on a seasonal basis. Since the establishment of a year round road, tourism (i.e. Christina Lake Lodge) is becoming a more important economic sector while Conklin has become a base area for oil and gas developments (i.e., pipelines, well installation and maintenance). Most of the jobs are held, however, by outside residents thus the high unemployment rate of 60 percent for Anzac residents (Ibid. and Regional Municipality of Wood Buffalo, 1995:66).

### **2.7.3 Population**

The current population is approximately 185 people with the majority of the population is under the age of 15 (Regional Municipality of Wood Buffalo, 1995:65).

### **2.7.4 Human Services**

#### **2.7.4.1 Education**

The Northland School Division operates an elementary school in Conklin. It provides education from kindergarten to grade 8. Students who want to pursue their education past grade 9 have to

move to Fort McMurray to continue their education. (Regional Municipality of Wood Buffalo, 1995:67)

#### **2.7.4.2 Medical and Health Services**

Virtually all health services must be accessed in Fort McMurray or Lac la Biche. The Northern Lights Regional Authority sends trained personnel (public health nurse) once a week to the community. (Regional Municipality of Wood Buffalo, 1995:68)

#### **2.7.4.3 Public Safety and Protection**

##### ***Policing***

Conklin is served by the RCMP Detachment in Fort McMurray (Regional Municipality of Wood Buffalo, 1995:67).

##### ***Fire Protection***

A volunteer-based fire department is maintained to provide basic fire protection (Ibid.).

##### ***Ambulance***

The Fort McMurray Fire Department provided ambulance services to the community. (Ibid.)

#### **2.7.4.4 Housing**

There are 47 units in the community of which 93 percent are single detached while the rest are mobile homes. There are three commercial development in the area: one that includes a gas bar, post office, store, bunkhouses and related facilities catering mainly to the oil and gas industry. The second development is the Christina Lake Recreation Resort and the third is the Conklin Corner, situated at Junction Highway #881 which includes Karen's Camp, Cafe and Lounge (Regional Municipality of Wood Buffalo, 1995:66).

#### **2.7.4.5 Recreation**

Facilities in the community include a baseball diamond, playground and skating rink. Adjacent to the community are the Christina Lake Recreation Park with its 100 camping sites and the Winefred Lake, two popular recreational areas (Alberta Native Affairs, 1990:17).

#### **2.7.4.6 Transportation**

The main access to the community is via Secondary Highway #881, an unpaved, all-weather roadway from Anzac. Diversified Transportation provides twice weekly bussing services to Fort McMurray. A grass airstrip exist within the community however the Leismer Airstrip located 12 km of Conklin is used more frequently. (Regional Municipality of Wood Buffalo, 1995:66)

#### **2.7.4.7 Utilities**

##### ***Water***

A water treatment plant provides potable water for delivery within Conklin (Regional Municipality of Wood Buffalo, 1995:67).

##### ***Sewage***

Individual privies, septic tank pumpouts or field systems are used to dispose of sewage (Ibid.).

##### ***Telephone, Electricity, Natural Gas***

TransAlta Utilities, Northwestern Utilities, AGT provide electrical power, natural gas and telephone services respectively (Ibid.).

##### ***Waste Management***

A weekly pick-up is provided by the Regional Municipality of Wood Buffalo. A modified landfill operates adjacent to the community (Ibid.).

### **2.7.5 Quality of Life Indicators**

The region around Conklin is resource-based, dependent upon natural gas exploration and production and logging for the pulp and paper industry. However, residents of the community have had few opportunities to gain full-time employment in these industries. Temporary employment is usually the only option available. The lack of skills and education are the primary barriers to gaining full-time employment in the resource industry. As a result, the unemployment rate is running as high as 60 percent in the community while the high school drop out rate is over 30 percent. Other areas of concerns include the lack of investment in the community, lack of training for local workers by resource industries, and an average annual income of less than \$10,000 (Terry Langis Associates, 1994:5). There are, however, signs that the community is attempting to improve the social and economic conditions of its residents. A recent community initiative named "Partners For A Better Conklin" has established an action plan which calls for the identification and development of economic opportunities for its residents. The project is in its infancy and tangible results are yet to be determined.

## **2.8 The Community of Sapræ Creek**

### **2.8.1 Historical Setting**

Sapræ Creek is a small country residential community located approximately 25 km southeast of Fort McMurray. It was established in 1987. It is situated at the crest of the Clearwater River Valley.

### **2.8.2 Economy**

The community has no specific economic base. The majority of its residents are employed by the oil and gas industry while another significant segment is employed in government services (Regional Municipality of Wood Buffalo, 1995:85).

### **2.8.3 Human Services**

#### **2.8.3.1 Education**

The Northland School Division busses students to schools in Fort McMurray for their education.

#### **2.8.3.2 Medical and Health Services**

All health care services must be accessed in Fort McMurray.

#### **2.8.3.3 Public Safety and Protection**

##### ***Fire***

The community has an eighteen member volunteer fire department. The members are managed by the Regional Municipality Fire Chief based in Fort McMurray and are trained to deal with both structural and forest or brush fires. The community is connected to the Fort McMurray's 911 emergency dispatch number. The community has a new combined community/fire hall, new fire truck and a water truck worth \$165,000 and \$60,000 respectively.

***Policing***

The RCMP Detachment in Fort McMurray, specifically the rural services group provides police protection.

***Ambulance***

Ambulance service is available to the community through the Fort McMurray Fire Department. As with fire fighting services, ambulance services can be accessed through the 911 emergency dispatch number.

**2.8.3.4 Physical Infrastructure*****Housing***

Housing in this community ranges from mobile homes to estate houses. There are 208 lots available in Saprae Creek. Of these, 168, are privately held and 40 are currently vacant. Most lots vary in size from 2 to 5 acres.

***Recreation***

There is one community hall in Saprae Creek.

***Transportation*****Highway**

The main access to the community is by Highway 69 southeast of Highway 63. It is a paved all-weather roadway. The roadways in Saprae Creek are graveled.

**Rail**

There is no rail service in Saprae Creek.

**Air**

The nearest airport is the Fort McMurray Airport located a short distance from the community.

### *Utilities*

#### Water

Potable water is piped to the community by a pipe system that is connected to the Fort McMurray water system.

#### Sewage

There is no piped sewage system in Sapræ Creek. Individual homes have their own septic tanks. The Regional Municipality of Wood Buffalo is considering building a piped sewage system for the community.

#### Other Utilities

The phone system is handled by AGT. Alberta Power provides electricity while Northwest Utilities provide natural gas. The Regional Municipality of Wood Buffalo picks up garbage on a weekly basis which is trucked to the Fort McMurray landfill. The same radio (AM and FM) and television stations available in Fort McMurray are available in Sapræ Creek. Shaw Communications provides the TV services which includes up to 35 channels.

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# FIGURES

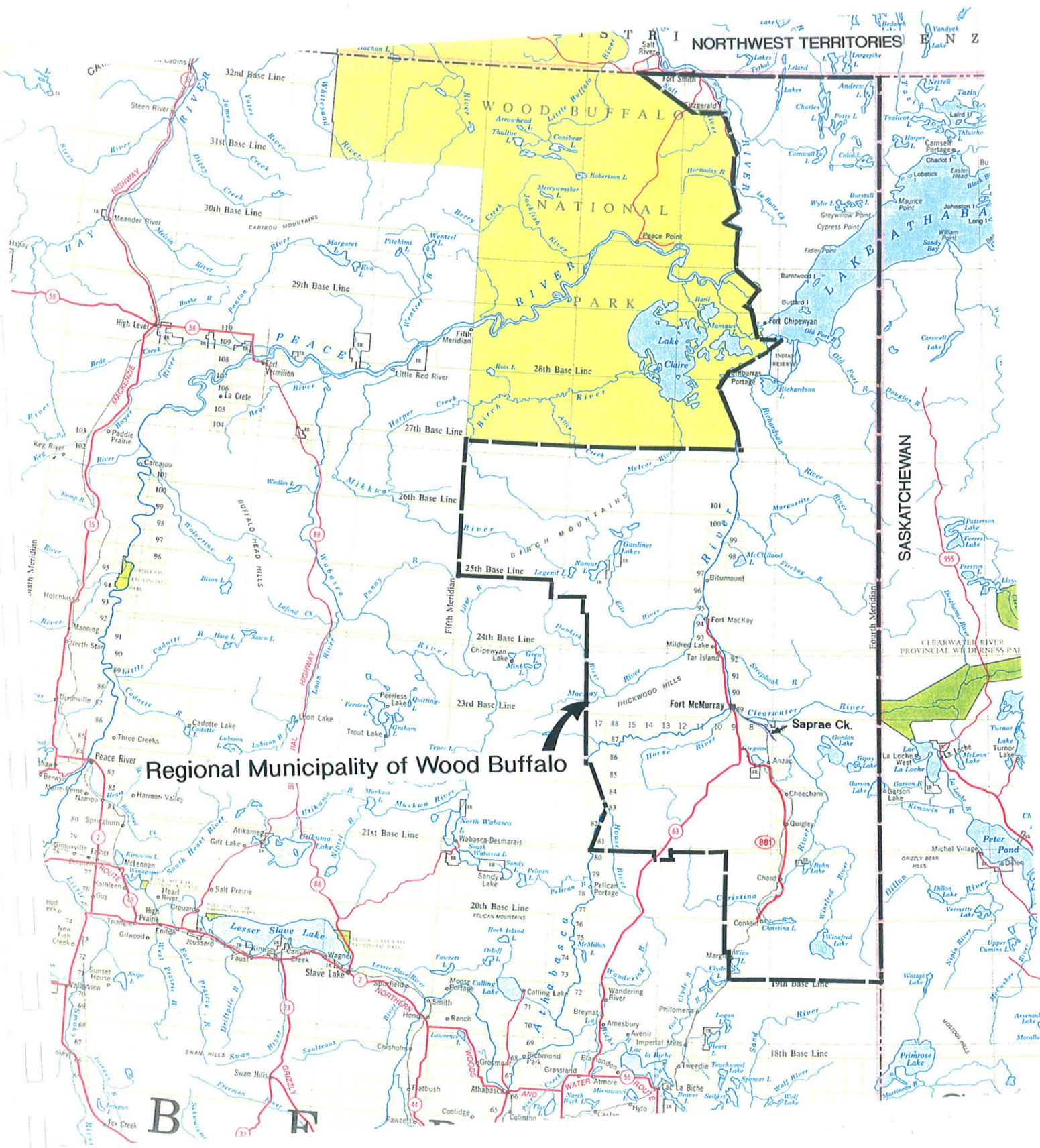
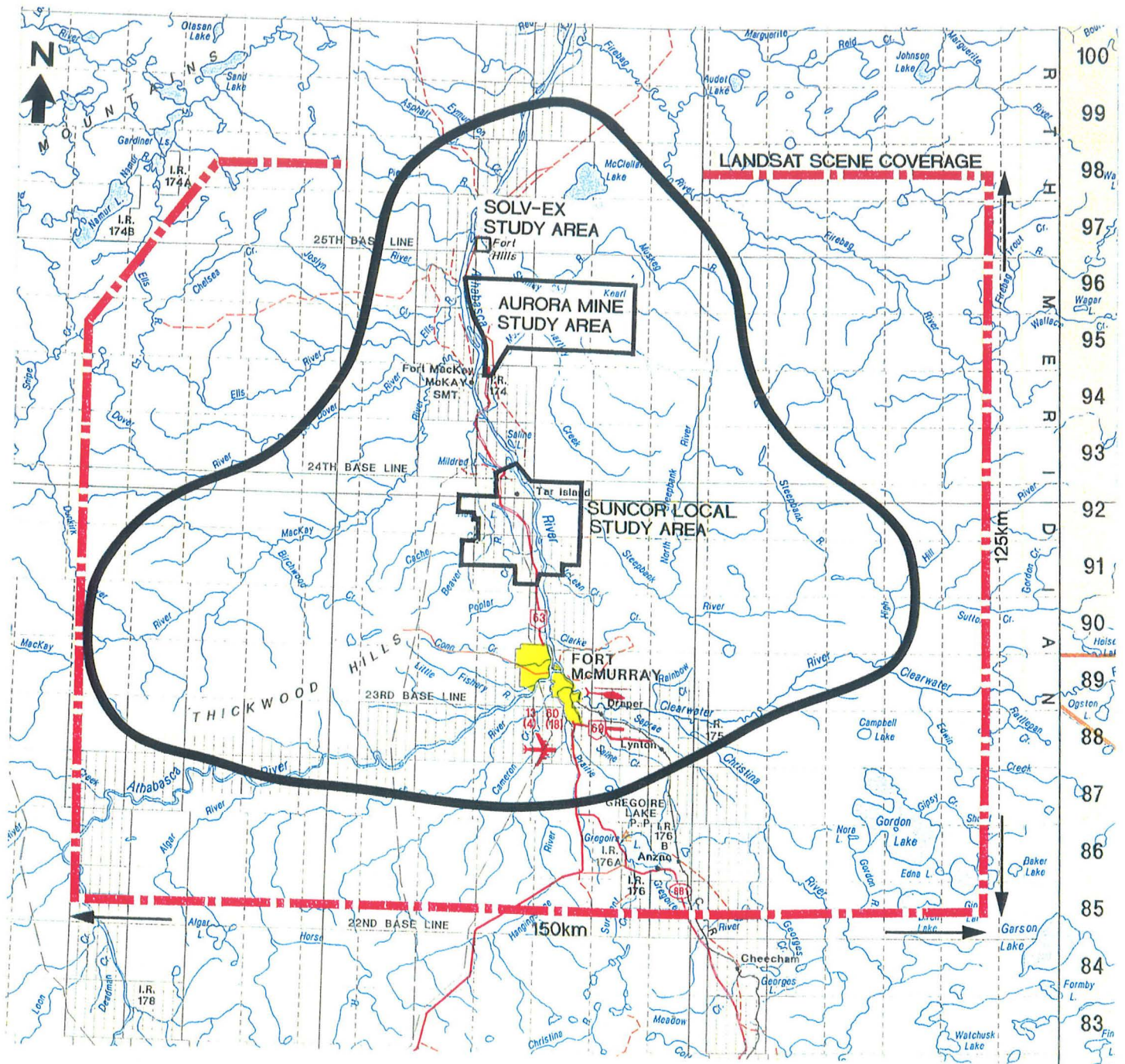


Figure 1 Location and Regional Context



Figure 2  
SUNCOR REGIONAL AND APPROXIMATE  
LOCAL STUDY AREA



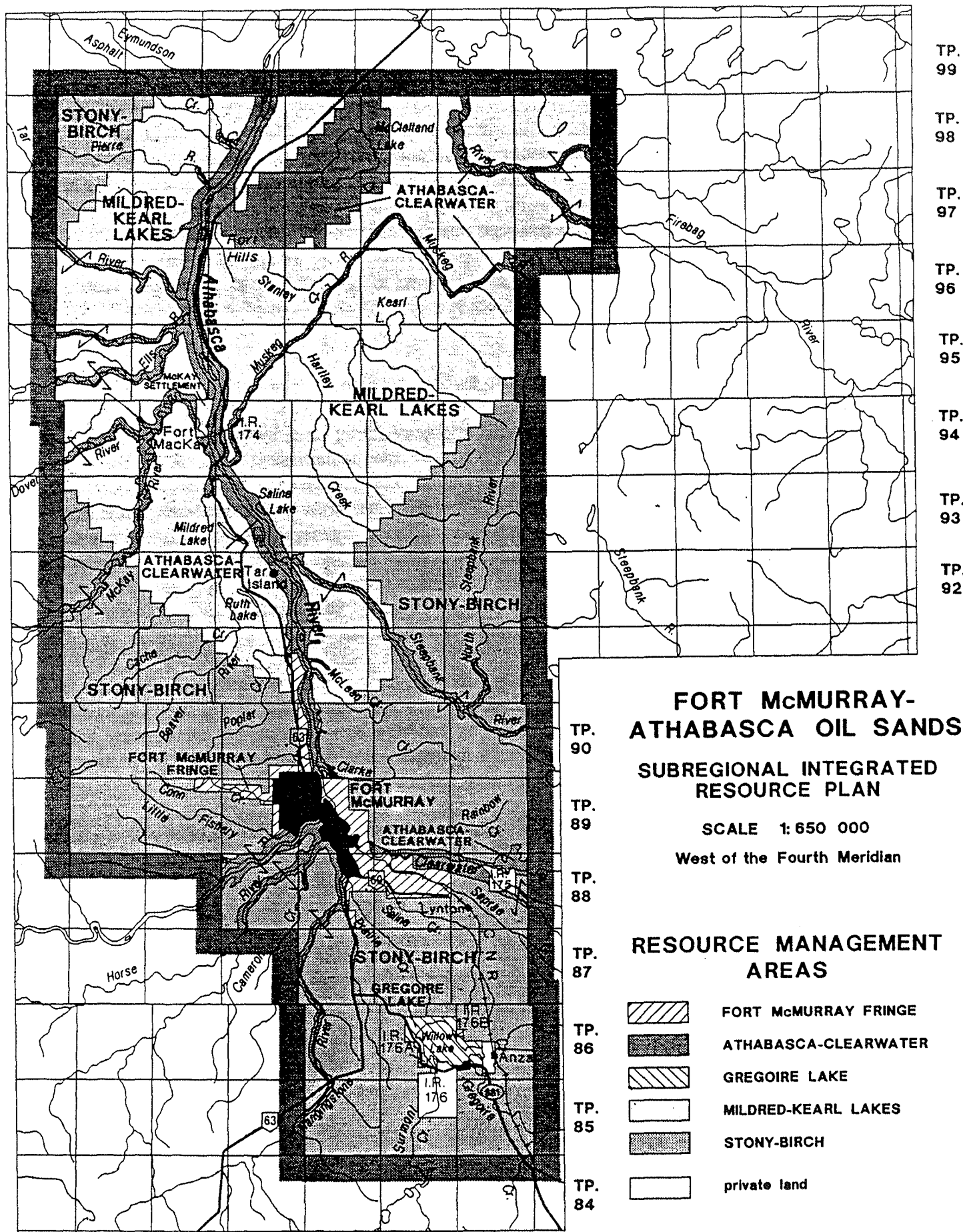


Figure 3 Resource Management Areas



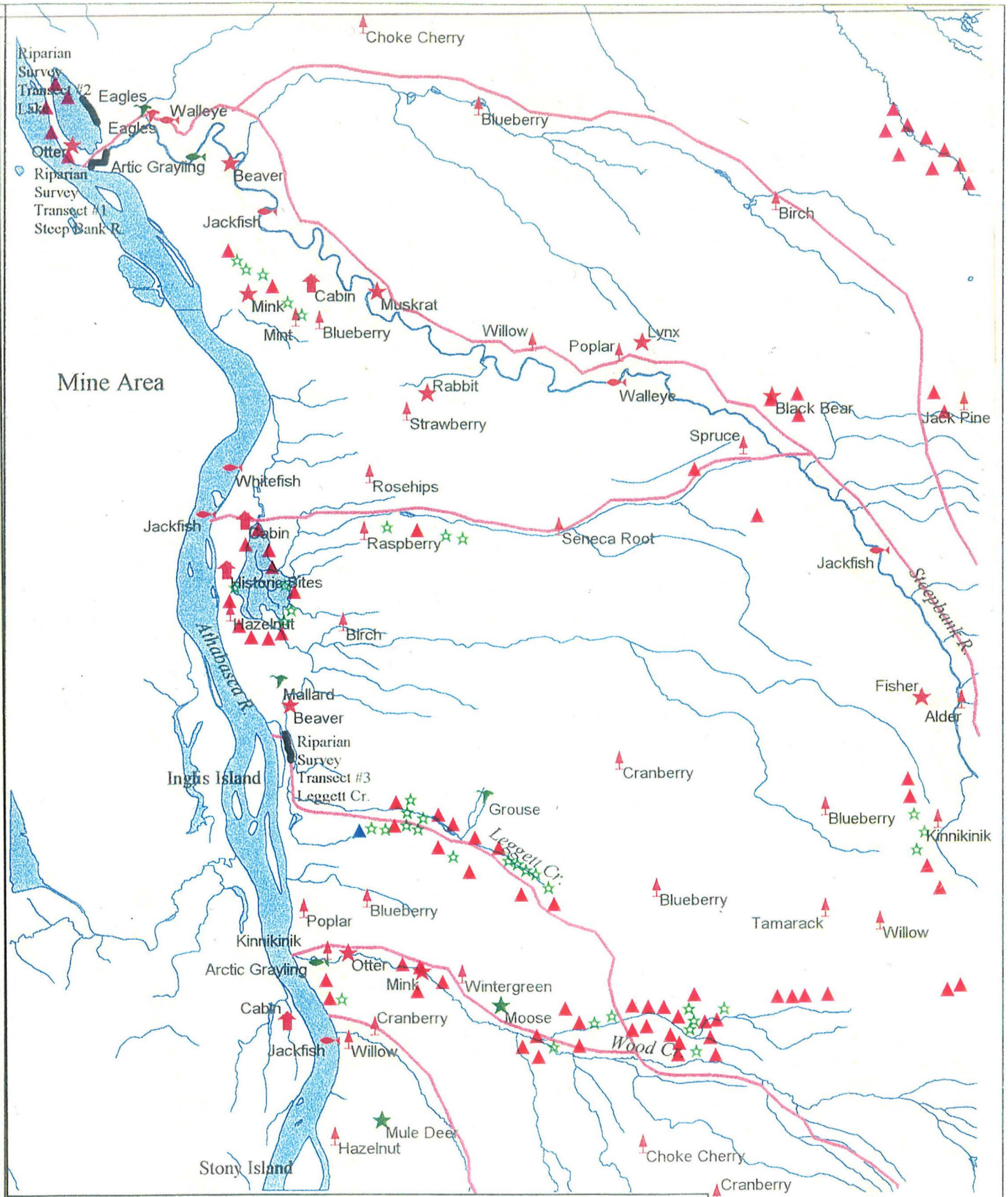


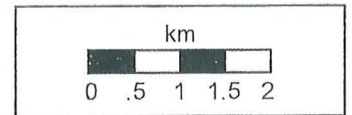
Figure 4

# SUNCOR Inc. Traditional Knowledge Survey

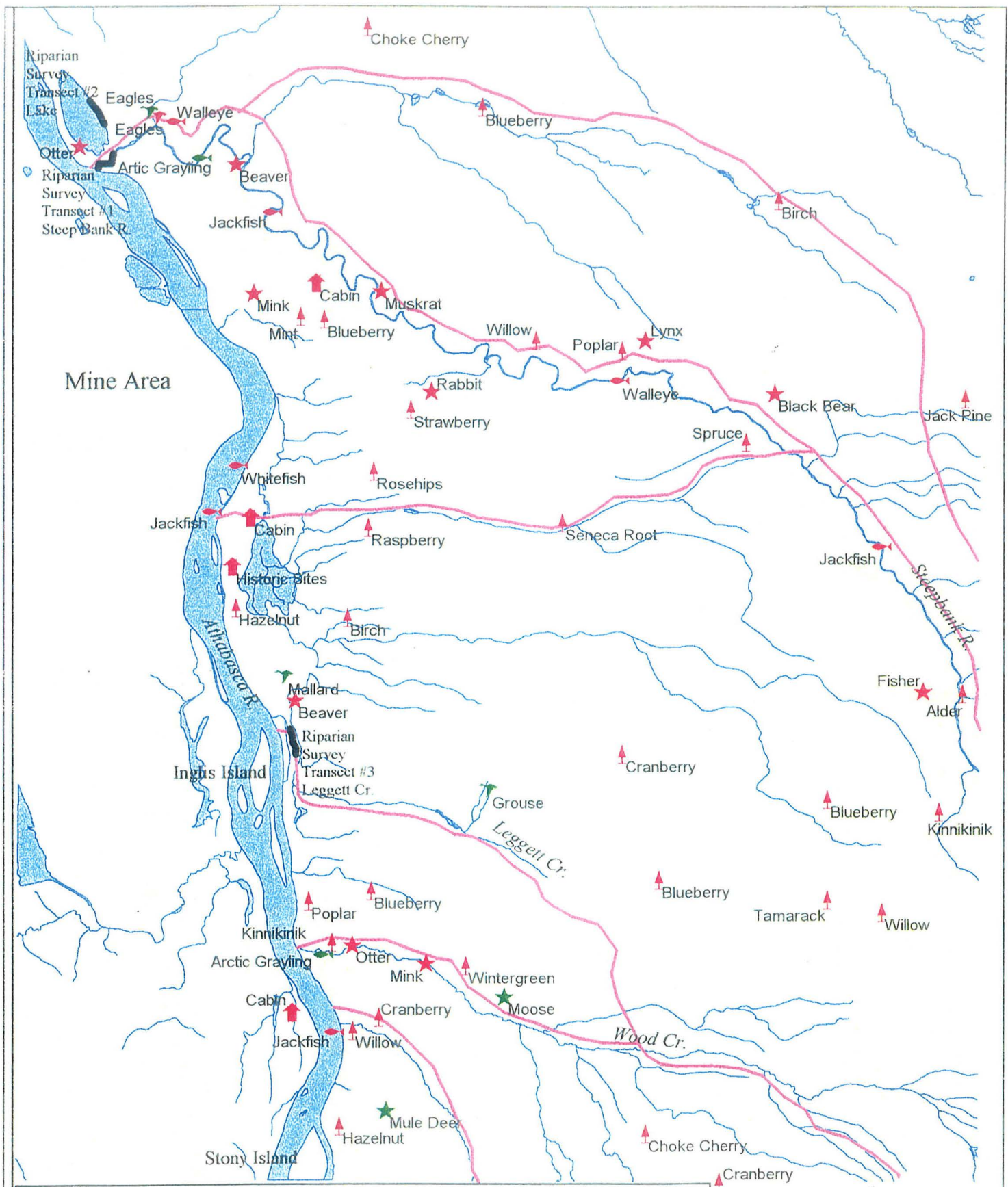
- Contours
- Hydrography
- Traditional Trails
- Transects

- Traditional Bird
- Current Birds
- Traditional Vegetation
- Traditional Human

- Traditional Mammals
- Current Mammals
- Traditional Fish
- Current Fish



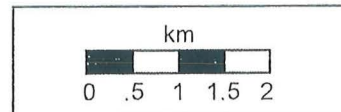




**Figure 4**

**SUNCOR Inc. Traditional Knowledge Survey**

- |                    |                        |                     |
|--------------------|------------------------|---------------------|
| Contours           | Traditional Bird       | Traditional Mammals |
| Hydrography        | Current Birds          | Current Mammals     |
| Traditional Trails | Traditional Vegetation | Traditional Fish    |
| Transects          | Traditional Human      | Current Fish        |





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