



Summary of the
**Socio-Economic Baseline
of the Ka'a'gee Tu
Candidate Protected
Area**

AMEC Earth & Environmental
April 2011



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Introduction

Ka'a'gee Tu is an area of about 9,600 square kilometres in the South Slave Region of the Northwest Territories. It is located southwest of the Mackenzie River and surrounds the community of Kakisa.

Ka'a'gee Tu is used for:

- Food
- Fuel
- Recreation
- Trapping
- Tourism
- Wildlife habitat

The Ka'a'gee Tu area also includes special sites that are part of the culture of the Dehcho people:

- old settlements
- burial sites
- camps and cabins
- trails

Residents of Kakisa, the Deh Gah Got'ie, Kat'odeeche and Dehcho First Nations want to protect the cultural heritage and ecosystems in Ka'a'gee Tu. In 2009 the Canadian Wildlife Service agreed to sponsor the Ka'a'gee Tu area as a National Wildlife Area. Ka'a'gee Tu is now a Candidate Protected Area being considered under the Protected Areas Strategy for the Northwest Territories.

A working group is evaluating the biological and mineral resources in the area. They will use this information to suggest which parts of Ka'a'gee Tu should be forever protected as a National Wildlife Area. Members of the working group include:

- Canadian Wildlife Service
- Community Members
- Government of Canada
- Government of the Northwest Territories
- World Wildlife Fund
- Ducks Unlimited Canada
- Northwest Territories Chamber of Mines
- Regional Aboriginal Organizations

The information in this report was shared with the working group at its meetings in Kakisa on March 9 and 10, 2011. The working group provided feedback on the information. In most cases, they agreed that the information accurately describes Kakisa and the surrounding communities.

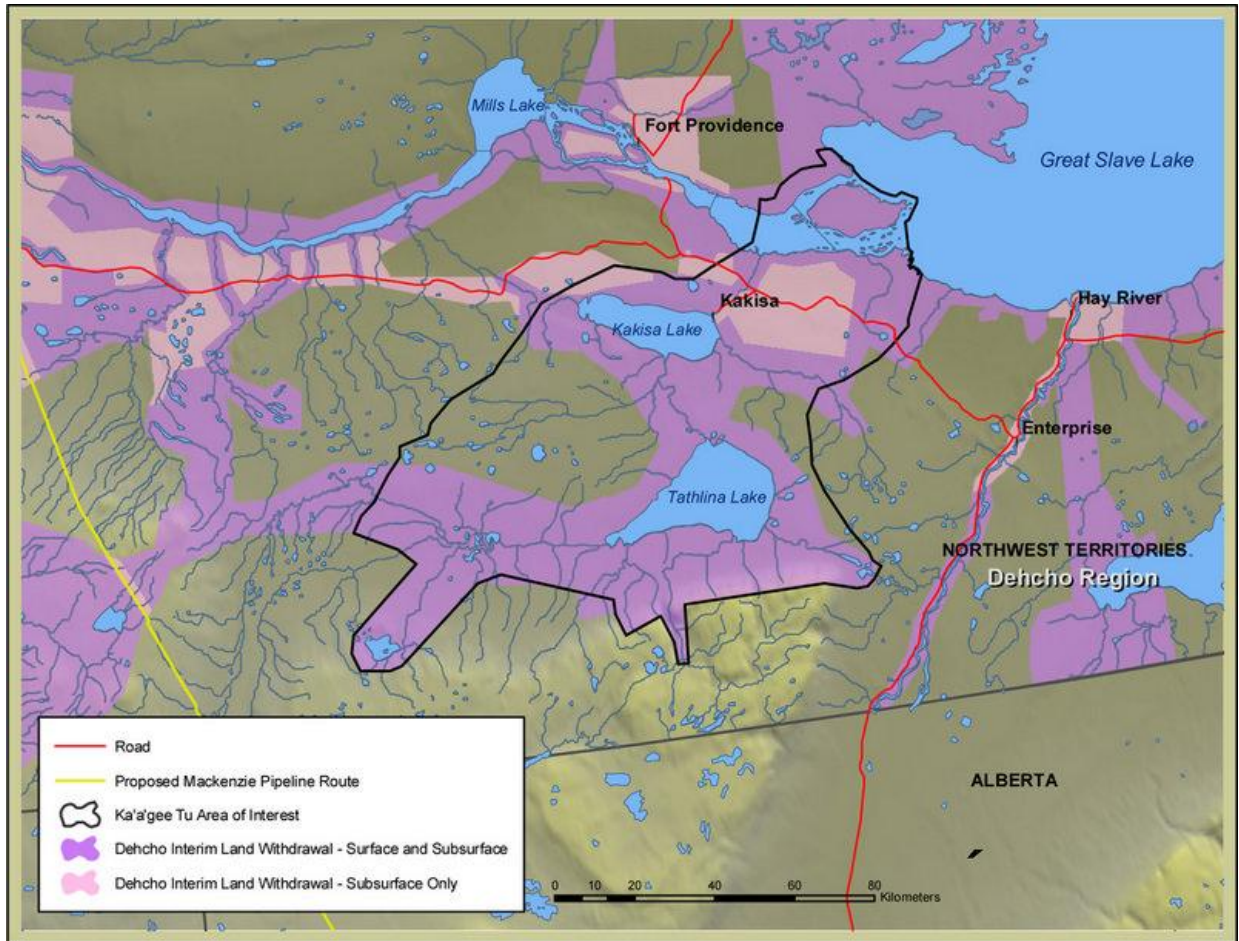
For more information about the NWT Protected Areas Strategy and the process for creating a protected area, please visit:

www.nwtpas.ca

For more information about the proposed Ka'a'gee Tu Candidate Protected Area, please visit:

<http://www.nwtpas.ca/area-kaageetu.asp>

Proposed Ka'a'gee Tu Candidate Protected Area



Source: NWT PAS (no date)

One of the steps in creating a protected area is to calculate the resources and values in the area. This includes the biological / ecological, cultural and non-renewable resources and values. It is also important to know what socio-economic effects could occur if a protected area is created. This report summarizes the highlights of Volume 1 of the socio-economic study, which addresses:

- A description of current social and economic characteristics of the five communities included in the study (Kakisa, Fort Providence, Enterprise, Hay River and Hay River Reserve)
- The current economic value of the Ka'a'gee Tu area

Volume 2 of the socio-economic study will examine the economic and social effects of different boundary options for a protected area.

References and data sources used are included at the end of this report.

The Region, Its People and the Economy

There are five communities in and around Ka'a'gee Tu:

- Kakisa
- Enterprise
- Fort Providence
- Hay River
- Hay River Reserve

These communities are interested in and could be affected by decisions about the Ka'a'gee Tu area.

This section looks at the social and economic conditions in the five communities that were considered in this study. It includes information about:

- The people
- The economy
- Income and cost of living
- Housing
- Community infrastructure and services
- Traditional land and resource use



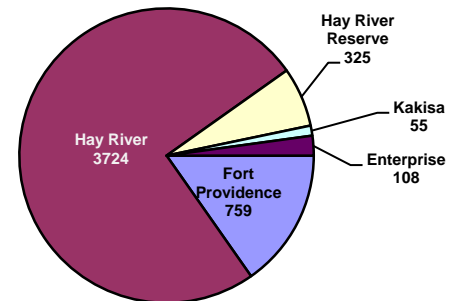
The People

In 2009, there were about 4,971 people living in the five communities.

Between 1991 and 2009, the population in the region grew by about 18%. The communities that grew the most were Enterprise, Hay River Reserve and Kakisa. The communities are not likely to grow noticeably over the next 15 years.

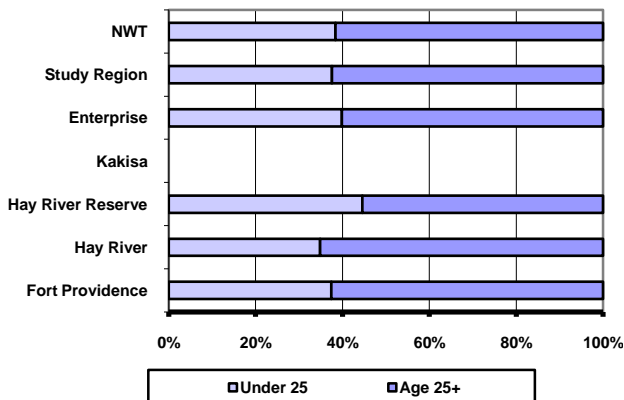
The population in the study region communities was higher than the NWT age profile in the 44+ age group and smaller in the 25 to 44 age group. This suggests that the study region population tends to be older than the NWT population on average.

Population by Community



Source: GNWT Bureau of Statistics, 2010a

Population by Age



Source: GNWT Bureau of Statistics, 2010a

There were more males than females living in the study area communities. On average, the regional gender balance is similar to the NWT population as a whole. But, Enterprise and Hay River have more female residents than male residents.

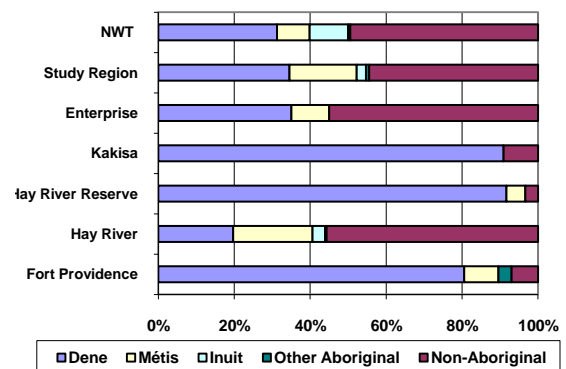
The percentage of Aboriginal people living in the study area communities was nearly the same as the NWT as a whole. Kakisa, Hay River Reserve and Fort Providence had the highest percentages of Aboriginal people.

There are three First Nations communities in the region that are affiliated with the Deh Cho Tribal Council:

- Deh Gah Gotie Dene Council
- K'atlodeeche First Nation
- Ka'a'gee Tu First Nation

About one third (30.9%) of the population in the study area can speak an Aboriginal language. This is less than the NWT average of 44%. The largest numbers of adults who speak an Aboriginal language live in Kakisa, Fort Providence and Hay River Reserve.

Aboriginal Population



Source: Statistics Canada, 2007b

There were about 1,325 families in the study region in 2006. Families could be:

- Married couple with or without children
- Lone parent with child/children
- Common-law with or without children

About half of the families in the study area were married, 28.5% were common-law and 21% were lone parent families. This is comparable to the make-up of families in the NWT as a whole.

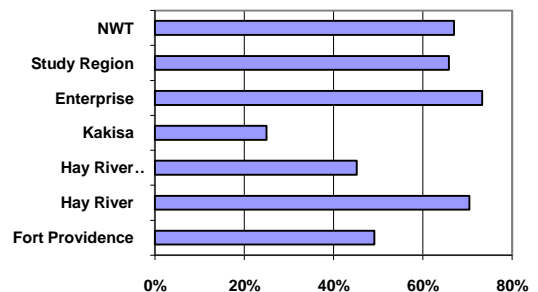
There were 1,690 households in the region in 2006. Households are made up of one or more family units. Regional households are:

- Couples with children (33.4%)
- Couples without children (23.7%)
- One-person (21.6%)
- Other types (multi-family, lone-parent, and non-family households) (20.4%)

The regional average household size is 2.8 people per household. This is much higher in Kakisa (3.7 people) and Hay River Reserve (3.4 people). The NWT average is 2.9 people per household.

Nearly 66% of the adult population (ages 15+) had completed high school in 2006. This is a bit below the NWT average of 67%. Enterprise and Hay River had the highest levels of school achievement. A full high school education is only available in Hay River and Fort Providence. Students in other regional communities have to go to high school outside of their community.

Education: High School Diploma or Greater



Source: GNWT Bureau of Statistics, 2010a



The Economy

Economic activity in each of the communities is unique. In some cases there are limited economic development opportunities. The cost of living is high and communities rely on traditional activities for food and some income.

In 2006, 2,765 people were active in the labour force. This means that they were working or actively looking for work. Most of these people were living in Hay River. Hay River and Enterprise had the highest numbers of people who were working or looking for work. In most communities there were more men than women active in the labour force.

Unemployment rates varied in each community. In 2006 unemployment rates were:

- 6.4% in Hay River
- 16.7% in Enterprise
- 23.9% in Fort Providence
- 24.1% in Hay River Reserve
- 40% in Kakisa

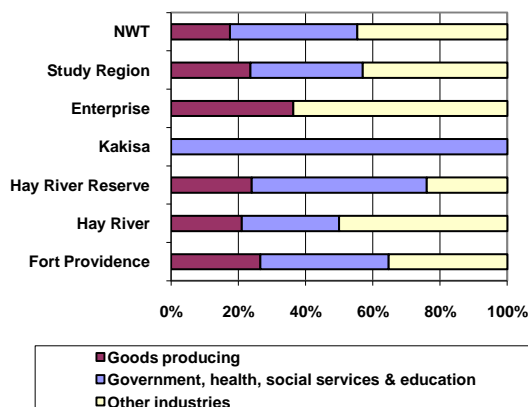
The overall unemployment rate in the communities was 10.1%. The NWT rate was similar (10.4%).

Unemployment rates were almost the same for men and women in Hay River but were different in the other communities. Hay River Reserve and Fort Providence had higher unemployment rates for men than for women.

In all of the communities studied, non-Aboriginal people had higher employment rates than non-Aboriginal. The biggest difference in this was found in Fort Providence. In Fort Providence less than half of Aboriginal people are employed but 90% of non-Aboriginal people were employed.

On average, about 30% of jobs in the communities are categorized as government, health, social services and education. This varies by community.

Employment by Industry



Source: GNWT Bureau of Statistics, 2010a

“Other” industries were the largest employer in the region. This includes:

- Retail and wholesale trade
- Business and financial services
- Real estate

There are many other important economic activities in the region that aren’t included in typical statistics. These include:

- Hunting
- Fishing
- Trapping
- Handicrafts
- Tourism

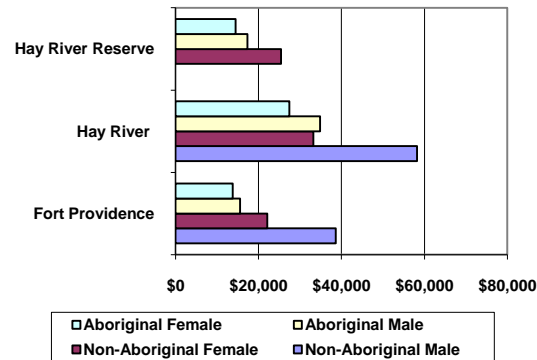
There are many territorial parks in the region. Hay River, Fort Providence and Enterprise are located along busy highways and offer tourist services like campgrounds, parks, and restaurants. There are no tourist services in Kakisa and Hay River Reserve.

Income and Cost of Living

Average incomes in the region were slightly less than the NWT average. The highest incomes were reported in Hay River. There was no income information available for Kakisa and Enterprise.

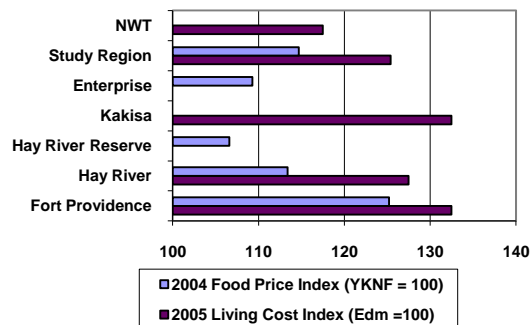
Nearly 90% of all income in the study communities came from employment. Almost 7% came from government transfers and just over 4% came from other sources. This is similar to the NWT population overall.

Median Incomes by Gender and Ethnicity in Study Region Communities, 2005



Source: Statistics Canada, 2007a, 2007b

Living and Food Price Index in Communities



Source: GNWT Bureau of Statistics, 2010a

The cost of living in the study communities is higher than the NWT average overall. On average, it costs people in the communities about 15% more for food than Yellowknife. Fort Providence had the highest food costs – 25% more for food than Yellowknife.

Another way to measure economic well being is to measure “core need”. Core need measures the percentage of households that have less income than they need to own and operate a home or rent without government help. Core need in 2009:

- Study communities – 12.7%
- NWT average – 19%

This percentage has decreased in the communities since 1996 and has stayed about the same in the NWT overall.

Housing

Nearly two-thirds of all housing is privately owned and occupied in the communities. About 15% is rental housing and 15% is public housing. Housing in the region is slightly older than the NWT average. On average, 22% is in need of major repair (highest in Hay River Reserve – 41.2%).

Health and Wellness

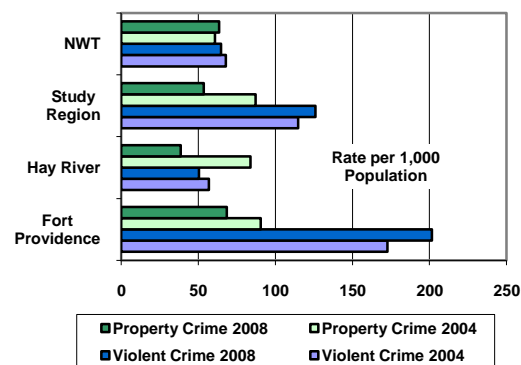
Health and wellness is measured in different ways, including:

- Teenage birth rate
- Number of lone parent families
- Crime rates
- Community well being

About 10% of all children born in the NWT are born to teenage mothers. In the study communities this average was 12.6%. The percentage of lone parent families (21.1%) in the study communities is about the same as for the NWT.

Crime rates in the communities were only available for Fort Providence and Hay River. Crime rates were generally higher in 2004 and 2008 in the study communities than in the NWT average.

Violent and Property Crime Rates, 2004 and 2008



Source: GNWT Bureau of Statistics, 2010a

Indian and Northern Affairs Canada (INAC) uses a Community Well Being Index to measure well being in Aboriginal communities. It is based on:

- Education
- Income
- Labour force activity
- Housing conditions

Community Well Being Index

Fort Providence – 67
 Hay River – 82
 Hay River Reserve – 62
 Kakisa – NA
 Enterprise – 78

Source: INAC, 2010b

There was no data reported for Kakisa. This could be due to its small population or the quality of the information available. Hay River reported the highest Community Well Being score (82). This is higher than the average score for non-Aboriginal Canadian communities (77). The average score for Aboriginal communities across Canada was 57. All communities in the study area scored higher than this.

Community Infrastructure and Services

All communities in the study area have fire protection and solid waste disposal services. The larger communities (Hay River and Fort Providence) offer a wider range of infrastructure and services than the smaller communities. Some of the community infrastructure and services available in the communities can be found in the table below.

	Recreation Services	All-Weather Road	Airport	Hospital	Health Centre/ Station	Police Officers
Enterprise		✓				
Kakisa		✓				
Hay River Reserve	✓	✓			✓	
Hay River	✓	✓	✓	✓		✓
Fort Providence	✓		✓		✓	✓

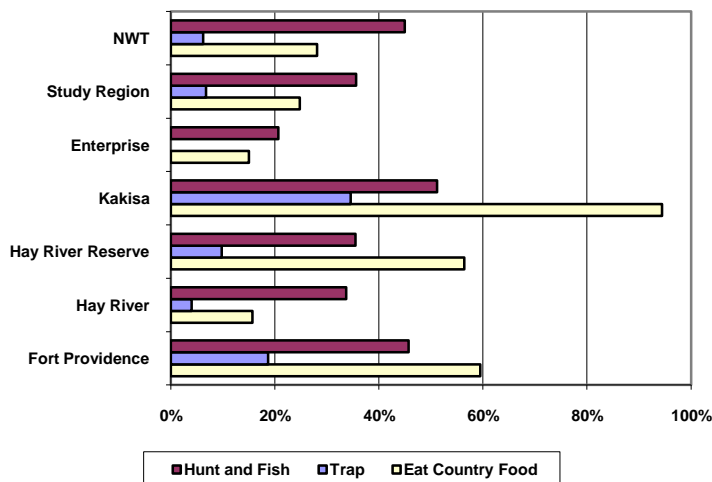
Once the Deh Cho Bridge construction is complete, Fort Providence will be linked by all-weather road.

Traditional Land and Resource Use

The Ka'a'gee Tu area has been used for generations for hunting, trapping and fishing. Many people consider it an important historical and cultural area. Overall, the percentage of adults in the study communities who hunt and fish, trap, and consume country food is close to the NWT average.

Kakisa had the highest number of adults who trapped, hunted and fished and ate country food. The lowest number of adults who participated in these traditional activities was in Enterprise. About 10% of adults in the communities made northern arts and crafts in 2008. This was highest in Kakisa (39.5%) and lowest in Hay River (6.9%).

Percentage of the Population (Aged 15+) Who Hunted and Fished, Trapped, and Ate Country Food



Source: GNWT Bureau of Statistics, 2010a; 2010b



Summary

When looking at the communities in and around Ka'a'gee Tu, it is possible to compare them to the overall population of the NWT.

	Compared to the NWT population in general, the regional population:
Population	<ul style="list-style-type: none"> • Is growing more slowly • Has the same percentage of young people • Has a higher ratio of males to females • Has a higher proportion of Aboriginal people • Is slightly less educated
Economy	<ul style="list-style-type: none"> • Is more likely to work in goods producing industries
Income and Cost of Living	<ul style="list-style-type: none"> • Had a slightly lower median family income in 2005 • Faces higher costs of living
Housing	<ul style="list-style-type: none"> • Has more housing in need of major repair • Has a lower percentage of households in core need
Health and Wellness	<ul style="list-style-type: none"> • Has higher violent crime rates • Has lower property crime rates
Community Infrastructure and Services	<ul style="list-style-type: none"> • Have limited services and facilities in the smaller communities • Have basic fire and waste disposal services
Traditional Land and Resource Use	<ul style="list-style-type: none"> • Is less likely to participate in fishing and hunting • Is less reliant on country food • Is more likely to participate in trapping • Is more likely to produce northern arts and crafts

The Value of Ka'a'gee Tu

To find out the total economic value of the Ka'a'gee Tu Candidate Protected Area there are three types of values that are looked at. These values include “use” values and “non-use” values.

Use values are related to harvesting or using the land or resources, like:

- Harvesting country food and fuel
- Recreation and tourism
- Trapping
- Making and selling arts and crafts
- Commercial logging
- Mineral resource development



Non-use values are based on the history and culture of the area and the value of keeping the area for the benefit of future generations.

Use Values

There are three use values that will be looked at here. These are:

1. Subsistence activities (country food sources, wood for heating and cooking)
2. Benefits people get from using the land for recreation
3. Activities that can or could generate economic activity

Subsistence Activities

The NWT has a dual economy. Dual economy means that some people rely on wages and money gotten through transfer payments and goods gotten through traditional activities like harvesting. The traditional economy tends to have a larger role in smaller NWT communities where there are fewer local opportunities for employment.

Traditional economic activities like hunting, fishing and trapping help balance the need for wage employment and government transfers by supplying some of the things that would otherwise need to be purchased with cash. The monetary economy and traditional economy usually work well together. Traditional harvesting often needs equipment such as firearms, boats, motors and snowmobiles. These things are usually are purchased with money. People living in Kakisa harvest fish, berries and plants for medicine and spiritual reasons, and hunting. The traditional economy is active and important to the community.

The study did not look at other study area communities because they have access to similar resources closer to home and would not likely travel to Ka'a'gee Tu to harvest food and fuel. The value of subsistence activities is based on the local price of purchased food and fuel.

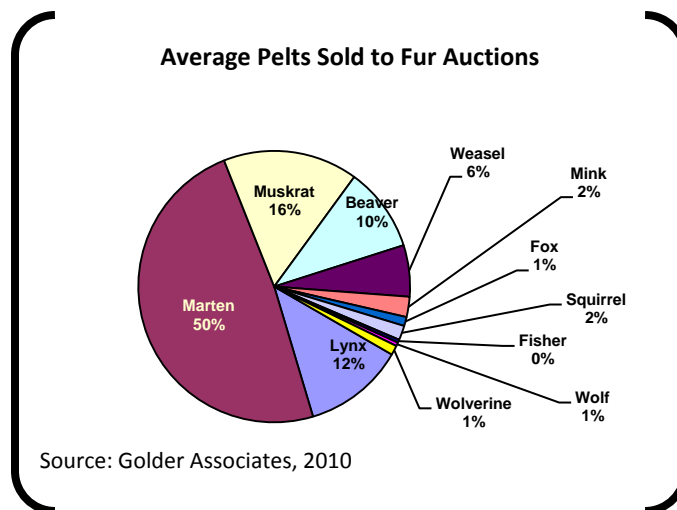
**Value of subsistence activities for people living
in Kakisa**
 Country foods = \$154,400 per year
 Fuel = \$72,000 per year

Recreation Activities

Nearly 40% of people in the study communities hunted for fished in 2008. The hunting and fishing may have been for the purpose of harvesting food, but the people who hunt and fish benefit from the activity itself. The value of recreation activities was estimated based on what people would likely spend to participate in recreational activities and what they would likely be willing to spend.

Trapping

Almost 7% of the adult population in the study communities participated in trapping. Nearly 40% of Kakisa residents trapped. The annual harvest of fur sold commercially had an average value of about \$93,000.



Commercial Fishing

There are two commercial fishing licences in the study area. Kakisa Lake was actively fished for walleye and Northern Pike. Between 2006 and 2009, the harvest was estimated to have a value of \$45,860 a year. The extent of the walleye harvest at Tathlina Lake is unknown.

Tourism

There is limited tourism infrastructure in the study communities of Kakisa and Hay River Reserve. Fort Providence, Hay River and Enterprise offer a range of services to tourists. Key features in the area are:

- Kakisa River Bridge Territorial Park
- Lady Evelyn Falls Territorial Park
- Kakisa Trail system
- Cameron Hills

The value of tourism in the Ka'a'gee Tu area, including the Deehahni Lake Camp, is about \$58,000 to \$70,000 a year.

Spending to participate in recreational activities
 \$11,700 to \$30,700 per year
Willingness to spend on recreational activities
 \$4,270 to \$47,440 per year

Arts and Crafts

The Ka'a'gee Tu area is a source of raw materials for makers of arts and crafts. Almost 10% of adults in the study communities produced arts and crafts. In Kakisa, almost 40% of adults produced northern arts and crafts. Based on regional spending by tourists, it's likely that the 390 people in the study communities sold a total of \$9,000 worth of arts and crafts per year.

Raw materials important to the arts and crafts industry:

- Bones and antlers
- Feathers and fur
- Animal hair and hides
- Porcupine quills
- Sinew
- Birch bark
- Plants for dyes
- Wood and stones

Summary

The Ka'a'gee Tu area contributes between \$0.4 and \$0.5 million per year in benefits for Kakisa and the other four communities in the study region.

The activities in the Ka'a'gee Tu area are sustainable and could be increased in a maintainable way. There could also be opportunities for new activities like commercial logging.

Non-Use Values

Cultural Values

The Ka'a'gee Tu Area has been used historically for hunting, fishing, and gathering other food and resources. It includes many old cabins, historical and archaeological sites. Some of the key cultural features are located:

- Around Kakisa Lake
- Along the Kakisa River
- Along the south shore of Great Slave Lake
- Along the Mackenzie River

Cultural values are known to be very important. However, there is no good way to put a dollar value on the cultural values of the area.

Density of traditional land use and occupancy of Ka'a'gee Tu:

- 5% very high density
- 10% high density
- 33% moderate density
- 41% low density
- 11% lakes

Summary

It is difficult to measure the total value of the Ka'a'gee Tu Candidate Protected Area based on the information available. The values in this report will be helpful to use to compare changes from development in the area.

Key References and Data Sources

The key references used to prepare this report are provided below. For the complete list of references and data sources, see:

AMEC. 2011. Socio-Economic Assessment of Ka'a'gee Tu Candidate Protected Area Volume 1: Socio-Economic Baseline. Prepared for Indian and Northern Affairs Canada and the Canadian Wildlife Service.

The Region, Its People and Economy

Deh Cho Land Use Planning Committee. May 2006. Respect for the Land: The Deh Cho Land Use Plan (Final Draft Plan).

Indian and Northern Affairs Canada (INAC). 2010a. First Nations Profiles. Available at: http://sdiprod2.inac.gc.ca/FNProfiles/FNProfiles_home.htm

Indian and Northern Affairs Canada (INAC). 2010b. Northwest Territories - 2006 Community Well-Being Database. Available at: http://www.ainc-inac.gc.ca/ai/rs/pubs/cwb/webdb/webdb_nt-eng.asp

Northwest Territories Bureau of Statistics. 2010a. Summary of NWT Community Statistics. Available at: <http://www.stats.gov.nt.ca/Profile/2007%20Summary%20of%20Comm%20Stats.pdf>

Northwest Territories Bureau of Statistics. 2010b. Traditional Activities. Available at: <http://www.stats.gov.nt.ca/Traditional%20Activities/>

Northwest Territories Bureau of Statistics. 2010c. 2009 NWT Community Survey: Housing Component: Available at: http://www.stats.gov.nt.ca/Housing/housing-conditions/2009_Housing.pdf

Northwest Territories Bureau of Statistics. 2007. Infrastructure Profiles for NWT Communities.

Statistics Canada. 2007a. 2006 Community Profiles. 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007. Available at: <http://www12.statcan.ca/english/census06/data/profiles/community/index.cfm?Lang=E>

Statistics Canada. 2007b. 2006 Aboriginal Population Profile. 2006 Census. Statistics Canada Catalogue no. 92-594-XWE. Ottawa. Released January 15, 2008. Available at : <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-594/index.cfm?Lang=E>

The Value of Ka'a'gee Tu

EBA Engineering Consultants. 2007a. Kakisa (K'agee Tu) Phase 1 Ecological Assessment, K'agee Tu Area of Interest, Dehcho, Northwest Territories. Available at: <http://www.nwtpas.ca/areas/document-2007-kaageetu-eaphase1.pdf>

EBA Engineering Consultants. 2007b. Ecological Assessment of the Ka'a'gee Tu Protected Strategy, Vegetation Assessment (Kakisa Lake). Available at: <http://www.nwtpas.ca/areas/document-2007-kaageetu-eaphase2.pdf>

Golder Associates. 2010. Renewable Resource Assessment of the Ka'a'gee Tu Candidate Protected Area.

Environment Canada. 1999. The Importance of Nature to Canadians: Survey Highlights. Available at: <http://dsp-psd.pwgsc.gc.ca/Collection/En47-312-2000E.pdf>

Mackenzie Gas Project. 2004. Environmental Impact Statement, Vol. 4. Available at: http://www.mackenziegasproject.com/theProject/regulatoryProcess/applicationSubmission/Documents/MGP_EIS_Vol4_Section_5_S.pdf